

**BY ORDER OF THE COMMANDER
99TH AIR BASE WING (ACC)**

**NELLIS AIR FORCE BASE
INSTRUCTION**



11-250

17 JUNE 2022

Flying Operations

LOCAL FLYING PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction outlines Nellis AFB local procedures common to all aircraft and personnel under the operational control of the 53d Wing, 57th Wing, 99th Air Base Wing, Nevada Test and Training Range (NTTR) Direct Reporting Unit and 23d Wing. Failure to comply with mandatory provisions of this instruction are a violation of Article 92, Uniform Code of Military Justice (UCMJ); instruction is compliant with departmental and higher headquarters guidance. This instruction applies to all aircraft under the jurisdiction of the 57th Wing (57 WG) when operating from Nellis AFB or within the confines of the airspace delegated to the Nellis Air Traffic Control Facility (NATCF). This instruction is applicable to the Air National Guard when flying scheduled missions from Nellis AFB or within the confines of the airspace delegated to the NATCF. This jurisdiction applies to all assigned and deployed units and personnel flying scheduled missions at Nellis AFB. Unit commanders must ensure aircrews under their operational control comply with this publication. Deviation or waiver requests to this instruction need to be approved by the 57th Operations Group Commander (57 OG/CC), or a designated representative, before flight operations begin. Submit requests for waivers through the chain of command to the 57 OG/CC or alternatively, to the publication OPR. NATCF delegated airspace contains Class A, B, E, G, and Special Use Airspace (SUA). Subsequently, all applicable AFIs, Federal Aviation Administration Joint Orders (FAA JO) and Federal Aviation Regulations (FAR) apply. Refer to Air Force 11-series instructions, major command (MAJCOM), or service specific directives for procedures unique to individual type aircraft. Recommendations for change should be referred to 57 OSS/OSA, 3770 Duffer Dr, Nellis AFB NV, using the AF Form 847, Recommendation for Change of Publication. Ensure that all records created as a result of processes prescribed in this publication

are maintained IAW Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

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Chapter 1

GENERAL

1.1. Deviation and Waiver Authority.

1.1.1. 99 ABW/CC has installation command authority over Nellis AFB and delegates flight line/flying operational control to the 57 WG/CC. Interim operational changes initiated by the 57 WG may be implemented via the 57 WG Flight Crew Information File (FCIF) guide process and when necessary, coordinate operational changes with affected 99 ABW organizations prior to implementation. Local/TDY aircrews are responsible for reviewing FCIF changes impacting this directive before flying.

1.1.2. Deviation or waiver requests to this instruction need to be approved by the 57th Operations Group Commander (57 OG/CC), or a designated representative, before flight operations begin. Submit requests for waivers through the chain of command to the 57 OG/CC or alternatively, to the publication OPR.

1.1.3. 99 ABW/CC has the authority to approve or disapprove civil aircraft landing permit applications (DD Forms 2400, Civil Aircraft Certificate of Insurance; 2401, Civil Aircraft Landing Permit; 2402, Civil Aircraft Hold Harmless Agreement) for Nellis airfield. For expeditious handling of short notice requests, 99 ABW/CC may also grant requests for one-time, official government business flights that are in the best interest of the U.S. Government and do not violate AFI 10-1001 provisions. The 99 ABW/CC has delegated authority to approve these permits and requests to the 57 OG/CC.

1.2. TDY Operations. Units deployed to Nellis AFB for local flying must have a Nellis host unit. Aircrews attending formal flying training courses and/or flying in support of a host unit are considered local aircrews. Aircrews in a formal course will receive a phase briefing from the host unit before flying. Aircrews that are not part of a formal course will receive a local area briefing from a local host unit covering Nellis AFB procedures prior to launching locally. Units inbound to Nellis AFB who plan to use the NTTR prior to landing must receive an electronic local area brief prior to flying into the NTTR. Deployed unit commanders will ensure their host unit is informed of any additional training events the deployed unit will accomplish before, during, or after any mission they fly in support of a Nellis requirement. This is most important when the training event they wish to accomplish may extend the planned flying day length or if it takes place beyond the NTTR, R-2508 or the local Nellis traffic pattern (e.g. training events flown at outlying civilian airports or low-level structure beyond the Nellis local flying area). The Nellis host unit must provide all aircrews, at each rated cockpit position, a 57 WG In-flight Guide (IFG). Electronic copies of the IFG are available on the 57 WG/WGV website at <https://usafws.nellis.af.mil/sites/57WGV/default.aspx>. Nellis host unit will provide an entry access list (EAL) identifying all Foreign National participants in flight operations on the NTTR to NTTR/DO. Units desiring to use the NTTR without Nellis AFB support will contact NTTR/DOXP. Note: United States Air Force Weapons School (USAFWS) geographically separated units (GSU) are considered host units.

1.2.1. TDY Units Utilizing R-2508. TDY units are restricted from using R-2508 for backup missions after airborne. TDY units are allowed to use R-2508 when it is briefed as the primary airspace. Flights going to R-2508 are required to read the user guide located on the Edwards

AFB website at <http://www.edwards.af.mil/About/r-2508> or SharePoint site <https://usaf.dps.mil/teams/12162>. Units TDY to Nellis for GREEN FLAG satisfy the requirement to receive these briefs from the 549 CTS on in-brief day. GREEN FLAG participants are not required to complete/fax the R-2508 checklist to 57 WG/WGV. TDY units must schedule the airspace with the Central Control Facility (CCF) at Edwards AFB email (2508CCF@us.af.mil) and/or fax their completed “R-2508 Airspace Request Form” to CCF (form found on the Edwards AFB website).

1.3. Off-Station, Deployed Operations (Nellis Based 57 WG Units), and Use of Civilian Fields. Deployed operations are those which are off-station for 72 hours or longer. Detachment commanders must comply with AFI 10-201, Force Readiness Reporting. For cross-country missions, aircrews must complete a DD Form 1801, *DoD International Flight Plan*. Completion of this form is self-explanatory. Aircrews will fill out one copy and forward it in the following distribution order: unit commander, group commander, wing commander, and wing scheduling. The completed form must be approved by the 57th Wing Commander (57 WG/CC) and returned to 57th Wing Scheduling (57 OSS/OSOS) NLT two weeks prior to the proposed cross-country. All planned deviations from originally approved itinerary will be approved in advance by the applicable GP/CC. All unplanned deviations will be briefed to the applicable GP/CC prior to departing on the next leg. Upon landing at a cross-country or divert field, call 99 ABW/CP with aircraft status and a local telephone number. Contact operations/maintenance supervision for any aircraft problems. Note: The United States Air Force Air Demonstration Squadron (USAFADS) will use their own cross-country procedures IAW 57 WGI 11-USAFADS Volume 3, Official Procedures - Thunderbirds.

1.3.1. Fighter and attack aircraft require a minimum runway (RWY) length of 8,000 feet, and compatible arresting gear for tail hook equipped aircraft, for off-station operations (deviations require GP/CC approval). The minimum runway width is 150 feet. Fighter/attack aircraft will not take off or land over an approach-end cable that has been reported as slack or loose.

1.3.2. Aircrews are responsible for ensuring security of the aircraft at the destination. For diverts, ensure 99 ABW/CP has coordinated for aircraft security. If aircraft security is in question, remain with the aircraft until security is confirmed.

1.3.3. Off-station operations will be conducted IAW the “Cross-Country and Divert” procedures described in the 57th Wing IFG.

1.3.4. Aircraft operating from Nellis AFB will coordinate the usage of civilian airfields in conjunction with local operations (within 200NM), through the Airspace Manager (57 OSS/OSOP). 57 OSS/OSOP will coordinate with civilian airfield managers and local authorities to ensure they are properly informed and gain concurrence and approval when needed.

1.4. Command and Control. The 57 WG Supervisor of Flying (SOF) supervises flying activities from Nellis Tower for all aircraft under the jurisdiction of the 57 WG and is the Incident Commander (IC) for in-flight emergencies. Commanders must have a fully qualified squadron duty officer (SDO) available during unit flying. The SDO will be a highly experienced aircrew member selected by the squadron or detachment commander. The position of IC may be assumed by the 57 WG/CC or 57 OG/CC at any time. See AFI 11-418, Operations Supervision, Nellis AFB Supplement, for guidance on SOF/Tower personnel interaction and SOF/SDO responsibilities.

1.4.1. The SOF must coordinate with the Watch Supervisor (WS) prior to using an ATC frequency. The SOF must not perform ATC functions or transmit ATC instructions or clearances to an aircraft. A person who commandeers an ATC frequency assumes responsibility for separation of aircraft.

1.4.2. The Base Fire Chief or designated representative (99 CES/CEF) is the IC for ground emergencies and IFEs after landing at Nellis AFB.

1.4.3. The 99 ABW/CP, call sign Raymond 22, works with the 57 OG/CC or designated representative to give assistance to transient aircraft when local flying is not scheduled and a SOF is not on duty.

1.4.4. The NATCF provides air traffic services to aircraft operating within the NTTR and NATCF delegated airspace in accordance with appropriate letters of agreement (LOA) and Certificates of Authorization (COA). Airspace LOAs and COAs can be found in the NATCF publication library and are reviewed IAW AFI 11-202 Volume 3, General Flight Rules, ACC Supplement.

1.4.5. NTTR/DOOS (Director of Operations, Scheduling) is the office for scheduling special use airspace assigned under the jurisdiction of the USAF Warfare Center (USAFFWC). Blackjack, a range monitoring office, provides real-time scheduling for NTTR airspace. NTTR Supplement to AFMAN 13-212, Volume 1 (AFMAN 13-212V1, ACC Sup, NTTR Addendum A), Range Planning and Operations defines range authority and operations. NTTR/DO is assigned authority in LOAs as applicable.

1.5. Flight Following Procedures. The 99 ABW/CP will be responsible for tracking all transient and cross-country departures and arrivals that are posted in the Global Decision Support System (GDSS). 99 ABW/CP will notify Airfield Management Operations (AMOPS) if an aircraft (loaded in GDSS) is overdue. The SDO will be available immediately to assist the SOF via land-line. The phone number for the SDO will be posted by unit schedulers in the 57 WG daily flying schedule inputs on the Patriot Excalibur (PEX) or verbally over the SOF land-line.

1.5.1. Locally Assigned Aircraft Times. The Tower will record all locally assigned departure times into PEX. The appropriate squadron operations will record all locally assigned aircraft arrival times into PEX. If a local aircraft is overdue, the squadron operations center must contact the 99 ABW/CP in order to run the required checklists.

1.5.2. Transient Aircraft Times. The Tower will record all arrival/departure times of transient (DD Form 1801, DoD International Flight Plan) aircraft and pass the times to AMOPS. AMOPS will contact 99 ABW/CP as soon as possible, but no later than 15 minutes from the time they are notified with arrival and departure times of transient aircraft. AMOPS will execute the overdue aircraft checklist if the aircraft is more than 30 minutes past their proposed arrival time.

1.6. Recurring Preventative Maintenance Schedule. No-NOTAM (Notice to Airmen) preventative maintenance schedules published in the IFR Supplement and FLIPs will be followed for the Nellis AFB Navigational Aids (NAVAID). This includes the TACAN, Instrument Landing System (ILS), Nellis Approach Surveillance Radar (ASR), and Tolicha Peak Digital ASR. If downtime is required outside of the scheduled times, prior coordination with the users must be accomplished by Airfield Operations (57 OSS/OSA). During periods of daylight savings time, effective hours will be one hour earlier than shown and will be indicated by a “++” symbol

following the hours indicated. IAW AFMAN 13-204 Volume 4, Radar, Airfield and Weather Systems, when developing a standardized, recurring PM schedule, consider current and forecast weather.

1.7. Organizational Responsibilities for Reopening Nellis Airfield Following a Period of Closure.

1.7.1. Control Tower:

- 1.7.1.1. Provide on-call recall document to 99 ABW/CP NLT 72 hours prior to airfield closure.
- 1.7.1.2. Respond to CP notifications and have tower operational within 60 minutes.
- 1.7.1.3. Advise CP and NATCF when tower and airfield is declared open.

1.7.2. Command Post (CP):

- 1.7.2.1. Receive and maintain on-call recall rosters for known closure periods.
- 1.7.2.2. Upon notification of request to open airfield, for real-world contingency or deployment related mission, notify AMOPS. If approved, recall tower personnel.
- 1.7.2.3. Advise/update AMOPS and Tower on changes greater than 10 minutes in aircraft's ETA.

1.7.3. AMOPS:

- 1.7.3.1. Provide on-call recall document to CP NLT 72 hours prior to airfield closure.
- 1.7.3.2. Respond to CP notification and have airfield operational within 60 minutes.
- 1.7.3.3. Advise tower when airfield is declared operational.

1.7.4. Weather (WX):

- 1.7.4.1. Provide on-call recall document to CP NLT 72 hours prior to airfield closure.
- 1.7.4.2. On-call members will remain on telephone standby at all times and be prepared to arrive at WX station within 60 minutes.
- 1.7.4.3. Respond to CP notification and disseminate weather observation locally prior to airfield being declared operational.

1.8. Airfield and ATC Services.

1.8.1. Nellis AFB airfield and ATC services are provided 24 hours a day, 7 days a week, unless closed by NOTAM.

1.8.2. Civil Use of Military NAVAIDS. Practice approaches are authorized for civil aircraft outside of the local flying window if accomplished with no delay to aircraft operating at Nellis AFB. Civil aircraft are not authorized to touch the runway without a PPR number unless pre-approved by AMOPS or in an emergency.

1.8.3. Automatic Terminal Information Service (ATIS) shall be broadcast 24 hours a day unless tower is evacuated or the airfield is closed. Millibars will be included in the ATIS broadcast during large force exercises (LFE).

1.8.4. IAW AFMAN 13-204 Volume 3, Air Traffic Control, the 57 OG/CC waives the requirement for air traffic controllers to issue variable winds to wing aircraft during periods of moderate to heavy traffic as determined by the appropriate on-duty ATC watch supervisor.

1.9. Runway Closure. AMOPS may close the RWYs and taxiways (TWYs) for unsafe conditions. NOTAM(s) will be sent for extended periods of closures, normally more than one hour. For planned closures, AMOPS will send applicable NOTAM(s) no earlier than 72 hours in advance and advise all agencies concerned. Tower Watch Supervisor (WS) will notify NATCF WS of the runway closure and estimated duration. AMOPS will cancel the applicable NOTAM(s) when the runway(s) is/are opened. AMOPS will perform the required checks prior to reopening the runway(s).

1.9.1. Closing the active runway for hazardous runway conditions. In an effort to avoid damage to aircraft, runway closures may be appropriate with the presence of certain types of FOD (i.e. large pieces of metal, large aggregate, large concrete spalling pieces, or any other materials likely to pose a high risk for operators). Tower will notify AMOPS immediately upon observing or being notified of FOD that poses a high risk for operators and suspend operations to the runway if warranted. AMOPS will determine the necessity to close the runway for FOD removal requiring an extended period of time or unsafe conditions existing on the runway.

1.10. Runway Suspension. Tower or AMOPS can temporarily suspend operations to a runway when unsafe conditions exist. Note: After airfield suspension, AMOPS is the only agency that can re-open the airfield. AMOPS will notify tower when suspending runway operations of reason and estimated duration. If tower is suspending operations, Tower WS will relay runway suspension time and expected duration to the NATCF WS and to AMOPS. NATCF will transmit runway suspension on Guard frequencies and up range repeaters.

1.11. Notice to Airmen (NOTAM) Procedures. The Airfield Manager is the authority for publishing NOTAM(s) for Nellis AFB only. Agencies with recommended NOTAM(s) should contact AMOPS. The Instrument Flight Procedures Specialist is the authority for publishing Class V NOTAM(s). The NATCF is the NOTAM monitoring facility.

1.12. Airfield Waivers. The 99 ABW/CC is the approval authority for approving temporary waivers for violations of airfield and heliport planning and design criteria for construction activities, air shows, or temporary installation of an aircraft arresting system. 99 CES will process waiver requests. Coordinate and submit airfield waiver and clear zone/accident potential zone siting requests to the appropriate approving authority IAW Unified Facilities Criteria (UFC) 3-260-01, UFC 3-535-01, AFI 10-1004, UFC 3-260-04 and AFI 32-7084 to include submitting a copy of wing-approved temporary waivers for construction activities, air shows, or temporary installation of an aircraft arresting system via the HQ ACC/A4CI SharePoint. An approved waiver and/or siting approval from the appropriate authority shall be secured before construction or alteration work is started.

1.13. Airspace Waivers/Agreements. Agencies wishing to nominate proposals for waivers to airspace criteria should contact the 57 OSS Airspace Manager. Airspace agreements are maintained by the 57 OSS Airspace Manager and reviewed annually.

1.14. Transient Aircraft. Nellis airfield is prior permission required (PPR). Due to limited availability of aircraft parking, billeting and transient maintenance, Nellis AFB requires a PPR

number for all transient aircraft. PPRs for aircraft with a wingspan of 132' or larger must contact Nellis Support Center at DSN 682-5250 (0730-1630L Monday-Friday) seven days prior to arrival. PPR for aircraft with wingspan smaller than 132' must contact Airfield Management seven days prior to arrival IAW Memorandum of Understanding between both agencies. When the 57 OG/CC deems it necessary, the airfield will be Official Business Only.

1.15. Transient Alert. Transient Alert (TA) services are normally IAW Nellis AFB AP/1. Please refer to the IFR Supplement or AP/1 for specific service availability.

1.16. Flight Information Publication (FLIP). AMOPS is the OPR for requesting non-procedural changes to the FLIPs. The Instrument Flight Procedure Specialist is the OPR for requesting procedural changes to FLIPs. 57 WG FLIP requirements are intended to supplement AFMAN 11-202 Volume 3 guidance. Minimum FLIP requirements for fixed and rotary-wing aircraft are maintained on the 57 WG/WGV website at <https://usafws.nellis.af.mil/sites/57WGV/default.aspx>. These minimum requirements apply to all Nellis-based and TDY/deployed units. Local units will receive FLIPs from their unit FLIP account managers. TDY/deployed units must plan to receive FLIPs from home station accounts. AMOPS does not stock extra FLIPs.

1.17. Flight line Smoking Policy. Smoking is prohibited on the flight line. Flight line smoking policy is IAW AFMAN 91-203, Air Force Occupational Safety, Fire and Health Standards.

1.18. The Wear of Hats on the Airfield. Wear of hats on the airfield is IAW AFI 21-101, Nellis Supplement 1, Aerospace Equipment Maintenance Management. Note: USAFADS exempt.

1.19. Flight line and Restricted Area Photography. In general, photography and videography on the Nellis AFB flight line area (including the runways, taxiways and aircraft parking ramps, as well as related hanger areas) are restricted. Reference **Attachment 22** for further guidance on flight line photography.

1.20. 99 LRS Refueling Priorities. Aircraft refueling priorities are outlined in the Nellis AFB Fuels Prioritization Letter coordinated through all flying units and signed by the 99 ABW/CC.

1.20.1. Where capacity cannot meet all requirements within a specific category, prioritization decisions will be made by or delegated from the 57 OG/CC through the weekly scheduling process. At times deemed necessary at the scheduling meeting, installation priority will be communicated by MOC with all fuels requests. Unforeseen adjustments to prioritization will be handled through the MOC and elevated to 57 OG/CC for arbitration if necessary.

1.21. Airfield Snow Removal Operations. Due to the climate, Nellis AFB does not experience snow accumulation and does not have procedures for snow removal operations.

1.22. NAFB Instruction 11-250 Recommended Changes. Forward recommended changes to 57 OSS/OSA or 57 WG/WGV who will coordinate with 57 OSS/OSA. Changes to this publication will either be categorized as time critical or annual review.

1.22.1. Changes to this instruction impacting safety are considered time critical. 57 OSS/OSA will coordinate time critical changes with 57 WG/WGV to generate a Flight Crew Information File (FCIF) change; formal interim changes will be accomplished IAW DAFI 33-360.

Chapter 2

LOCAL FLYING AREA

2.1. General. The Nellis AFB local flying area includes southern Nevada, western Utah, western Arizona, and east-central California. The primary training areas are immediately north of Nellis AFB. Secondary training areas are in the range complexes assigned to Hill AFB, Utah, Edwards AFB, California, China Lake NAS, California, Fort Irwin, California, and Luke AFB, Arizona.

2.2. Nellis AFB Description. Nellis AFB is located northeast of Las Vegas, Nevada; field elevation is 1,869 feet MSL. The airfield lies within Las Vegas Class B airspace. Two parallel RWYs are oriented 030°/210° with 1,000 feet between the centerlines. The east RWY (21L/03R) is 10,051 feet by 150 feet and is concrete with asphalt overruns. The west RWY (21R/03L) is 10,120 feet by 200 feet and the first 1,320 feet of 21R and first 920 feet of 03L are grooved concrete, the mid 7,879 feet and center 80 feet are concrete and the remaining is asphalt with asphalt overruns. Runway 21L is the primary instrument runway. Primary helicopter landing pads are the Jolly and Transient Helipads, and both are concrete. Taxiways/Taxi lanes Alpha through Juliet are concrete except for Charlie and Kilo. Taxiway Charlie has a 25-foot concrete center, the remaining is asphalt. Tow-ways to the fuel barn, north trim pad and south trim pad are asphalt. The Nellis AFB Parking Plan is IAW [Attachment 2](#).

2.2.1. Aircraft Arresting Systems (AAS). See [Table 2.1](#) and [Figure 2.1](#) for basic arresting system layout. BAK-12s are modified with an 8-point tie-down system (except in overruns). See [Attachment 16](#) for barrier certification procedures.

Table 2.1. NAFB Aircraft Arresting Systems (AAS).

RUNWAY LENGTHS	
RWY 21R/03L	10,120' x 200'
RWY 21L/03R	10,051' x 150'
BARRIERS	
RWY21R	BAK-12 1,451' from approach end, BAK-12 41' into overrun
RWY21L	BAK-12 1,200' from approach end, BAK-12 46' into overrun
RWY03L	BAK-12 1,211' from approach end, BAK-12 41' into overrun
RWY 03R	BAK-12 1,226' from approach end, BAK-12 41' into overrun

2.2.1.1. RWY 21L/03R.

2.2.1.1.1. BAK-14 (Retractable Hook-Cable AAS) Normal Configuration. Both BAK-14(s) approach and departure end will be in lowered position and are available upon request for emergency use only.

2.2.1.1.2. BAK-12 AAS Configuration. During normal configuration, both overrun BAK-12s are connected at all times and in a raised position. Thirty minute notification is required for removal of any BAK-12 arresting system. In an emergency situation, the BAK-12 (overrun RWY 03R) can be removed with a 20 minute notification (see [paragraph 6.9](#)).

2.2.1.2. RWY 21R/03L BAK-12 AAS Configuration. During normal configuration, approach, departure end and overrun BAK-12s are connected at all times and in a raised position. Thirty minute notification is required for removal of any arresting system.

2.2.1.3. RWY 21R/03L RC-135, B-2 and P-3 AAS BAK-12 procedures. Nellis flying organizations hosting RC-135, B-2 or P-3 aircraft will contact AMOPS at 652-4601 with arrival/departure dates and times as soon as they are known.

2.2.1.3.1. AMOPS or tower will coordinate with the fire department and barrier maintenance for removal of the appropriate BAK-12 AAS on the landing/takeoff runway NLT 30 minutes prior to the scheduled time. RC-135, B-2 and P-3 aircraft require removal of approach and departure barriers. Note: BAK-12 AAA removal procedures may also be executed for other type aircraft when requested by aircrew.

2.2.1.3.2. When requested by AMOPS, NATCF will provide arrival information for inbound RC-135, B-2 or P-3 aircraft as soon as they are under NATCF control.

2.2.1.3.3. Tower will notify AMOPS of RC-135, B-2 or P-3 engine start for departure if the AAS have not been removed from the departure runway. For arrivals, tower will notify NATCF to hold the aircraft until the AAS are removed.

2.2.1.3.4. AMOPS or tower will notify the fire department and barrier maintenance of any changes as soon as possible.

2.2.1.3.5. Aircrews will ensure scheduled takeoff and arrival times are provided to Nellis AMOPS and tower NLT two hours prior. RC-135, B-2 and P-3 aircrews are responsible for informing AMOPS or tower of any changes. Every effort will be made by scheduling agencies to ensure these airframes depart first and recover last during LFEs.

2.2.1.3.6. Barrier maintenance is responsible for reporting barrier system status to Tower and AMOPS and will use the following phraseology. For operational barriers, use “UP AND OPERATIONAL.” For non-operational barriers, use “OUT OF SERVICE”. For disconnected barriers, use “REMOVED FROM SERVICE.”

2.2.2. End of Runway (EOR) Pads (**Figure 2.1**).

2.2.2.1. The RWY 21 primary EOR Pad (North EOR—**Figure 2.9**) is located on Taxiway Echo between Taxiway Foxtrot and RWY 03L/21R. All aircraft must taxi beyond the white wingtip clearance line to ensure wingtip clearance is provided to aircraft on taxiway adjacent EOR apron.

2.2.2.1.1. An additional EOR Pad is located on Taxiway Delta between Taxiway Foxtrot and RWY 03L/21R. Delta EOR is marked for 5 aircraft but up to 6 F-22s or smaller are authorized to arm on Taxiway Delta (10 foot wingtip clearance).

2.2.2.1.2. In the Echo East EOR, park in the first available spot to the east and fill to the west. All aircraft must taxi/hold beyond the white wingtip clearance line to ensure wingtip clearance is provided to aircraft on taxiway adjacent EOR apron.

2.2.2.1.3. In the North EOR, park in the first available slot to the west and fill to the east.

2.2.2.2. The RWY 03 primary EOR Pad (South EOR) splits Taxiway Alpha on Taxiway Foxtrot.

2.2.2.2.1. The EOR portion north of Taxiway Alpha will be primarily used by TDY units supporting a Nellis-hosted exercise such as RED FLAG, GREEN FLAG, or

Weapons School Integration (WSINT). Whether arming or de-arm, aircraft will utilize the northernmost arm/de-arm location first, parking perpendicular to Taxiway Foxtrot and fill-in to the south.

2.2.2.2.2. The EOR portion south of Taxiway Alpha will be primarily used by Nellis-assigned aircraft. Aircraft will utilize the southernmost arm/de-arm location first, parking perpendicular to Taxiway Foxtrot and fill to the north.

2.2.2.3. An additional RWY 03 EOR Pad is on Taxiway Alpha east of RWY 21L/RWY 03R. Aircraft will park in the first available spot to the west and fill to the east. All aircraft when taxiing into hold position pointed north must pull up to the white wing tip clearance line to ensure clearance is provided for aircraft taxiing behind in EOR. White wingtip clearance is provided to ensure clearance to aircraft on taxiway adjacent EOR apron.

2.2.2.4. Alpha Center EOR located between RWY 21L/03R and RWY 21R/03L, park in first available spot, fill west to east (to allow for clockwise directional flow). When taxiing into hold position pointed north, pilot must pull up to the white wing tip clearance line to ensure clearance is provided for aircraft taxiing behind in EOR. White wingtip clearance is provided to ensure clearance to aircraft on taxiway adjacent EOR apron.

2.2.2.5. For aircraft using the Live Ordnance Loading Areas (LOLA) or revetments, use the eastern EOR Pads on Taxiway Alpha and Taxiway Echo. EOR pads are for fighter type aircraft only.

2.2.2.6. Aircraft Maintenance is responsible to ensure all equipment is positioned to allow proper wingtip clearance. Equipment must be removed NLT three hours after flying and pre-positioned NET three hours prior to the start of flying. Equipment is not to be stored in the EOR area.

2.2.2.7. Aircrew are responsible for ensuring proper wingtip clearance and must follow marshaler/wing walker instructions.

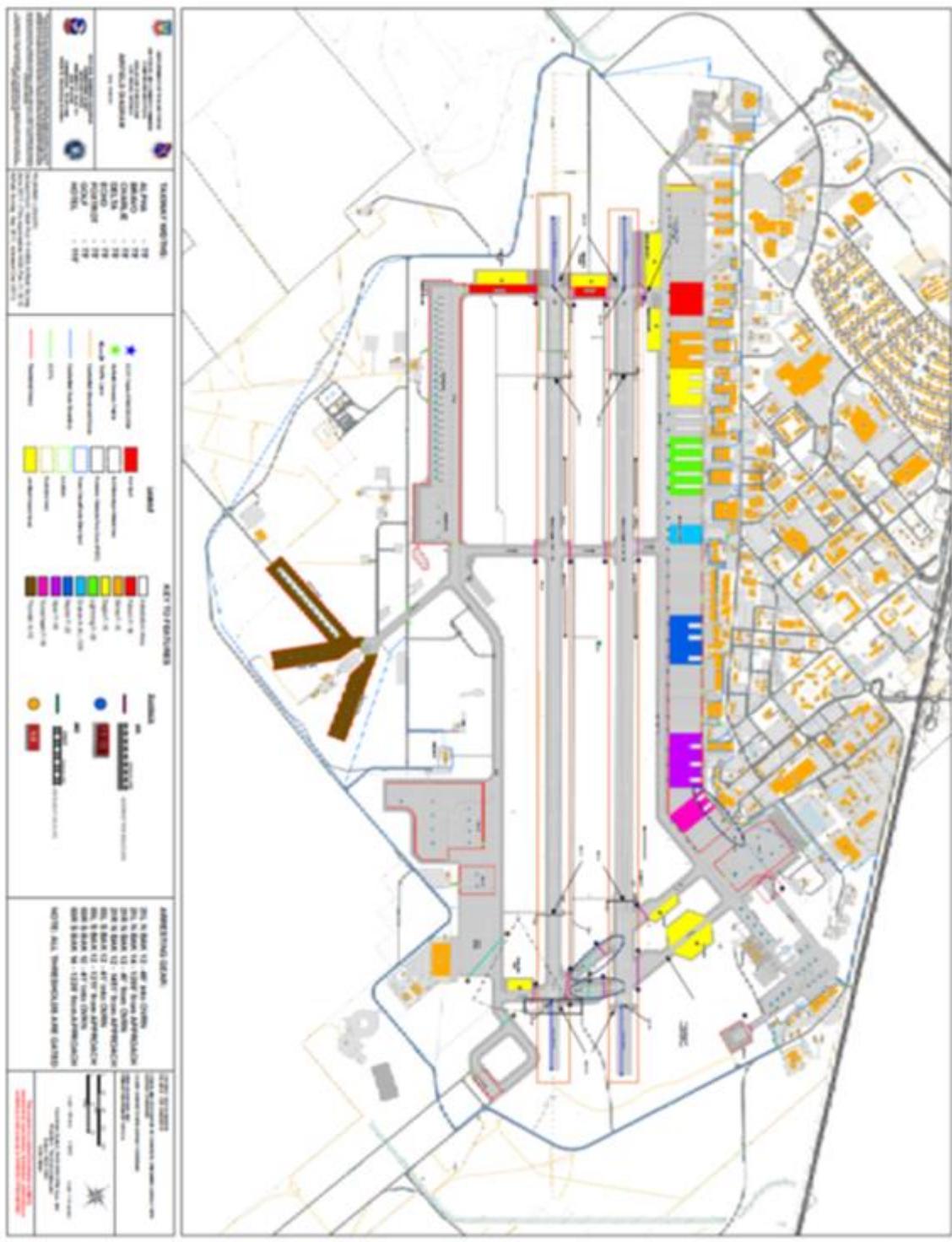
2.2.2.8. When aircraft are located on the EORs in between the runways and adjacent to taxiways Alpha, Delta or Echo, aircraft C-130 and larger are not authorized to taxi past these aprons. Aircrew are encouraged to thoroughly plan for this requirement during LFE preparation to ensure that heavy aircraft requiring to cross the EORs are deconflicted from aircraft expecting to arm and hold at EOR. Note: In any situation when an aircraft requires additional taxi assistance, contact AMOPS at 652-4601.

2.2.3. Drag Chute Jettison. Aircraft with drag chutes must turn off the runway so as not to drag rocks or snag taxiway lights with the drag chute. Carry drag chutes to parking. If unable to carry the drag chute to parking, use minimum power settings when releasing the chute in designated areas defined below. Align fuselage to runway heading to avoid blowing loose debris on the taxiways and runways. If chutes do not clear taxiways or the runway, notify Nellis Ground. At the south end, use Taxiway Alpha between RWY 03L/21R and Taxiway Foxtrot. At the north end, use Taxiways Echo or Delta between RWY 03L/21R and Taxiway Foxtrot. If taxiing to the east side, jettison between RWY 03R/21L and Taxiway Golf on the south end and between RWY 03R/21L and DOE ramp on the north end. Host units will ensure drag chutes are retrieved.

2.2.3.1. In the event an aircraft jettisons a chute on the runway, tower will suspend runway operations. If a pilot requests to land on the suspended runway Tower will advise the aircraft, “CHUTE ON RUNWAY (POSITION OF CHUTE INCLUDING SIDE OF RUNWAY AND DISTANCE REMAINING).” UNABLE TO ISSUE LANDING CLEARANCE, LANDING WILL BE AT YOUR OWN RISK.” Pilot will advise tower of intentions.

2.2.4. Live Ordnance Areas. Fixed wing live ordnance areas are the LOLA, Hot Cargo Pad, Bomber Pad, and Golf Revetments ([Figure 2.1](#)). Note: Contact 57 OSS/OSAA (652-4601) if original image is required.

Figure 2.1. Nellis Airfield Diagram.



PRIMARY INSTRUMENT RUNWAY IS RWY 21L – FIELD ELEVATION: 1869'

2.2.5. Hot Brake Areas. Hot brake areas are located on Taxiway Alpha and Echo between the runways (**Figure 2.1**). The hot brake areas are not wide enough for B-52 aircraft. B-52 aircraft

will clear the runway and hold on Taxiway Echo (east of RWY 03R/21L) or Alpha for hot brakes.

2.2.6. Decontamination Areas. The primary decontamination area for fighter type aircraft is located at the wash rack adjacent to Hangar 270 (Row 25). The secondary decontamination area is at the wash rack on the ramp side of the Thunderbird Hangar (Row 37 and 38). Holding points for either area is in the north EOR pads and hot brake areas.

2.2.7. Hydrazine Area. The hydrazine areas are between the runways on Taxiway Alpha for RWY 21 and Taxiway Delta for RWY 03 ([Figure 2.1](#)).

2.2.8. Critical Protection Areas. The localizer critical area, glide slope critical area and Precision Obstacle Free Zone are depicted in [Figure 2.2](#).

2.2.8.1. Instrument Hold Line Procedures ([Figures 2.1](#) and [Figure 2.2](#)):

2.2.8.1.1. Nellis Tower will:

2.2.8.1.1.1. Restrict vehicle/aircraft movement to protect the critical areas IAW AFI 13-213/FAA JO 7110.65.

2.2.8.1.1.2. Notify AMOPS, MOC, and Fire Department of activation/termination of instrument hold line procedures.

2.2.8.1.1.3. Include “INSTRUMENT HOLD LINE PROCEDURES IN EFFECT” on the ATIS and if necessary, advise aircrews on taxi clearance.

2.2.8.1.2. AMOPS will broadcast/notify maintenance personnel via appropriate Ramp Net channels that “INSTRUMENT HOLD LINE PROCEDURES ARE IN EFFECT/TERMINATED.”

2.2.8.1.3. When implemented, aircrews/vehicles shall not operate within the instrument hold line without permission from the Nellis Tower.

2.2.9. Permanently Closed/Unusable Portions of the Airfield. Pad in the vicinity of the intersection of Taxiway Bravo and Golf is closed ([Figure 2.1](#)). The pad is remnants of an old cross runway (34S).

2.2.10. Control Tower Visual Blindspots. A portion of the Transient West ramp is obscured by the AMOPS building ([Figure 2.2](#)).

2.2.11. Radio Blind Spots. Rows 40-45 on the west parking apron are consistent radio blind spots for Ground Control (121.8/275.8). Taxiways Delta and Echo between the runways are consistent radio blind spots for Local Control (132.55/327.0)—see [Figure 2.2](#).

2.2.12. Radar, Airfield, Weather Systems (RAWS):

2.2.12.1. Auxiliary Power Generators. Primary power for all RAWS is commercial power. If the auto-start or auto transfer feature of any RAWS equipment is determined unreliable, that equipment will be placed on generator power at least 30 minutes prior to the arrival of forecasted or impending severe weather conditions.

2.2.13. Airfield Lighting. Both runways are equipped with illuminated distance remaining markers and arresting markers. Note: The barriers on both runways are marked with illuminated signs; however, the barriers within the overruns are not marked with lighted

markers. All taxiway lights are standard blue. RWY 03R/21L is equipped with High Intensity Runway Lights (HIRL), Approach Lighting System with Sequenced Flashing Lights Category 1 (ALSF-1), and Precision Approach Path Indicator (PAPI) System. RWY 03L/21R is equipped with HIRL and PAPI. All SFLs on RWY 21L are 1.5 feet to the right of the extended centerline. HIRL spacing exceeds 200 feet at two locations on 21R/03L and four locations on 21L/03R. All threshold lights are gated.

2.2.13.1. The HCP does not have taxiway lighting and is restricted to daylight/VFR use only.

2.2.14. Airfield Lighting Inspections.

2.2.14.1. AMOPS will inspect the airfield lighting systems on a daily basis NLT 2230L. Discrepancies will be recorded utilizing the Airfield Lighting Discrepancy Checklist and applicable NOTAMs sent. AMOPS will post the Airfield Lighting discrepancy report on the SharePoint site. Standby personnel will be available to respond within 45 minutes to repair outages that impact Nellis AFB flying operations.

2.2.14.2. 99 CES/CEOFE will perform daily inspections, except weekends and holidays, on the airfield lighting systems and will notify AMOPS when proceeding out to perform the inspection and verify/repair discrepancies. Once the inspection is complete report to AMOPS the status of outages and any new discrepancies found.

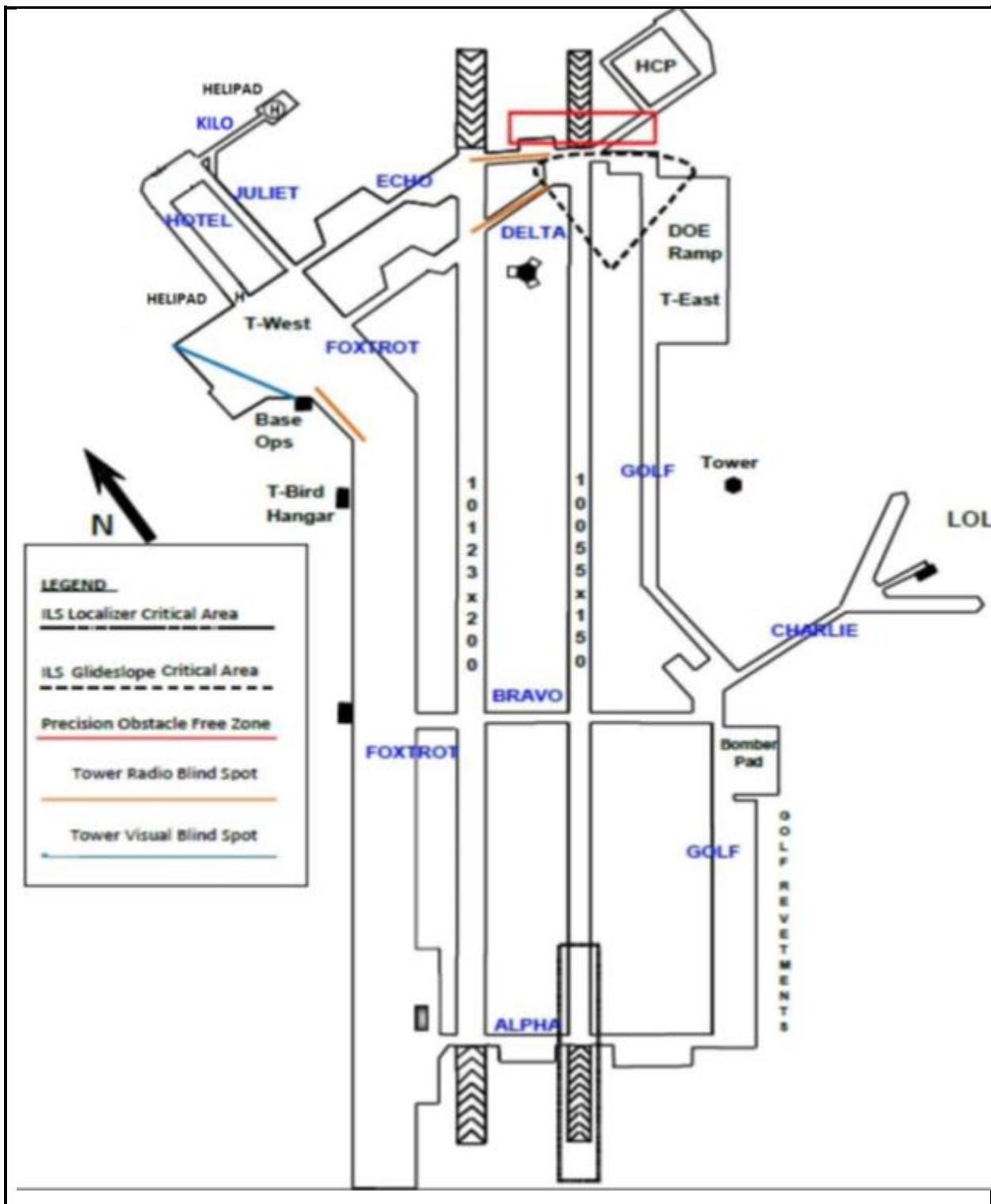
2.2.15. The paved areas leading to the trim pads and fuel barn area are tow ways. Aircraft must be towed to the position and are restricted to A-10 and smaller aircraft.

2.2.16. The taxiways adjacent to aprons are considered taxilanes for airfield criteria purposes.

2.2.17. Jet blast criteria may not be met on aprons. Maintenance must use caution and ensure adjacent rows/areas are aware of engine starts/runs.

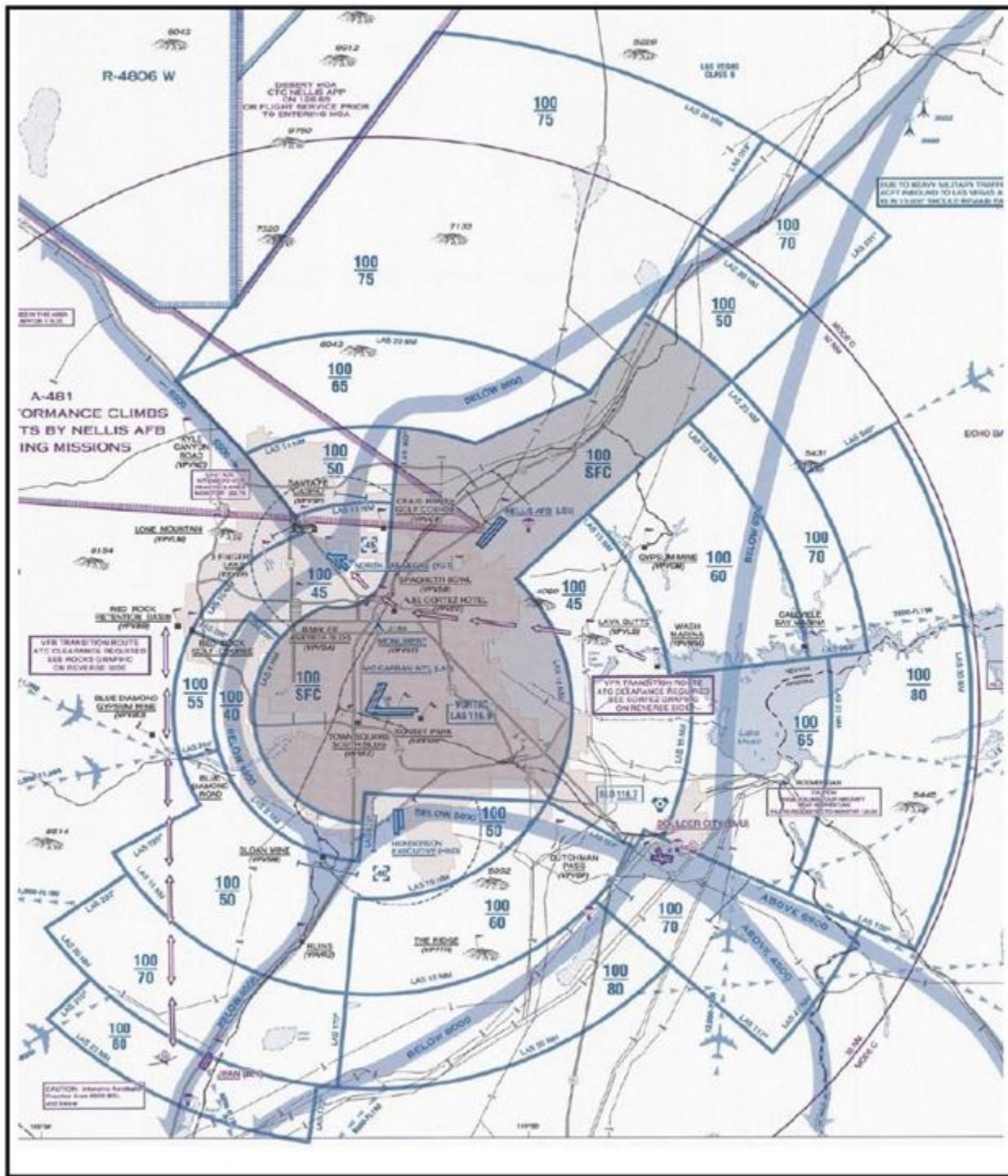
2.2.17.1. Rows 20-21 restricted to idle engine runs only.

Figure 2.2. Critical Protection Areas.



2.3. Las Vegas Class B Airspace. Las Vegas Class B Airspace is an area of positive radar control, for all IFR and VFR aircraft, surrounding Harry Reid Airport that includes Nellis AFB. ATC clearance is required before entering or operating in Class B airspace. See [Figure 2.3](#).

Figure 2.3. Las Vegas Class B Airspace.



2.4. Las Vegas Speedway. The Las Vegas Speedway is located two miles north of the runways at Nellis. The following procedures shall be in effect during scheduled events at the speedway from the time spectator gates open until at least one hour after the conclusion of the last event. All aircraft departing and arriving will avoid overflight of the speedway. An advisory shall be placed

on the ATIS during effective periods. VFR traffic pattern operations shall be flown east of the runways to the maximum extent possible.

2.5. Low Level Avoidance and Noise Sensitive Areas. [Attachment 13](#) identifies noise sensitive and other restricted areas that must be avoided by established horizontal and vertical distances for flight safety, noise sensitivity, or environmental sensitivity. Temporary Flight Restrictions (TFR) are occasionally established within the NTTR. Aircrews must remain clear of these areas and use caution for VFR air support operations in the vicinity of TFR areas. TFR NOTAMs are displayed on the TFR NOTAM website (<https://www.notams.jcs.mil>).

2.6. Grand Canyon. Aircrews will not fly in the Grand Canyon Special Flight Rules Area below 14,500 feet MSL without 57 WG/CC approval and written authorization from FAA Flight Standards District Office IAW Special Federal Aviation Regulation 50-2. Aircrews flying on VR-283 and IR-400 should be aware of possible conflicts with Grand Canyon tour aircraft. A Grand Canyon Special Flight Rules Area briefing can be obtained from 57 OSS/OSOP.

2.7. Airfield Inspections and Checks. AMOPS will accomplish airfield inspections and checks IAW AFMAN 13-204V2, and applicable supplements.

2.8. Determining Runway Surface Condition (RSC). AMOPS will determine RSC IAW AFMAN 13-204V2 and applicable supplements.

2.9. Mid-Air Collision Avoidance. Nellis AFB is a busy airfield with diverse missions and aircraft flown from a single base. The potential for conflict with other military or civilian aircraft is high. All aircrews must be particularly vigilant when departing/recovering at Nellis AFB.

2.9.1. Local traffic pattern potential conflict areas are:

2.9.1.1. Craig Ranch Park (LSV264/5.5). Craig Ranch Park is just outside of the North Las Vegas (KVGT) Class D airspace (the fix falls inside the lateral boundaries of Nellis Tower airspace) and near KVGT Airport which accommodates numerous types of light aircraft ([Figure 2.5](#)). Civilian aircraft from KVGT Airport have a GYPSUM Route (Day VFR Only) that transits over Nellis AFB ([Figure 2.6](#)).

Figure 2.4. NATCF Terminal Airspace.

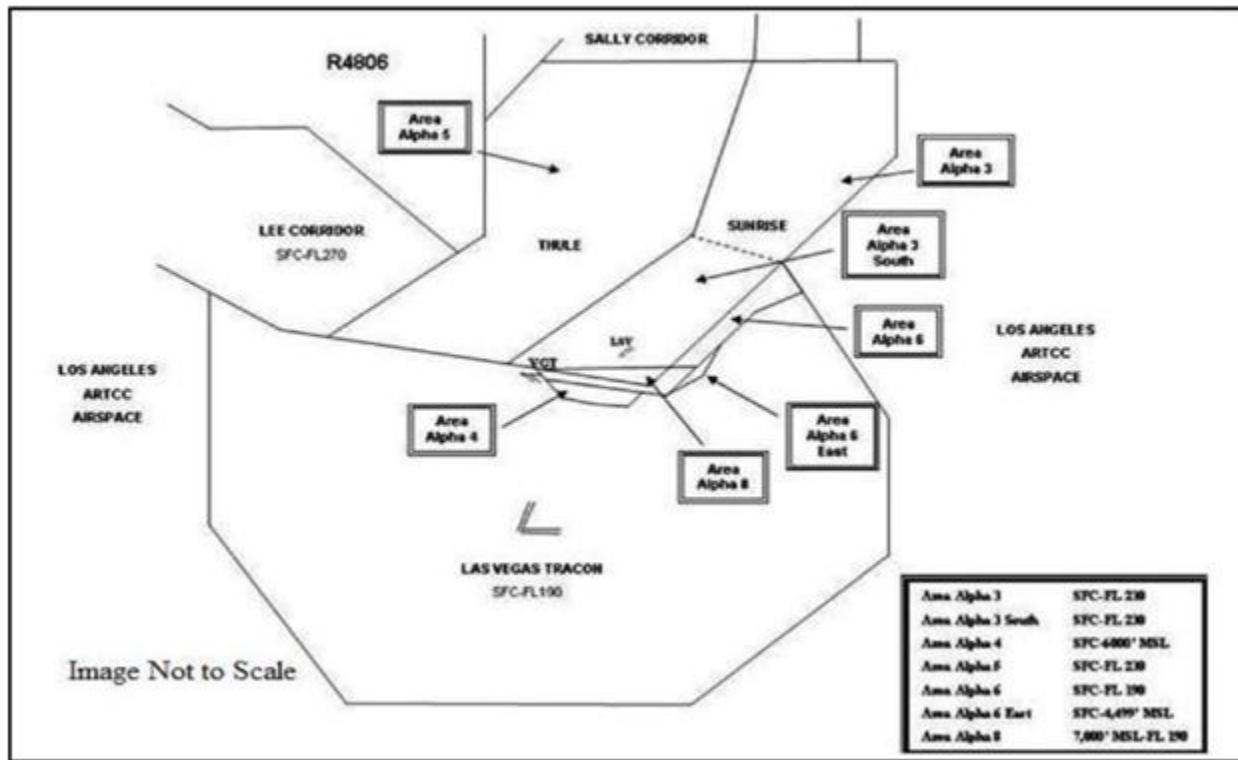


Figure 2.5. Nellis Tower Area of Responsibility.

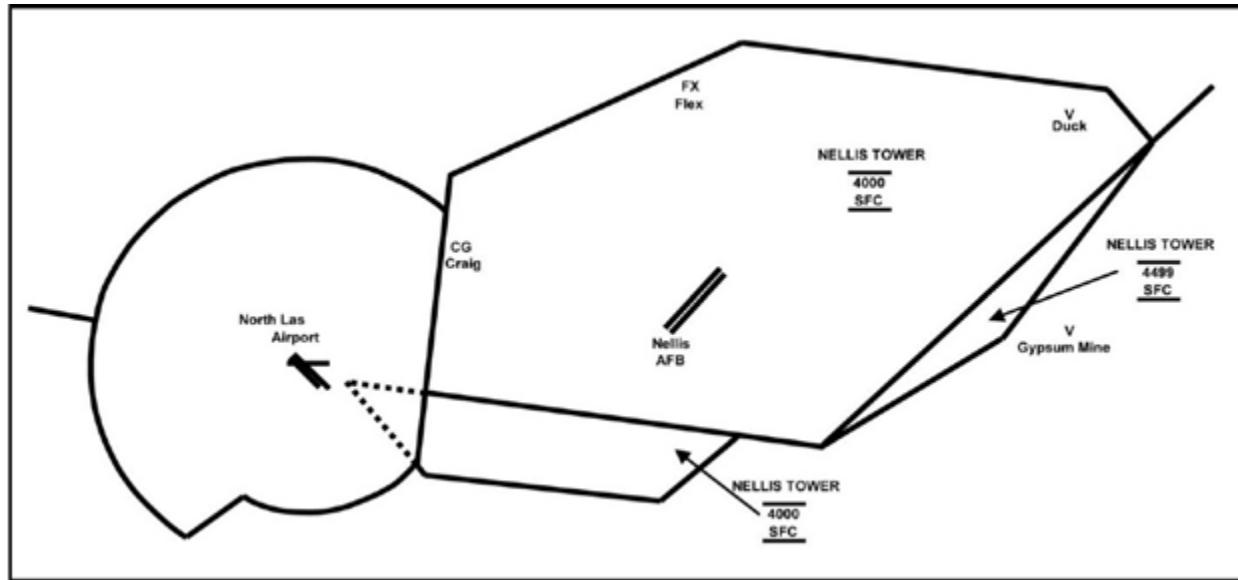
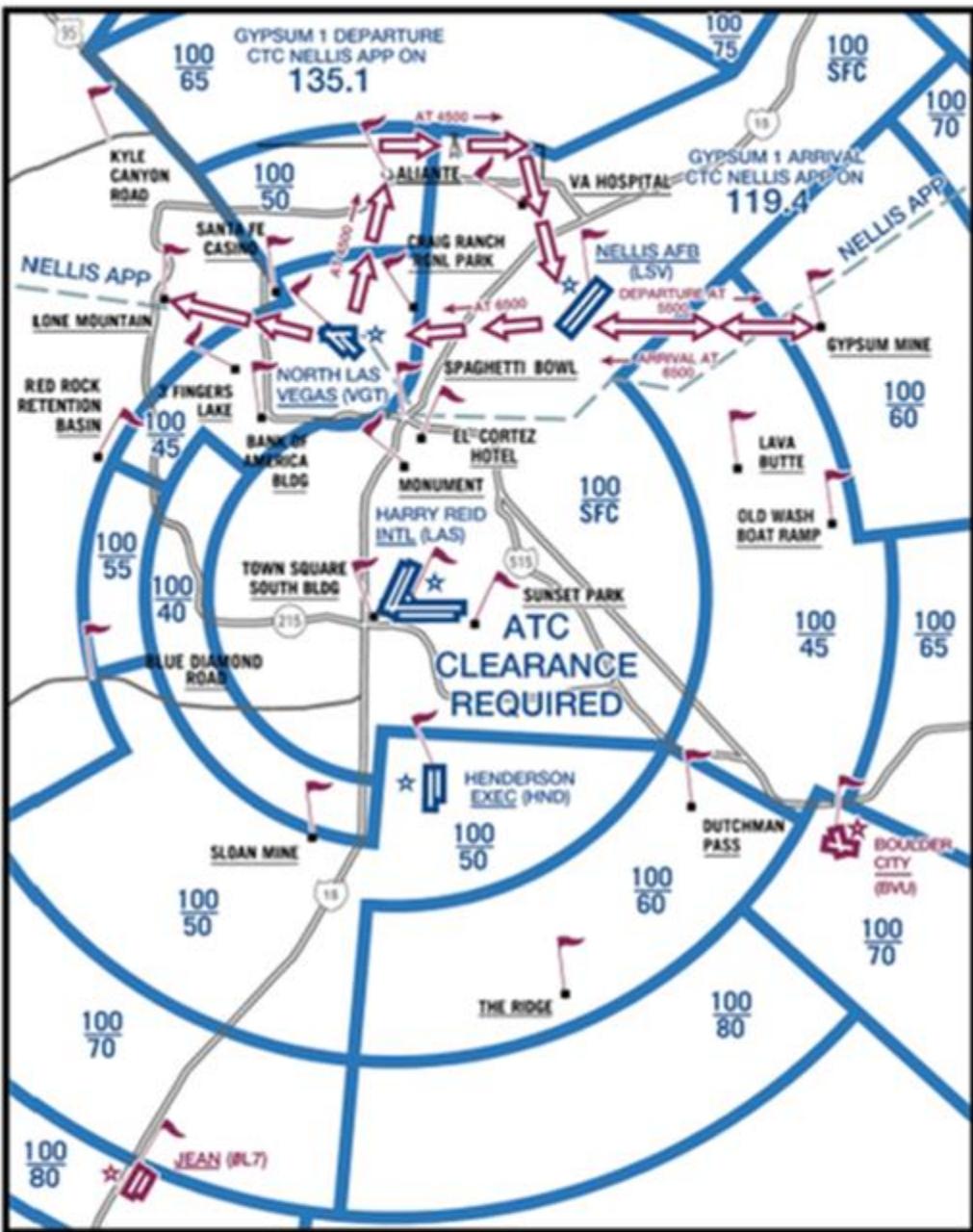


Figure 2.6. GYPSUM Route (North Las Vegas Airport/Day VFR Only).



PILOTS SHALL BE RESPONSIBLE FOR MAINTAINING THEIR OWN TERRAIN
SEPARATION WHILE OPERATING ON THESE ROUTES

GYPSUM 1 DEPARTURE: After receiving clearance, proceed direct and cross ALIANTE CASINO VFR Checkpoint (VPVAL) proceed 1nm North to the Powerline at 4500' MSL; follow the powerline East, contact Nellis Approach prior to entering the Class B, proceed East until abeam the VA HOSPITAL VFR Checkpoint (VPVVA) at 4500' MSL; proceed direct and cross Nellis AFB Runway 03L/R approach end numbers at 5500' MSL; direct GYPSUM MINE (VPVGM) maintain 5500' MSL until exiting Class B airspace.

GYPSUM 1 ARRIVAL: After receiving clearance, enter Las Vegas Class B direct and cross GYPSUM MINE (VPVGM) at 6500' MSL; direct Nellis AFB (KLSV) approach end numbers of runway 03L/R at 6500' MSL; direct North Las Vegas (KVGT) at 6500' MSL; direct LONE MOUNTAIN (VPVLM) at 6500' MSL until exiting Class B airspace. If a VFR descent is approved prior to LONE MOUNTAIN (VPVLM), remain on Nellis Approach frequency until changed to North Las Vegas Tower. Do not descend below 4000' MSL without North Las Vegas Tower approval.

NOTE 1: It is recommended that pilots make request for the GYPSUM Departure route on initial contact with Nellis Approach due to high density fighter traffic in the vicinity of Nellis AFB.

NOTE 2: Due to the volume and close proximity of traffic on the same route, pilots shall make every reasonable effort to visually acquire and report traffic immediately preceding on GYPSUM route in sight.

ALIANTE	36°17.56'N 115°10.80'W	GYPSUM MINE	36°13.56'N 114°52.74'W	LONE MOUNTAIN	36°14.29'N 115°18.92'W	VA HOSPITAL	36°17.10'N 115°05.66'W
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2.9.1.2. Runway 03 Arrivals. Limited airspace for RWY 03 arrivals creates a possible conflict between straight-in, initial, and base leg traffic. Additional conflicts may occur with high density VFR civilian aircraft operating in the vicinity of VGT.

2.9.1.3. Environmental Conditions. Late afternoon and low sun conditions restrict the tower's visibility for control of the area from Craig Ranch Park to initial and from base leg to final for RWY 03. Late afternoon takeoffs from RWY 21 are also obscured to the tower controllers.

2.9.1.4. Tower Area of Responsibility. Nellis Tower's area of responsibility ([Figure 2.5](#)) around FLEX ends at the LAS R-350 (west end of FLEX). Remain over the east edge of the eastern most marker (triangle) at FLEX to avoid conflict with the VGT traffic.

2.9.1.5. Low Altitude Departures and Recoveries. Aircraft flying low altitude departure/arrival routes to RWY 03 must use caution for VFR civil traffic along US Highway 95.

2.9.2. North Las Vegas Training Area. A high density VFR civilian aircraft training area is located north of the Las Vegas (LAS) 260 radial, west of Highway 95, and from approximately 15 to 30 NM from LAS TACAN ([Figure 2.3](#)). The training area extends as far north as Lee Canyon and includes all altitudes.

2.9.3. Desert Rock Airport (NV65). Aircraft in the Low Altitude Tactical Navigation Area (LATN) west area must use caution for DOE aircraft on approach to or departure from NV65.

2.9.4. Mesquite Airport. Aircraft in the LATN east area and within the confines of IR 126, IR 266 or VFR Military Training Route (VR) 209 must use caution for aircraft on the published instrument approach.

2.10. Primary Training Area. The primary training area ([Figure 2.8](#)) includes: Desert and Reveille North/South Military Operations Areas (MOA), overlying Air Traffic Control Assigned Airspace (ATCAA), LATN, the Silver MOA, and restricted areas 4806E, 4806W, 4807A, 4807B, and 4809. Restricted area 4808 and portions of 4809 are assigned to other agencies. See [Attachment 13](#) for avoidance areas, noise sensitive areas and IFF off/lights out airspace.

2.10.1. Primary Training Areas. Boundary coordinates, procedures, and restrictions for the primary training area SUA subdivisions are in AFMAN 13-212V1, ACC Sup, NTTR Addendum A, Range Planning and Operations.

2.10.2. Unscheduled Sorties to 4809A ([Figure 2.7](#)). Acrews that fly unscheduled sorties or without ATC clearance into 4809A must remain with their aircraft after landing until met by a designated USAFWC representative; maintain positive control of video tape recorder (VTR) tapes and gun film and release only to USAFWC representative; remain silent about the mission until debriefed by USAFWC or DOE security personnel and sign a security statement.

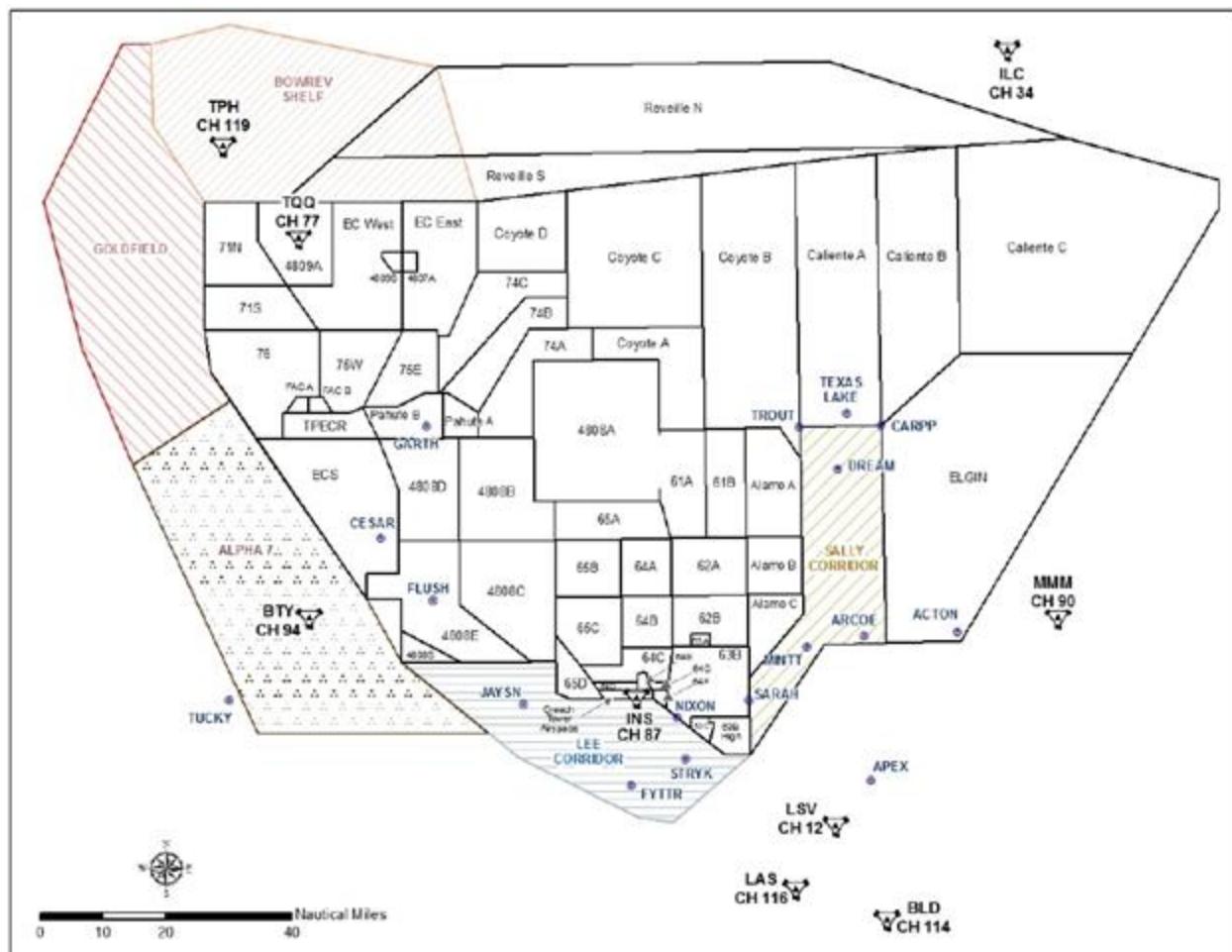
2.10.3. Range Transition Corridors.

2.10.3.1. Sally Corridor. Aircraft must have an IFR clearance from Nellis Control to operate in the Sally Corridor at Flight Level (FL) 180 and above. VFR operations may be conducted within the corridor from 9,700 feet to 17,500 feet MSL provided ATC approval and radio contact are maintained. Aircraft may transit through or work in the Sally corridor VFR without contacting Nellis Control when operating below 9,700 feet MSL. Helicopters

will monitor appropriate frequencies and contact Nellis Approach or Tower when appropriate.

2.10.3.2. Lee Corridor. The corridor airspace extends from the surface to FL 270. Aircraft must have an IFR clearance to operate within the corridor from FL 180 to FL 270. VFR operations may take place within the corridor below FL 180.

Figure 2.7. Nevada Test and Training Range (NTTR) Area.



2.10.4. LATN Areas (**Figure 2.8**). The LATN areas are for use by aircraft to allow random selection of navigation points and low altitude tactical formation practice (**Table 2.2**, through **Table 2.5**). Ground tracks must remain outside of Class B (adjacent to LATN Central), D airspace, airports and populated or noise sensitive areas. Altitudes and airspeeds will be in accordance with CFR Part 91, applicable FAA orders and appropriate AFI/AFMAN 11-series regulations. Helicopter crews flying in the Bitter Springs or White Basin area and/or in the Lake Mead/Grand Canyon/Hoover Dam area are encouraged to monitor and communicate on 120.65.

Figure 2.8. Local Area/VFR Low Altitude Tactical Navigation (LATN).

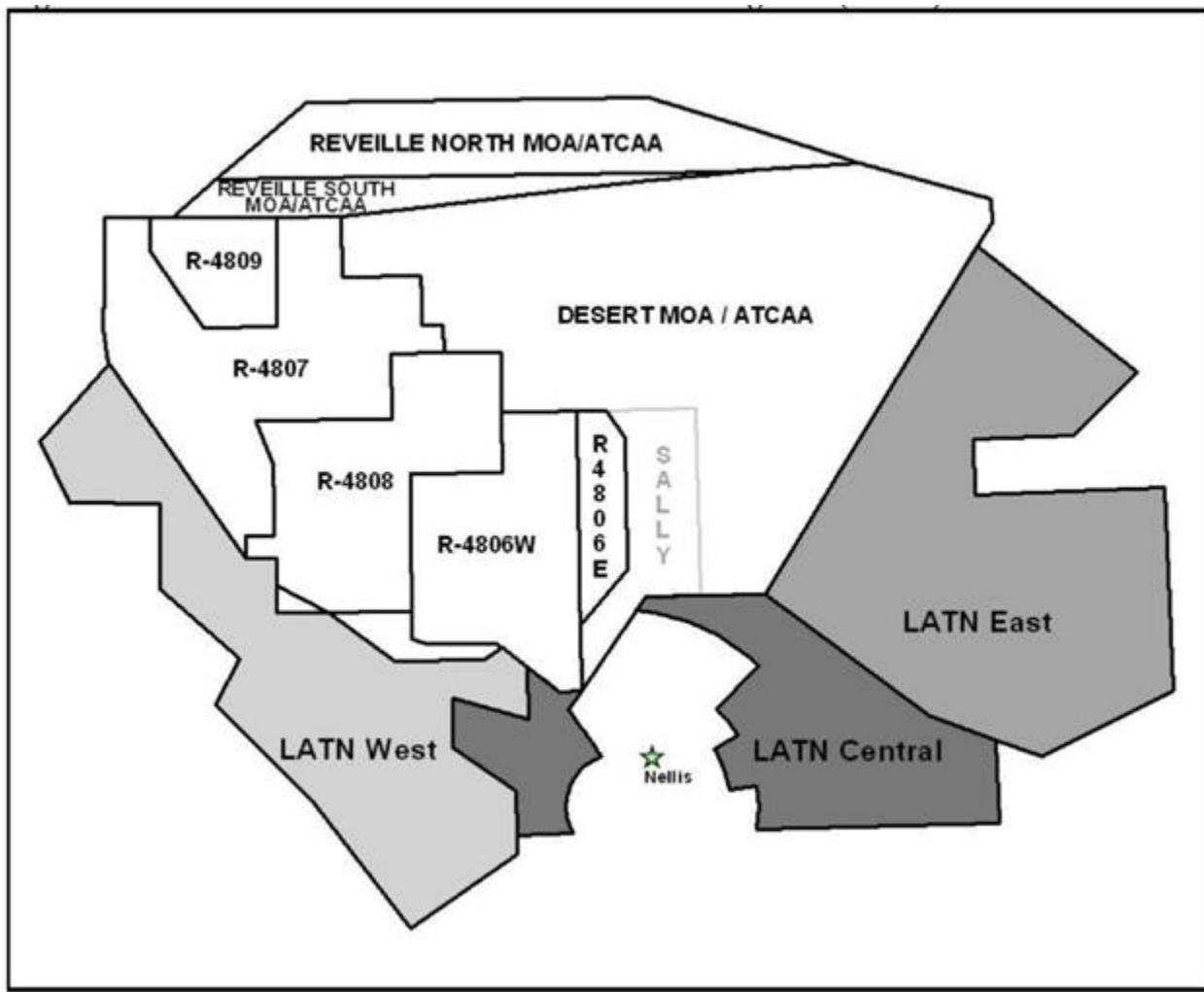


Table 2.2. LATN West.

50 -1,500 feet AGL	(WGS-84 HH-MM-SS)
37 26 30N, 117 04 30W	36 51 00N, 116 33 30W
36 51 00N, 116 26 30W	36 41 00N, 116 26 30W
36 41 00N, 116 14 45W	36 32 00N, 116 00 00W
36 32 00N, 115 39 50W	36 34 00N, 115 36 00W
36 30 00N, 115 30 00W	36 21 00N, 115 30 00W
36 25 00N, 115 47 00W	36 16 00N, 115 47 00W
36 08 00N, 115 33 00W	35 56 25N, 115 33 00W
35 43 20N, 115 56 50W	36 06 30N, 116 17 00W
36 25 00N, 116 40 00W	36 32 50N, 116 36 00W
36 32 50N, 116 36 00W	36 45 00N, 116 52 30W
37 01 30N, 116 52 30W	37 01 30N, 117 12 30W
37 11 55N, 117 20 20W	37 26 30N, 117 04 30W

Table 2.3. LATN East.

50 - 1,500 feet AGL	(WGS-84 HH-MM-SS)
37 45 00N, 113 45 20W	37 21 00N, 113 10 00W
37 10 00N, 113 25 00W	37 10 00N, 113 48 00W
37 00 00N, 113 48 00W	37 00 00N, 113 05 00W
36 23 00N, 113 05 00W	36 12 00N, 113 35 00W
36 20 00N, 114 00 00W	36 45 00N, 114 34 00W
37 45 00N, 113 45 20W	???

Table 2.4. LATN Central.

50 - 1,500 feet AGL	(WGS-84 HH-MM-SS)
36 26 00N, 115 24 00W	36 26 00N, 115 17 00W
36 44 00N, 115 03 50W	36 44 00N, 114 35 00W
36 45 00N, 114 34 00W	36 20 00N, 114 00 00W
36 15 00N, 113 45 00W	36 00 00N, 113 45 00W
36 00 00N, 115 47 00W	36 08 00N, 115 33 00W
36 16 00N, 115 47 00W	36 25 00N, 115 47 00W
36 21 00N, 115 30 00W	36 30 00N, 115 30 00W
36 26 00N, 115 24 00W	Excluding Las Vegas B Airspace

2.11. Lights Out Training Procedures.

2.11.1. Lights Out Training MOA Operations. Aircrew using lights out training procedures in the MOAs will add the phrase “Lights Out Ops” to their initial check in with Nellis Control on Channel 7/8. Nellis Control will acknowledge and pass the information to the appropriate controlling agency (AWACS/GCI or the agency with primary responsibility for controlling traffic in the working area [if AWACS or GCI is not available]).

2.11.2. Aircraft will terminate lights out MOA operations when a non-participating aircraft approaches within 5 NM and 5,000 feet unless they have radar contact or tally and can assume responsibility for maintaining safe separation. The controlling agency will advise aircraft operating under lights out conditions of non-participating traffic approaching within 10 NM and 5,000 feet by transmitting, “ATTENTION (a/c callsign), TRAFFIC (position/altitude or bullseye)” on the aircraft’s working frequency or UHF guard. Aircraft will acknowledge with callsign and call “tally” or “radar contact” as appropriate. If the “radar contact” or “tally” call is not heard by the controlling agency and the non-participating traffic reaches 5NM and 5,000 ft from the lights out aircraft, the controlling agency will transmit, “ATTENTION (a/c callsign), NELLIS CONTROL DIRECTS OVERT LIGHTING ON NOW, TRAFFIC (position/altitude or bullseye)”. The lights out aircraft will acknowledge with call sign and turn on the appropriate night lighting IAW AFMAN 11-202V3 until the non-participating aircraft is no longer a factor (i.e. greater than 5 NM or 5,000 feet), at which time the controlling agency will transmit, “(a/c callsign), TRAFFIC NO FACTOR.”

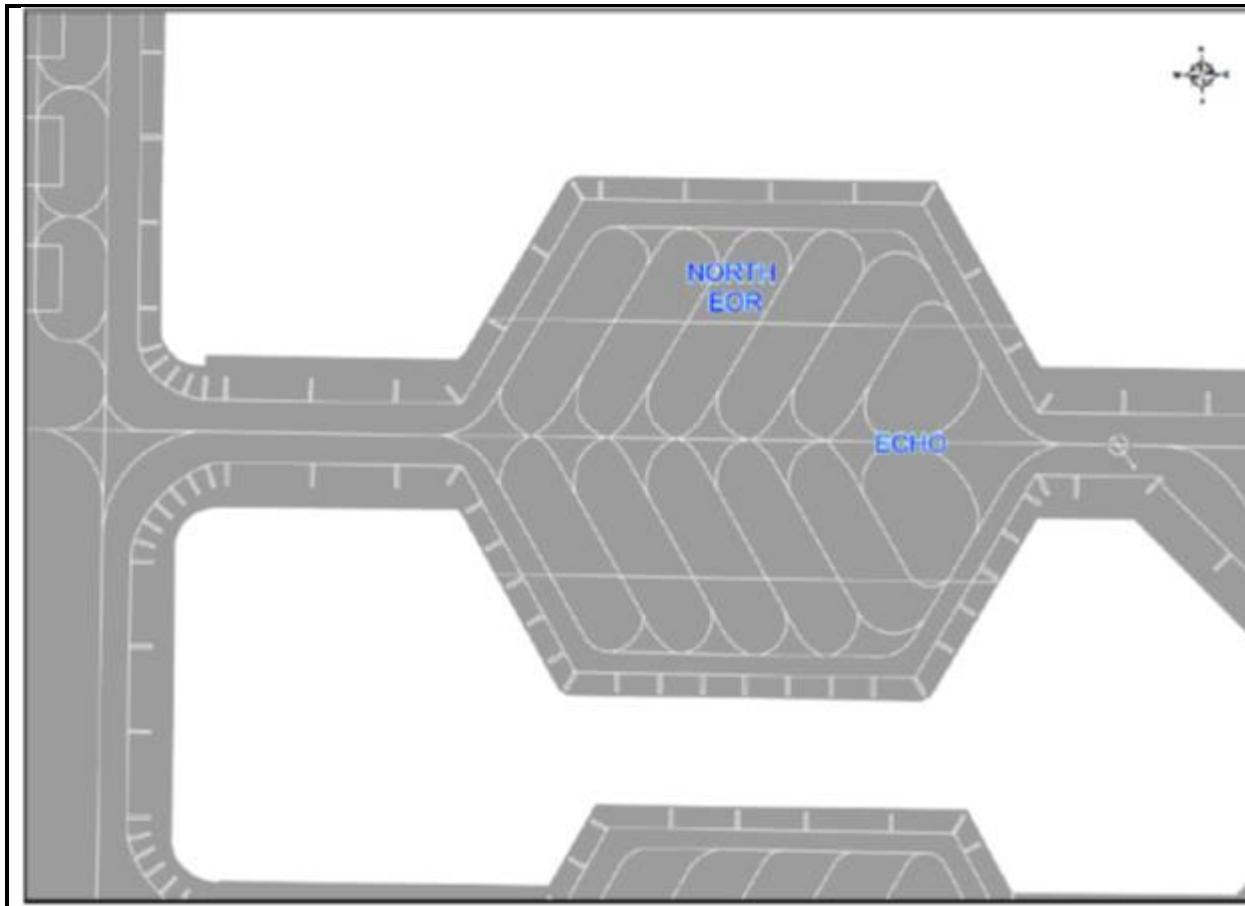
2.11.3. USAFADS will conduct daytime operations lights out.

2.12. Hot Refueling Pits.

2.12.1. There are two rotary wing hot refueling areas on Taxiway Hotel north of the Transient Helipad. Rotary hot pit refueling capabilities are for base rotary assigned aircraft or for rotary aircraft specifically supporting a base-assigned unit. Non-local aircraft supporting based assigned units must receive Hot Pit training as part of their local area orientation briefing prior to utilizing the hot refueling pits. The supported/host rotary unit is responsible for notifying the 57 MXG during the weekly scheduling meetings if a non-locally assigned rotary aircraft will be conducting hot refueling and confirm they have received the appropriate training.

2.12.2. Fixed wing hot refueling pits are located at the Golf revetments 1-25, Bomber Pad pits 1-3, and spots 3 through 6 of aircraft parking rows 7, 29, and 45. Fixed wing hot pit refueling capabilities are for base assigned aircraft only unless coordinated with 57 MXG and approved by the 57 OG/CC. Note: Exception; B-2A are approved hot-pit refueling IAW Nellis AFB Hot Pit Refueling Site Certification for B-2A Aircraft and Hot Pit Refueling Site Master Listing memorandum dated 15 Mar 21.

Figure 2.9. North EOR Arming and Holding Flow.



2.13. Airfield Maintenance. All airfield maintenance and construction projects that may impact airfield operations must be coordinated through the Airfield Manager (57 OSS/OSAA). Sweeper operations, grass mowing, etc., will be IAW operations letter between AMOPS and CE for specific operations.

Chapter 3

GROUND OPERATIONS

3.1. General. Preflight planning and briefing requirements will be in accordance with current directives. Unit operations sections and aircrews will file flight plans with AMOPS and confirm range space restrictions with NTTR Operations Center (Blackjack) in accordance with AFMAN 13-212V1, ACC Sup, NTTR Addendum A, Range Planning and Operations, NAFB Addendum A. All frequencies for Nellis AFB operations are contained in the 57 WG IFG and available for download at the 57 WG/WGV website <https://usafws.nellis.af.mil/sites/57WGV/default.aspx>.

3.2. Operations within the Controlled Movement Area (CMA). The CMA is defined as both runways, overruns, helipads, and the area within 100 feet of the runways, overruns and helipads. Note: Personnel must possess a valid airfield driver's license IAW NAFB Instruction 13-213, Airfield Driving.

3.2.1. Authorization to enter the CMA must be received from Nellis Ground prior to entry. Unless otherwise authorized, only vehicles in direct radio contact with Nellis Ground or escorted by a radio-equipped vehicle in direct radio contact with Nellis Ground will be authorized in the CMA.

3.2.2. Entry request procedures. Vehicle operators will contact Nellis Ground on the Ramp Frequency Modulation (FM) net stating location and requested operation. Operators will acknowledge all ground control instructions to ensure receipt and understanding prior to compliance. The Ramp FM net must be continuously monitored while within the CMA.

3.2.3. Emergency removal or exit of vehicles and/or pedestrians in the event of vehicle or Air Traffic Control Tower radio failure: Tower will flash the runway edge lights on and off to alert vehicle operators/pedestrians on the runway that there is a problem and/or emergency that requires them to immediately exit the runway. All vehicle operators/pedestrians must exit the runway immediately. Contact Tower and Airfield Management immediately and advise off the runway and include any pertinent information that might affect safe runway operations. If not able to communicate with Air Traffic Control Tower or Airfield Management via radio, use other means of communication such as a cellular phone (when available). Report incident to Airfield Management immediately.

3.3. Aircraft Priorities. Aircraft will be given priority for taxi, takeoff, and landing IAW FAA JO 7110.65 and applicable supplemental publication. FAA JO 7110.65 priorities will take precedence over local priorities, which are listed below:

3.3.1. ACA Taskings

3.3.2. DOE

3.3.3. DV/VIP (See 3.3.9.1. below)

3.3.4. LFEs

3.3.5. Active Runway Arrival (See 3.3.9.2. below)

3.3.6. Active Runway Departure (See 3.3.9.2. below)

3.3.7. Opposite Direction Departures

3.3.8. Opposite Direction Arrivals (See 3.3.9.2. below)

3.3.9. Practice Approaches.

3.3.9.1. Thunderbirds will have priority when they have a DV/VIP on board.

3.3.9.2. Check rides in the instrument/PFO/SFO pattern have priority over normal operations. On initial contact advise Tower/NATCF of check ride status.

3.3.9.3. The SOF, in coordination with ATC, may adjust priorities to meet mission needs.

3.4. Flight Plans. All aircraft departing Nellis AFB must file a flight plan. All fixed wing aircraft departing Nellis AFB must file a departure procedure to include fixed wing aircrew planning to depart VFR (i.e., FLEX WEST/NORTH Departure or A-10 VFR Departure). Stereo routes ([Attachment 4](#)) are available from Nellis AFB to the primary and secondary training areas. Stereo routes are used for test, exercises or training only. TDY aircrew(s) must be briefed by their host unit prior to using stereo flight plans. If stereo routes are not used, aircrews must file a DD Form 1801, Military Flight Plan. All Nellis based, LFE participants and Nellis supported aircrews, to include the DOE (DoE Operations), may fax or e-mail the DD Form 1801 to AMOPS. The original DD Form 1801 must be maintained by the host unit. Amendments to the original DD Form 1801 may be coordinated with AMOPS via direct voice lines.

3.4.1. All requesting units will contact AMOPS via landline at 652-4601 after faxing or e-mailing flight plan to ensure receipt and verify accuracy. Request for flight clearance will not be submitted until verification is received from requesting unit.

3.4.2. Transient aircrews not participating in LFE or supporting Nellis-based flying operations must file a DD Form 1801 in person with AMOPS.

3.4.3. Any changes to stereo routes filed in PEX, within an hour of departure time, must be called to AMOPS for submittal to Los Angeles Center. Failure to notify AMOPS of changes to flights already in PEX could result in a delay of clearance issued.

3.5. Clearance Procedures. Unless otherwise approved or instructed by ATC, a local ATC clearance will be obtained from Nellis Clearance Delivery prior to taxi. An A-10 VFR Departure clearance will be obtained from Nellis Ground Control on taxi; aircrew are not required to contact NATCF Clearance Delivery. ATC clearance for any A-10 VFR Departure constitutes clearance to operate within Class B airspace. Upon departing Class B airspace, aircraft shall not re-enter without ATC approval.

3.5.1. Aircrews expending ordnance on the NTTR, except for RED FLAG missions and WSINT exercises, will confirm type ordnance and specific target with Blackjack prior to departure. Blackjack will advise the pilot of any range restrictions.

3.5.2. If a wingman is delayed or a clearance is not available, a short-range clearance may be requested if a flight plan is on file and the aircraft will remain within the NTTR. Use the following procedures:

3.5.2.1. Request a short-range clearance from Clearance Delivery. Specify the requested departure procedure and your scheduled transponder code.

3.5.2.2. Range times and restrictions for a delayed wingman are the same as the flight leads. A delayed wingman is considered part of the flight after he is cleared to tactical frequency and is in scheduled airspace.

3.5.3. If two or more flights want to join-up and depart together, each flight must be on the same departure procedures and have their own clearance.

3.6. Taxi Procedures. All aircrews must obtain ATIS information prior to taxi. Include the following information in all calls requesting taxi from Ground Control (GC): Call sign, number of aircraft, ATIS letter designation, status of clearance, and parking row location. Prior to takeoff, aircrew will ensure power is applied to the NACTS pod station and keep power on the station for the sortie duration.

3.6.1. Advise GC when:

3.6.1.1. The number in the flight differs from the flight plan (i.e. one aircraft ground aborts).

3.6.1.2. Planned takeoff spacing is more than 20 seconds between aircraft.

3.6.1.3. A FLEX NORTH/WEST Departure or A-10 VFR Departure is requested.

3.6.1.4. RWY 03 departure is required for live or inert ordnance configuration when RWY 21 is the active runway. See [Chapter 5](#) for specific ordnance definitions and restrictions.

3.6.1.5. Two or more flights join-up/depart together. All communications will be directed to the flight lead call sign only, but instructions are applicable to all flight elements.

3.6.1.6. Unrestricted climbs. If an unrestricted climb is requested, include highest altitude climbing to on departure. In order to prevent local noise complaints, “quick climb” or unrestricted afterburner (AB) climbs are subject to the following restrictions:

3.6.1.6.1. No transient/TDY aircraft departing to another base will perform an unrestricted AB climb out of Nellis without explicit approval from the 57 OG/CC.

3.6.1.6.2. For aircraft operating locally, there will be no unrestricted AB climbs on weekends or holidays. In addition, there will be no unrestricted AB climbs on weekdays prior to 1000L. The only exceptions are functional check flights (FCF), incentive flights, operational missions and syllabus requirements.

3.6.1.7. Requiring an opposite direction departure or a non-standard arming area.

3.6.1.8. Any deviation from standard departure procedures is requested.

3.6.2. Taxi Spacing. Taxi spacing will be in accordance with specific aircraft operating procedures. 57 WG fixed wing aircraft will use 150 feet staggered spacing during daylight hours and 300 feet centerline at night. Helicopters will use a minimum of 100 feet spacing. Note: USAFADS will taxi IAW ACCI 11-USAFADSV3.

3.6.3. Ramp Control. All parking ramps and the hot cargo pad are uncontrolled.

3.6.4. Landing helicopters have priority over taxiing aircraft. Do not direct engine exhaust at hovering or air taxiing helicopters.

3.6.5. All aircraft must give way to emergency response vehicles. If taxiing near an EPU activation or hydrazine spill, switch to 100% oxygen until clear of the area.

3.6.6. If radio failure occurs during taxi, turn on taxi lights (F-15s extend speed brake) and taxi to parking.

3.6.7. Heavy Aircraft Taxi Procedures. To reduce FOD potential on taxiways, after landing, large/heavy (C-130s, C-5s, C-17s, KC-135s, E-3s, B-52s, KC-10s) and other four engine aircraft must taxi with outboard engines at idle or off, unless operational necessity dictates otherwise. Consider any areas of airfield construction as high risk FOD areas and use caution to minimize blowing FOD around airfield.

3.6.7.1. ATC should avoid holding heavy aircraft in-between the runways at the approach end or on any taxiway adjacent to runways where jet wash is directed at the landing zone. If unavoidable, ATC will issue a cautionary to aircraft landing to the affected runway.

3.6.7.1.1. When arranging parking for transient aircraft, host units will plan for 25' wingtip clearance when ramp space allows. As approved by the 57 WG/CC, 10' wingtip clearance will only be used when operationally necessary due to limited ramp space.

3.6.7.2. Wide body aircraft with wingspans greater than a 132.7 feet will not be allowed to taxi on Taxiway Foxtrot between rows 1-22 and 32-46 without wing-walkers. If it is necessary for a wide body aircraft to taxi past these rows the sponsoring unit, Deployment Liaison and/or Transient Alert must ensure that sufficient wingtip clearance is available and provide wing-walkers. This may require the last outboard parking spot on rows 1-22 and 32-46 be left vacant, dependent on type of aircraft. If the aircraft is exiting at Taxiway Bravo they may taxi to rows 23-26 and 28-31 without wing walkers, provided no aircraft is already parked on the spot closest to Taxiway Foxtrot. Aircraft with wingspan of greater than 112 feet may not taxi on Taxiway Foxtrot abeam the arm/dearm pad when the arm/dearm pad north of Taxiway Alpha is in use.

3.6.7.3. B-52/B-747 Operations. B-52s and B-747s will only use RWY 03L/21R. When parking a B-52 on the Bomber Pad, aircraft will turn at the end of the runway, cross RWY 03R/21L, and taxi via Taxiway Golf to the Bomber Pad.

3.6.7.4. Runway and adjacent taxiway operations will be suspended after C-5 and/or B-747 arrivals/departures until a foreign object damage (FOD) check can be accomplished by AMOPS.

3.6.7.5. During mass launches and recoveries, heavy aircraft will takeoff as early as possible and land as late as practical in the launch and recovery windows to minimize potential FOD hazards and delays for other aircraft.

3.6.7.5.1. Simultaneous heavy aircraft departures are prohibited.

3.6.7.5.2. When taking the runway and preparing for departure, heavy aircraft commanders must be aware of the hazards associated with jet blast and FOD potential to aircraft and equipment and personnel in arming and holding areas.

3.6.8. Taxiway Charlie restricted to A-10 and smaller aircraft.

3.6.9. Multiple Runway Crossing (MRC) Procedures. MRC procedures are authorized only for 57 Wing aircraft to include DRAKEN Industries. This procedure also applies to non-assigned and transient crews after the participating pilots have been specifically briefed in a Nellis AFB Local Area Orientation (LAO) briefing. Note: MRC operations are authorized via HQ Air Force Flight Standards Agency (AFFSA) waiver.

3.7. Fixed Wing Arming, Safing and Pre-takeoff Inspection. Pre-takeoff/armng inspections should take place IAW MDS requirements for location. The following apply: Note: USAFADS conducts arming IAW ACCI 11-USAFAFADSV3.

3.7.1. When arming, pilots are responsible for ensuring 10 feet wingtip clearance between aircraft. In the North EOR (**Figure 3.2**), park in the first available slot to the west and fill to the east. In the South EOR south of Taxiway Alpha, park in the most southern slot available and fill to the north. In the South EOR north of Taxiway Alpha, park in the most northern slot available and fill to the south.

3.7.2. The revetments have three taxi lines painted in each shelter. The center line accommodates all fighter aircraft, while F-16s may use the other two lines to park two aircraft per shelter. F-16s parked two per shelter must have a crew chief marshal them when entering or exiting the revetments. Fighters using the center line may transit the shelters without marshaling. Arming or safing is not allowed in the revetments except for deviations approved by the 57 WG Weapons Safety Office. Maintenance will ensure all equipment is properly stored prior to aircraft entering/exiting the revetments to ensure proper wingtip clearance.

3.7.3. B-52s, B-1Bs and B-2s may accomplish pre-takeoff/post landing checks in the chocks.

3.7.4. Check appropriate armament switches safe and keep both hands in view during ground crew arming/dearming procedures.

3.7.5. Individual flight members should clear the EOR after arming is complete. Flights anticipating a delay in takeoff after arming should get clearance from the Nellis Tower to hold between the runways; however, do not taxi in front of aircraft arming forward-firing ordnance (FFO). When holding between runways, align aircraft to be parallel with the runway (do not follow the diagonally painted lines). Pilots are responsible for ensuring 10 feet wingtip clearance when in holding. If holding between runways in the South EOR, taxi aircraft far enough forward to allow other aircraft room to taxi behind.

3.7.6. EOR inspections and/or arming and safing operations on 414th Combat Training Squadron (414 CTS/"RED FLAG"), 549th Combat Training Squadron (549 CTS/"GREEN FLAG") deployed aircraft, and deployed aircraft hosted by the deployment liaison section will be performed by deployed maintenance personnel. Visiting units will comply with arm safe procedures as described in AFI 21-101, Aircraft and Equipment Maintenance Management, and related supplements.

3.7.7. Aircraft that require safing will be safed at the nearest EOR pad and pinned before taxiing to parking. If EOR crews are not available (for example, runway change in effect) and a low fuel state exists, contact the SOF and shut down the engines in the appropriate EOR area if necessary.

3.7.8. Aircraft waiting to be armed will not block Taxiway Alpha between RWY 03R and the revetments. Flight leads or package commanders will prevent blocking by staggering taxi and takeoff times and marshaling flights or packages between the runways on Taxiway Alpha. In addition, aircrews will hold on Taxiway Golf, north of Taxiway Alpha, until an arming slot opens up. After arming, aircrews will individually request to cross RWY 03R and marshal between the runways.

3.8. Taking the Active Runway. Do not block access to the runway unless runway clearance has been received and all ground checks are completed for all flight members.

3.9. Intersection Departures. Intersection departures are authorized for RWY 21R and RWY 03. RWY 21R at Taxiway Delta 8,900 feet available ([Figure 2.1](#)). RWY 03L/R at Taxiway Bravo 6,450 (RWY 03L)/6,300 (RWY 03R) feet available ([Figure 2.1](#)). As cleared by ATC, helicopters and tiltrotor aircraft are authorized to depart from any active runway, taxiway, or helipad. Note: [Figure 2.1](#)/runway feet available identified above are rounded down to the nearest 50' interval.

3.10. Rolling Takeoffs. Rolling takeoff solicitation by tower can be used when deemed necessary to expedite traffic flow (heavy jet rolling takeoffs are not authorized). The aircrew is the final authority to accept or reject the rolling takeoff option. Tower will use the following phraseology to solicit a rolling takeoff: "STRIKE 1, WILL YOU ACCEPT ROLLING?" If it is accepted, Tower expects a rolling takeoff when takeoff clearance is issued.

3.11. After Landing Procedures. In order to avoid congestion in the EOR areas, aircrews should taxi single-ship to the chocks immediately following safing unless other aircraft are safing FFO or other factors present a hazard. If congestion is not a factor, flight integrity may be maintained.

3.12. Engine Run Procedures.

3.12.1. Fighter aircraft conduct engine runs at the following locations:

3.12.1.1. 80% or Less—at the standard parking spot.

3.12.1.2. Above 80% - all fighter aircraft can perform above 80% at the hush house/hush house engine trim pads. Only A-10, A-4 and L-159 aircraft can perform 360 degree above 80% engine runs on the north and sound trim pads.

3.12.1.2.1. A-4 and L-159 maintenance must coordinate with the A-10 (Thunder) Pro-Supervisor to request use of the north and/or south trim pad prior to towing an aircraft to a trim pad.

3.12.1.3. Due to jet blast issues on the apron, maintenance must ensure that personnel and equipment on adjacent rows are aware of engine starts/runs.

3.12.2. C-130s and larger aircraft may conduct engine runs at the following locations:

3.12.2.1. Idle engine runs - at the standard parking spot.

3.12.2.2. Greater than idle runs—primary location is on the concrete portion of the runway. Prior coordination is required and will usually be done outside the flying window. Alternate engine run locations may be approved by Airfield Management on a case-by-case basis if the below criteria is met:

3.12.2.2.1. Sufficient space for required engine run must be present behind the aircraft per the applicable aircraft T.O. The area must be all concrete (no asphalt or shoulder pavement).

3.12.2.2.2. Coordination must be made with the unit/agency parked behind the aircraft before the run is approved.

3.12.2.2.3. Maintenance crews must conduct a FOD walk behind the aircraft before the engine run and protect the jet blast/prop wash danger area as required.

3.12.3. 57 WG MOC shall advise Control Tower of proposed maintenance engine runs (this is an advisory only; Nellis Tower does not approve or deny maintenance engine runs). During airfield closures, 57 WG MOC will notify Command Post and the Base Defense Operations Center (BDOC) for engine runs.

3.13. Transient East Taxi Procedures. [Figure 3.1](#) and [Table 3.1](#), Spots 01-A through 10-A, 11-B and the taxilane into the ramp are marked for B-1 wingtip clearance. Any aircraft larger than a B-1 must ensure they have wing walkers because wingtip clearance cannot be guaranteed. Aircraft must use the taxi lane between the parking areas to access spots 01-A through 04-A. Aerospace Ground Equipment (AGE) will be stored in the AGE area, not on the shoulders. Aircraft must follow marshaller directions. Aircraft and equipment must be kept inside the red lines and east of the white line to protect wingtip clearance for Gulf taxi lane.

Figure 3.1. Transient East Taxi.



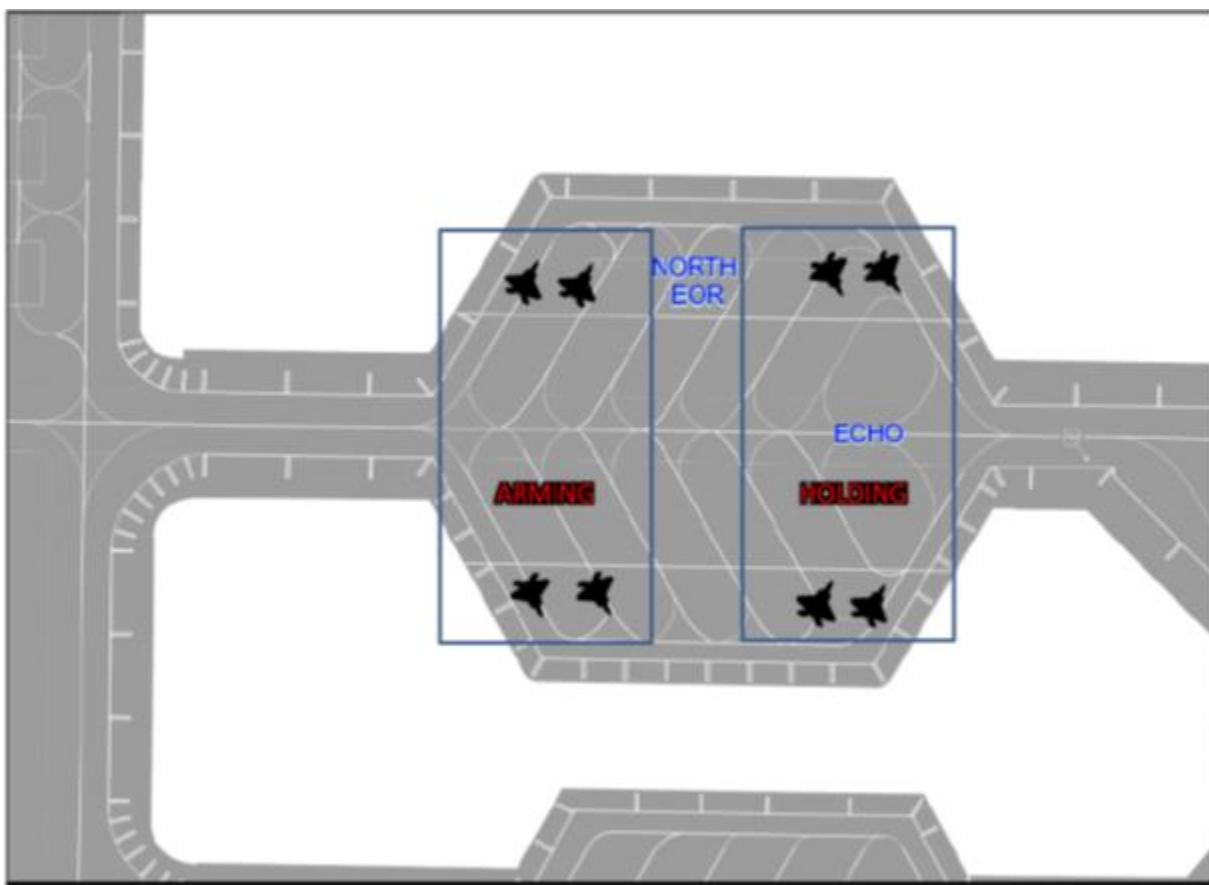
Table 3.1. Transient East Coordinates/Elevation.

LOCATION	TYPE A/C	COORDINATES	ELEV
TRANSIENT EAST			

01-A	B-1B	N3614.284/W11501.502	1848'
01-B	C-130	N3614.277/W11501.493	1848'
02-A	B-1B	N3614.304/W11501.480	1849'
02-B	C-130	N3614.297/W11501.471	1849'
03-A	B-1B	N3614.324/W11501.458	1849'
03-B	C-130	N3614.317/W11501.449	1850'
04-A	B-1B	N3614.344/W11501.436	1850'
04-B	C-130	N3614.337/W11501.427	1850'
05-A	B-1B	N3614.402/W11501.381	1852'
06-A	B-1B	N3614.423/W11501.359	1854'
07-A	B-1B	N3614.219/W11501.441	1847'
07-B	C-130	N3614.214/W11501.433	1847'
08-A	B-1B	N3614.243/W11501.415	1848'
08-B	C-130	N3614.238/W11501.407	1848'
09-A	B-1B	N3614.267/W11501.388	1849'
09-B	C-130	N3614.269/W11501.381	1848'
10-A	B-1B	N3614.292/W11501.362	1849'
10-B	C-130	N3614.286/W11501.355	1849'
11-A	C-17	N3614.165/W11501.364	1846'
11-B	B-1B	N3614.163/W11501.362	1846'
DOE RAMP			
South End	N/A	N3614.40/W11501.38	1814'
Middle	N/A	N3614.44/W11501.32	1814'
North End	N/A	N3614.53/W11501.20	1814'
BOMBER PAD			
Spot 1 (S End)	N/A	N3613.71/W11501.95	1814'
Spot 2 (Mid)	N/A	N3613.73/W11501.92	1814'
Spot 3 (End)	N/A	N3613.77/W11501.89	1814'

3.14. Aircraft Tow Procedures. MOC will coordinate all aircraft tows that may enter CMAs with Nellis Tower (see [Figure 2.1](#)). Tow crews shall obtain tower approval prior to entering CMAs using aircraft radios or the Ramp Net, and shall monitor that frequency until exiting the CMA. Tow crews will monitor Ramp Net during all tow operations even if not entering a CMA.

Figure 3.2. North EOR Arming and Holding Flow.



Chapter 4

FLIGHT OPERATIONS

4.1. Primary Runway Designation.

4.1.1. The tower WS, after coordination with the SOF and NATCF WS, determines the active runway. When a runway change is required, the tower WS and NATCF WS, after coordination with the SOF, will determine when the change is to become effective based upon existing traffic. The tower will notify NATCF, AMOPS, Weather, Fire Department, and the CP when runway change is complete. The SOF will ensure EOR crews are notified of the change and are positioned as required. In the event of an unplanned runway closure or suspended operations to a runway, NATCF will broadcast the runway configuration on Guard frequencies (243.0/121.5) using all repeaters.

4.1.2. RWY 21 is the calm wind runway. When prevailing headwind/tailwind component exceeds 10 knots, the runway most nearly aligned with the winds will be designated the active runway. When conflicting wind information is received from different sensors, the sensor that shows the highest velocity or most consistent direction will be used in determining the active runway.

4.1.3. RWY 03 will be used daily from 2200L to 0800L for departures and RWY 21 for arrivals unless winds, air traffic volume or operational requirements dictate otherwise.

4.1.4. During peak traffic periods, controllers are not required to give wind variances to wing aircraft due to frequency congestion unless requested by the aircraft.

4.1.5. When “Area Alpha 8 Ops” are in effect RWY 21 quick climb coordination (including Thunderbird departure procedures) will require a minimum of 10 minutes prior notification. NATCF will coordinate for quick climb as soon as possible after pilot request.

4.2. Radio Procedures. All aircraft under the operational control of the 57 WG should use standardized ultra-high frequency (UHF) preset channels 2 through 13. UHF equipped aircraft will use UHF frequencies to the maximum extent possible. Note: See [Attachment 20](#).

4.3. Standard and Nonstandard Formations. All fixed wing aircraft will fly standard formation (100 feet vertical, 1 mile horizontal from lead) unless the flight lead has requested and ATC has approved a nonstandard formation. Departing flights of three or more will automatically be considered a non-standard formation.

4.3.1. For Nellis assigned flights departing to the NTTR (i.e., SNAKE01, MIG01, etc.), the flight lead will squawk the random assigned mode 3/C and unless requested by ATC, only the last member of a nonstandard flight will squawk their permanently assigned unit mode 3/C (i.e., flight lead is SNAKE01/0250, non-standard SNAKE04 squawks 0253, etc.); flight lead will squawk the random mode 3/C until cleared tactical and established on range.

4.3.2. For non-Nellis assigned flights departing to the NTTR that have previously coordinated/have been pre-issued discrete mode 3/C squawks (i.e., REDFLAG, other large force exercises, etc.), flight lead will squawk their pre-issued discrete mode 3/C and unless requested by ATC, only the last member of a nonstandard flight will squawk mode 3/C in sequence (i.e., flight lead is SWORD61/6411, non-standard SWORD64 squawks 6414, etc.).

4.3.3. For flights departing the local airspace and into the National Airspace System (NAS), the flight lead will squawk the random ATC issued mode 3/C and only the last member of a non-standard flight will squawk the first two digits of the flight lead's mode 3/C and 00 (i.e., if the flight lead's mode 3/C is 5411, the number four aircraft squawks 5400).

4.3.4. When given altitude instructions from ATC, the trailing aircraft in a nonstandard formation will not climb/descend simultaneously with the lead aircraft. The trailing aircraft will climb/descend at the coordinated fix assigned by ATC. If there is no coordinated fix assigned, the trailing aircraft will climb/descend at the same point in space as the flight lead.

4.3.5. 57 OSS/OSA coordinates directly with the FAA Western Service Area (WSA) for permanent allocations of Mode 3/A beacon codes and will in turn assign IFF Mode 3/A codes to local units via memorandum IAW FAA JO 7110.66F WSA Supplement 1.

4.4. Dissimilar Formation Flights. 57 WG and TDY aircrew assigned to Nellis AFB are authorized to fly in dissimilar formations during departure and recovery. 57 WG aircrew are authorized to fly dissimilar formation departure and recoveries during deployed operations. Dissimilar aircraft may fly close formation provided it is briefed, emphasizing proper position, responsibilities, airspeeds, signals, and aircraft-unique requirements. Flight members (similar or dissimilar) will ensure safe runway separation is maintained. This does not preclude ATC from taking action in the event of an unsafe condition. Mixed formation low approaches are not authorized.

4.5. Hot Cargo Pad (HCP) Procedures. The following procedures will be used when aircraft are parked on the HCP. Hot cargo pad is restricted to VFR, daylight use only due to no taxiway lighting.

4.5.1. Normal HCP Procedures. When an aircraft is parked on the HCP, operations to RWY 03R/21L will be limited to 21L departures only. This is referred to as “LIMITED OPERATIONS.” AMOPS will send applicable NOTAM(s) when the HCP is in use and RWY 21L/03R operations are limited.

4.5.2. To the maximum extent possible, aircraft will be moved (taxied or towed) from the HCP as soon as possible, thus restoring RWY 03R/21L to normal operations.

4.6. RWY 21L/R Noise Abatement Procedures.

4.6.1. Noise Abatement Procedures ([Figure 4.1](#)) are mandatory for all aircraft during Visual Meteorological Conditions (VMC) and using RWY 21L/R for takeoff, missed approach local climb out, closed patterns, pattern reentry, go-around, etc.

4.6.2. When executing noise abatement procedures in conjunction with any instrument departure/missed approach local climb out, aircrews are on a VFR climb until established on a radial segment of the instrument procedure (FYTR/DREAM Departure) “or” when north of Craig Road when departing on a MORMON MESA, radar vector departure, obstacle departure procedure or missed approach local climb. At this point, the aircraft is considered Instrument Flight Rules (IFR) and further instrument departure/missed approach local climb restrictions are mandatory. To ensure obstacle/terrain separation, aircrews are required to climb at published climb gradient rates contained within the FLIP/as issued by ATC throughout the entire noise abatement procedure. Note: Noise abatement is not applicable to helicopter operations when departing from other portions of the airport.

4.6.2.1. To accommodate aircrew an initial VFR climb, 4,700' AGL/3 SM are required to execute the VMC portion of noise abatement.

4.6.2.2. If the above weather is not available, aircrew shall comply with the instrument procedure as published except noise abatement.

4.6.3. When executing noise abatement:

4.6.3.1. Aircraft shall remain within 4.0 DME of LSV TACAN/do not penetrate LAS VORTAC 7.5 DME ARC westbound.

4.6.3.2. All aircraft must expedite climb in accordance with flight manual to an altitude window of 2,500 to 3,000 feet MSL until turning out of traffic abeam the south end of the Nellis AFB golf course (the portion of the golf course on the southwest side of the runways).

4.6.3.3. Unless flight manual directs otherwise, fighter aircraft will terminate afterburner NLT 300 KIAS (360 KIAS for B-1B aircraft) or abeam the south end of the Nellis golf course (southwest side), whichever occurs last.

4.6.3.4. Immediately start a 60 degree banked right turn (safety of flight permitting) abeam the south end of the Nellis golf course (southwest side) to 300° in order to avoid populated areas and fly between Shadow Creek and Craig Ranch Park.

4.6.3.5. When departing on the FYTTR Departure, cross the LSV R-256 westbound between 5,000 feet and 6,000 feet MSL.

4.6.3.6. When departing on the DREAM Departure, intercept the LAS R-349 outbound between 5,000 feet to 6,000 feet MSL NLT 12 DME.

4.6.3.7. When departing on the MORMON MESA Departure, cross Craig Road northbound between 5,000 and 6,000 feet MSL.

4.6.3.8. When departing on ATC issued radar vectors/obstacle departure procedure/executing missed approach local climb out, cross the LSV R-256 (military TACAN equipped) or LAS R-349 (civilian) westbound below 6,000 feet MSL.

4.6.3.9. Once north of Craig Road, resume the departure procedures as directed (AB may be re-selected as required once clear of populated areas).

4.6.3.10. Flight leads must not delay the turn nor will wingmen drop low or turn out early to expedite join-up.

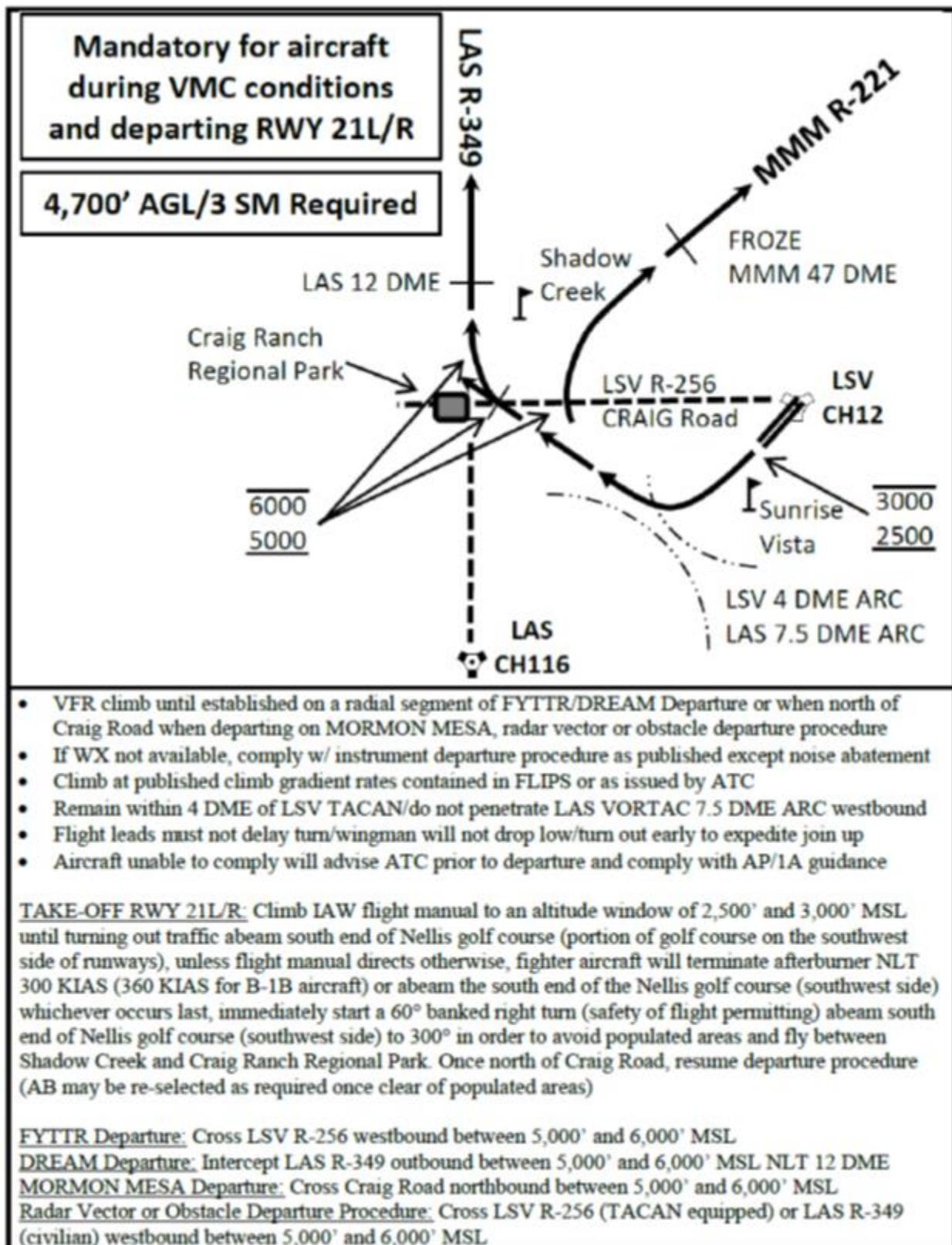
4.6.4. Aircraft unable to comply with Nellis noise abatement procedures will advise ATC prior to departure. Note: Aircraft unable to comply with noise abatement and departing on an instrument departure are still required to climb at published climb gradient rates contained within the FLIP/as issued by ATC to ensure obstacle/terrain separation.

4.6.4.1. Such aircraft will climb to 2,500 to 3,000 feet MSL and upon reaching the departure end will use power as required to achieve, aircraft performance permitting, 250 knots indicated airspeed (KIAS).

4.6.4.2. Use up to approximately 60 degrees of bank (safety of flight permitting) to maintain a ground track through the least populated areas.

4.6.4.3. Northwest of Interstate 15 use power as required to achieve the planned climb schedule and altitude restrictions.

Figure 4.1. RWY 21L/R Noise Abatement Procedures.



4.6.5. Additional Noise Considerations:

4.6.5.1. Turbo Jet Practice Approaches: Approaches are authorized only after 0900L daily.

4.6.5.2. ACC Quiet Hours: Scheduled flying from 2230L–0600L may follow normal procedures (practice approaches or low approaches) if required for the mission.

4.6.5.3. Unrestricted (Maximum Performance AB) Climbs: See **paragraph 3.6.1.6.**

4.7. Protection of the 360° Overhead Pattern. During daytime VMC, all departing aircraft will remain at or below 3,000 feet MSL prior to turning out of traffic at the departure end of the runway.

4.8. Departure Procedures.

4.8.1. Departure procedures will be used by fixed wing aircraft operating out of Nellis AFB (KLSV). Rotary departure procedures are contained within **Attachment 7**.

4.8.2. Diverse departures are authorized, use published instrument departure procedure or request a radar vector departure for obstacle avoidance.

4.8.3. Aircrews unable to comply with departure procedure climb or radar vector departure climb gradient must file the appropriate departure procedure for their intended destination, notify Clearance Delivery that you are unable to make climb gradient and depart VFR. Clearance Delivery will assign a VFR Class B Departure (**Attachment 5**). Once airborne, aircraft may request their IFR clearance. Note: Non-mission related VFR transitions over the city of Las Vegas for fixed wing aircraft below 7,500 feet MSL require prior approval from the 57 WG/CC.

4.8.4. Do not request straight ahead or left turn departure when utilizing Runway 21L/R for departure.

4.8.5. Flight leads will not call number one until all flight members are ready for takeoff. The flight should be airborne within three minutes after takeoff clearance is received.

4.8.6. All departures will comply with noise abatement procedures IAW **paragraph 4.6.**

4.8.7. Initiate coordination for an unrestricted climb with Nellis Ground.

4.8.8. FYTTR Departure. The FYTTR Departure is a westbound IFR departure. This departure requires a climb in excess of maximum climb rates required in DOD obstruction criteria. The FYTTR Departure is located in the FLIP Low Altitude, Vol-5 and High Altitude, Southwest books.

4.8.9. DREAM Departure. The DREAM Departure is a northbound IFR departure for high-performance aircraft. The DREAM Departure is located in the FLIP Low Altitude Vol-5 and High Altitude, Southwest books.

4.8.10. FLEX NORTH/WEST Departures.

4.8.10.1. The FLEX NORTH/WEST Departure are for daytime/VMC use only (**Figure 4.3** and **Figure 4.4**) and used to expedite the movement of departures. To further expedite departures, ATC may issue initial departure headings contrary to **Figure 4.3** and **Figure 4.4** or aircrew may request a non-standard VFR departure routing as specified on **Figure 4.3** and **Figure 4.4**. Aircrew will notify ATC if headings conflict with mission

requirements/restrictions (i.e., heavyweight/ordnance requirements to overfly FLEX, etc.). Note: These departure procedures satisfy AFI 11-202v3 ACC Supplement regarding IFR flight which states: flights under VFR radar services to/from or between training areas, low-level routes and low-altitude tactical navigation (LATN) areas fulfill the intent of this paragraph and may be conducted in lieu of IFR.

4.8.10.1.1. ATC may initiate to apply Simultaneous Opposite Direction Operations (SODO, paragraph **4.20**) when filed on the FYTTR/DREAM Departures and arrivals are landing RWY 21.

4.8.10.1.2. ATC or aircrew may initiate to provide a quick turn out to the FYTTR Departure when departing RWY 03.

4.8.10.1.3. When pilot requested, a FLEX NORTH/WEST Departure may be obtained by Nellis Ground Control prior to takeoff only after an initial clearance from NATCF Clearance Delivery has been received.

4.8.10.1.4. Aircrew that have been issued an IFR clearance by NATCF Clearance Delivery and subsequently requests and/or ATC initiates and aircrew accepts a FLEX NORTH/WEST Departure cancel their previously issued IFR clearance.

4.8.10.1.4.1. Aircrew requesting a subsequent IFR clearance after departure will make request on initial contact. Example: “*NELLIS DEPARTURE, MIG01 LEAVING (altitude), REQUEST IFR PICK-UP (altitude).*”

4.8.10.1.4.2. NATCF shall issue a short-range IFR clearance time permitting and when able, assign a final requested altitude.

4.8.10.1.5. Aircrew departing/remaining VFR on the FLEX NORTH/WEST Departure will fly the stereo route ground track after FYTTR/DREAM unless otherwise coordinated with ATC.

4.8.11. Non-Local Area Departures. Aircraft that depart on a DD Form 1801 flight plan will use the departure procedure appropriate to the filed route of flight. Aircrew TDY to Nellis AFB or aircrew departing on a cross-country will not use the DREAM Departure when they re-deploy to their home base or depart on a cross-country. Instead, cross-country aircrew will file as follows:

4.8.11.1. North/Northeast bound departures (routed over MMM) should file MORMON MESA Departure, MMM then direct either MLF or BCE. If unable to execute the MORMON MESA Departure, expect radar vectors.

4.8.11.2. Northeast/East bound departures (routed over DVC or South of DVC) should file BLD then direct either DVC or TBC. Pilots can expect radar vectors to BLD.

4.8.11.3. South/Southwest bound departures (routed over HEC/GFS) should file LAS, CRESO then direct either HEC/GFS. Pilots can expect radar vectors to LAS.

4.8.11.4. Northwest bound departures should be filed to BTY then J92 Northwest bound. Pilots should file the FYTTR Departure to FYTTR, then BTY. If unable, expect radar vectors to BTY.

4.8.12. Local Area Navigation Points. **Attachment 3** contains a list of local area navigation points with their associated radial/DME and coordinates.

4.8.13. A-10 VFR Departure Procedures. Procedures allow A-10s to depart Class B airspace during daylight hours while VFR via FLEX or Dry Lake (**Figure 4.2**). Request departure from Ground prior to taxi; must be approved by Tower prior to take-off. All opposite direction RWY 03 A-10 VFR Departure will overfly FLEX regardless of inbound traffic. Upon reaching FLEX or Dry Lake, flights will maintain VFR and remain clear of Class B airspace. Pilots may contact Nellis Approach or Nellis Control for flight-following, but should expect limited radar coverage at low altitude. Enroute to the NTTR, flights will remain on their discrete beacon codes and shall obtain clearance for range entry from Nellis Control as soon as possible due to limited low level radio coverage. For north departures, contact Nellis Control before entering SALLY Corridor. Flights can contact Blackjack on the ground for range restrictions. Recoveries will still be flown using published procedures. Departing flights must maintain a vigilant lookout for helicopter traffic departing, recovering, and training along the departure. Winner Landing Zone (LZ) is a helicopter training area approximately 3 NM northeast of FLEX. To maintain situational awareness on departing flights and facilitate deconfliction, helicopters in Winner LZ will monitor local Channel 4. Tower should also issue traffic advisories to departing flights. Departing flights will maintain 500 feet AGL until deconfliction with helicopter traffic can be ensured.

4.8.13.1. A-10 VFR North Departure. Proceed direct FLEX then direct Dry Lake when departing opposite direction RWY 03 or following a RWY 21 departure via FLEX. Report “FLEX” to inform ATC the flight is clear of Class B airspace. Proceed direct Apex then direct Dry Lake when RWY 03 is the active. Report “APEX” to inform ATC the flight is clear of Class B airspace in 3 NM enroute to Dry Lake.

4.8.13.2. A-10 VFR West Departure. Proceed to FLEX. Report “FLEX” to inform ATC the flight is clear of Class B airspace. Remain below 4,000 MSL until west of Gass Peak.

4.8.14. Issuance of a FLEX/A-10 VFR Departure received from ATC and/or originating from Nellis AFB constitutes clearance to enter, operate and exit the Las Vegas Class B airspace.

Figure 4.2. A-10 VFR Departure.

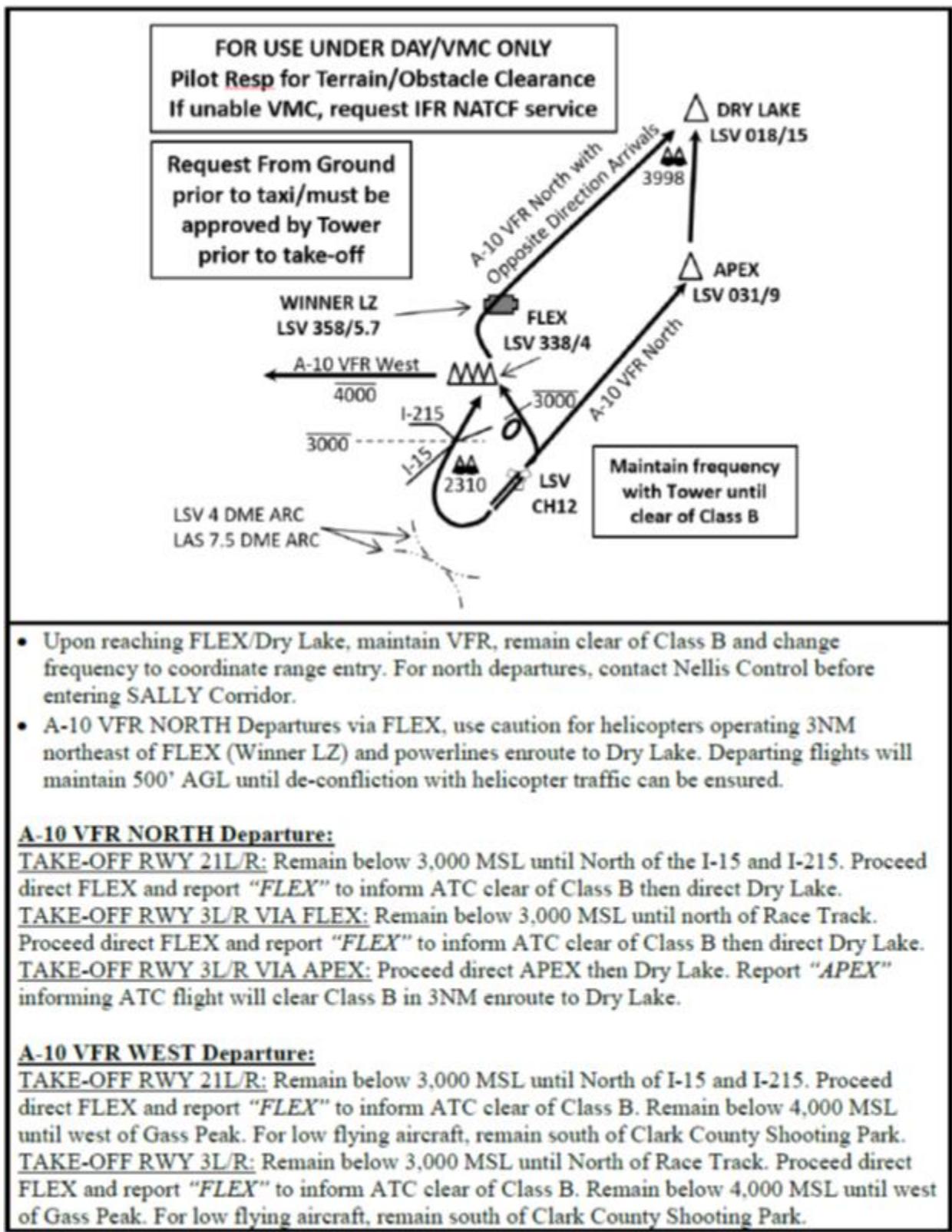


Figure 4.3. RWY 03L/R FLEX NORTH/WEST Departure.

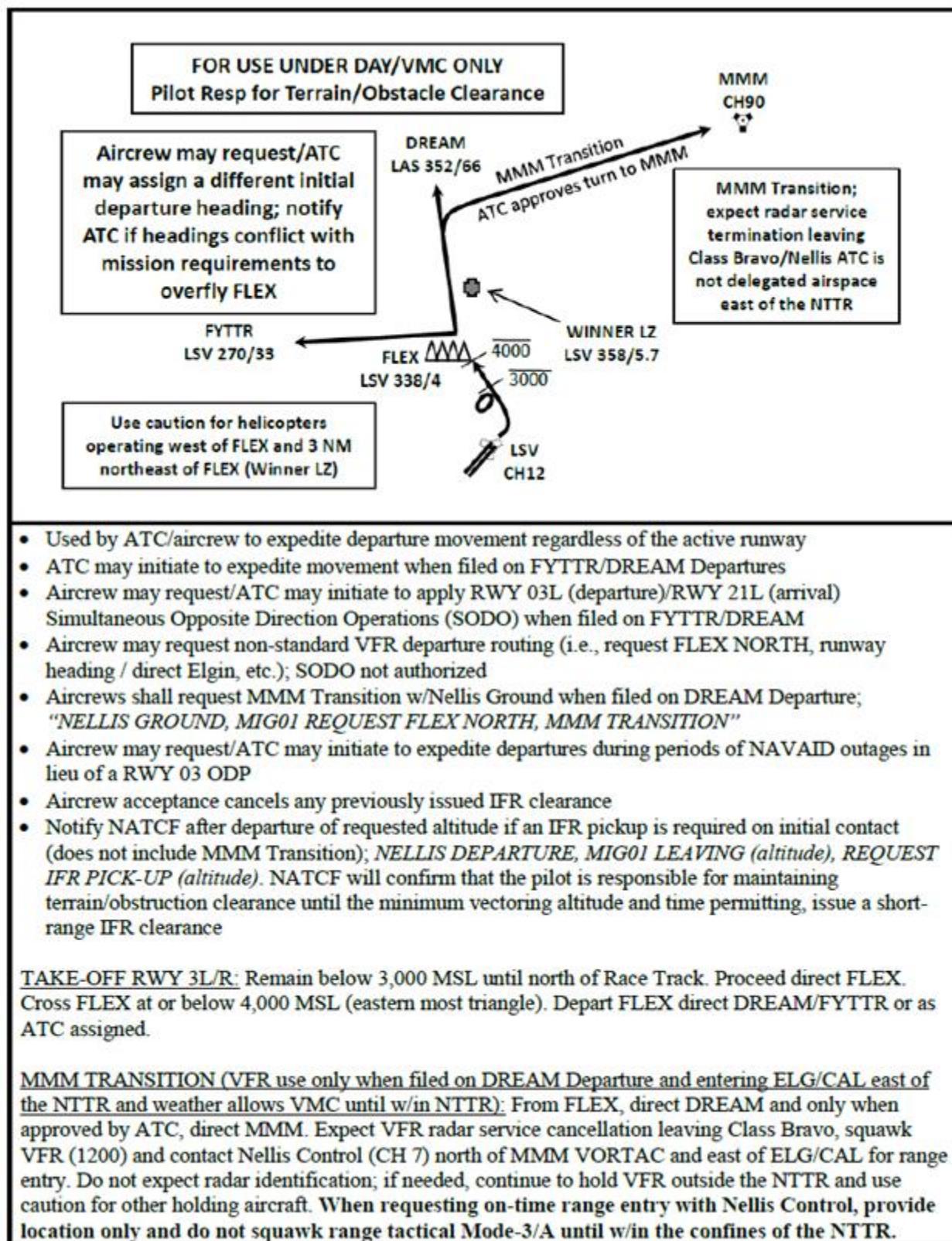
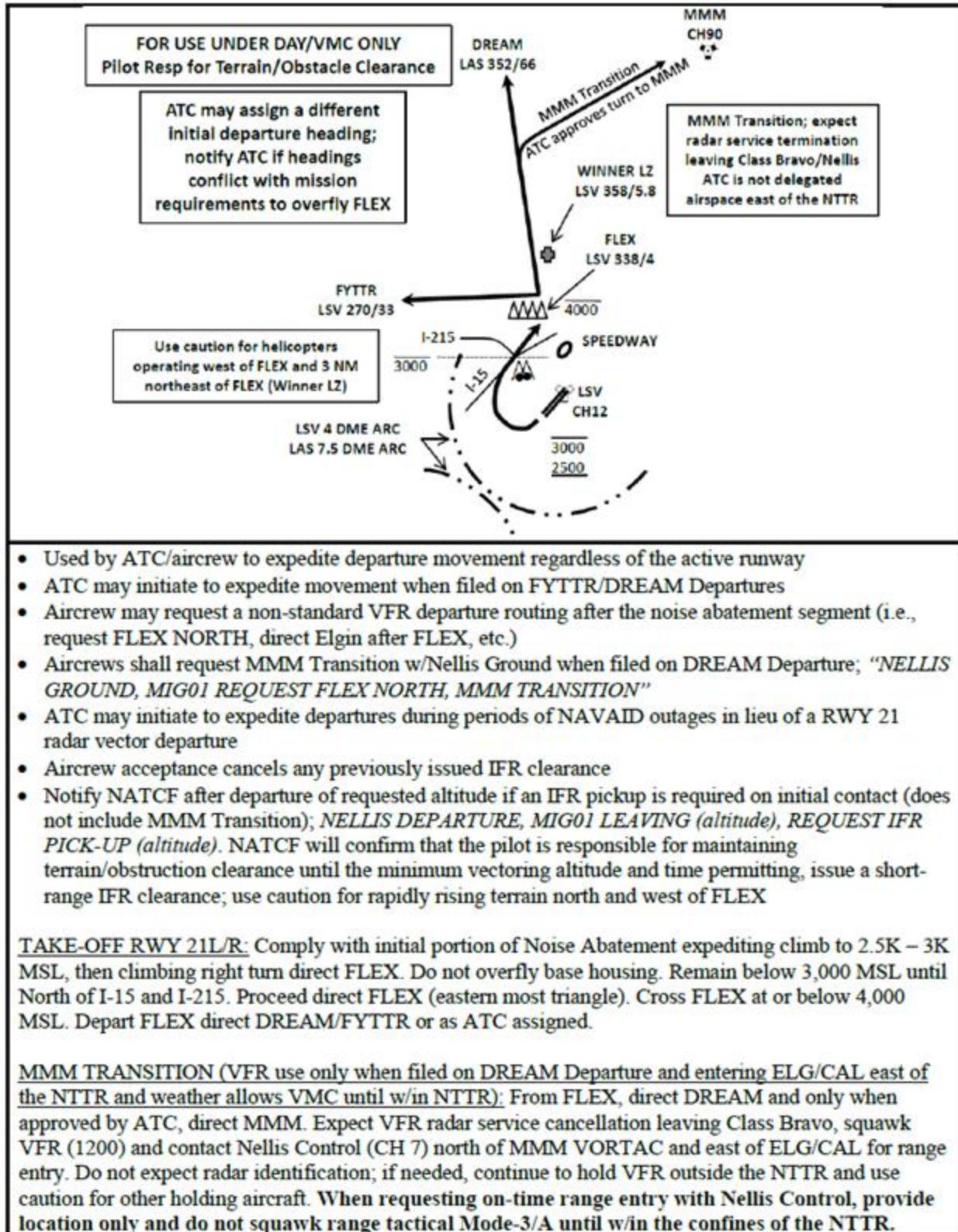


Figure 4.4. RWY 21L/R CRAIG NORTH/WEST Departure.



4.9. Use of Military Assumes Responsibility for Separation (MARSA).

4.9.1. MARSA Procedures.

4.9.1.1. MARSA is authorized within the Nellis primary training area (**paragraph 2.10** and **Figure 2.8**) and as specified by ATC such as when refueling in AR625. When scheduled, flight operations to include NTTR entry/exit are conducted as MARSA IAW this directive, agreements on file with 57 OSS/OSA and applicable FAA directives.

4.9.1.2. Aircraft operating in the NTTR operate under the provisions of MARSA while on range IAW indoctrination briefings provided by the USAFWC host unit.

4.9.1.3. ATC will not provide IFR services to participating mission aircraft operating under the provisions of MARSA in the NTTR.

4.9.1.4. MARSA operations are not authorized outside the NTTR unless specified in a letter of agreement or other appropriate FAA or military document. Non-standard or routine flight join ups on departure or arrival outside the NTTR are not considered MARSA operations.

4.9.1.5. Graphical Range Restriction (GRR) MARSA Procedures. Aircrew planning to share airspace with another mission should communicate their deconfliction in the following order based on time available:

4.9.1.5.1. Update the GRR to reflect the deconfliction. The GRR should be updated to show geographic and / or altitude deconfliction for each mission. For example mission #1906 wants to use Elgin FL210 and above during mission #1616's airspace. Mission #1616 agrees to be established FL200 and below in Elgin. The GRR should be updated to show #1906 owns Elgin above FL210 and #1616 owns Elgin FL200 and below. The GRR will not say "MARSA" as the scheduled missions' airspaces are deconflicted via altitude and / or geography.

4.9.1.5.2. Establish deconfliction and add MARSA to the GRR. If the deconfliction cannot be easily annotated via GRR restrictions, communication that deconfliction exists between two missions of overlapping airspace (in altitude, geography and time) will be annotated via "MARSA" on the GRR under restrictions. Note: The GRR can be updated via "pencils" by the squadron scheduler. After "pencils" the GRR can be updated by contacting Blackjack scheduling.

4.9.1.6. Inform Nellis Control of MARSA. Use this procedure if a mission has worked out a deconfliction measure with the mission that owns the airspace and does not have time to get the GRR updated. The flight that does not own the airspace will communicate to Nellis Control on check-in that they are MARSA with the flight that owns the airspace (i.e. "NELLIS CONTROL, RAMBO01, FL190, MARSA SNAKE"). Aircrew can expect to hear "CLEARED EARLY ENTRY" from Nellis Control. Aircrew departing to the North (i.e., DREAM Departure via Sally/Alamo Corridors, etc.) should communicate the MARSA agreement to Blackjack before requesting take-off to avoid being held on the ground (i.e. "BLACKJACK, RAMBO 01, FIVE MINUTES FROM TAKEOFF, MARSA SNAKE"). Note: Blackjack/NATCF will not verify that the owning flight accepts MARSA. By communicating MARSA, the departing aircraft is communicating that the owning flight

has already accepted MARSA via pre-coordinated methods and is responsible for any issues that arise.

4.9.2. NTTR Procedures. All aircrews must receive ATC clearance from Nellis Control prior to entering or exiting the NTTR. Graphical Range Restrictions (GRR) is the primary source for aircrew obtaining temporary flight restrictions and range time information for missions on the NTTR (<https://rkmf-ws-nttr01v/units/range/targets/casFilter/Default.aspx>).

4.9.2.1. Departure Procedures.

4.9.2.1.1. Aircrews departing to the West that have not coordinated entry IAW early entry procedures below can expect to hold west of the NTTR and enter as directed by Nellis Control.

4.9.2.1.2. Aircrews departing to the North (i.e., DREAM Departure) that have not coordinated early entry IAW MARSA procedures above should not request takeoff until they can make their scheduled airspace time without holding. (does not apply to VFR FLEX NORTH, MMM Transition Departures).

4.9.2.2. Range Entry.

4.9.2.2.1. ATC separation is provided until entering aircraft have crossed the boundary of SUA at ATC assigned routings and altitudes.

4.9.2.2.2. Mission flight leads (Airboss/Designated POC in the event of LFEs) will check-in with Blackjack prior to range entry with their working frequency for any mission changes/restrictions. NATCF will *transfer communications* to Blackjack by voicing “*CLEARED SCHEDULED, CONTACT BLACKJACK (U377.8/V123.55)*.” Aircrew will comply with any routing instructions into the airspace provided by NATCF. Without routing instructions, aircrew can turn direct their owned airspace (reverse course not authorized) at the “*CLEARED SCHEDULED*” call.

4.9.2.2.3. Blackjack will advise aircrews of changes in range condition and state the fire condition when determined “*EXTREME*.” Blackjack will then clear the aircraft to their area working frequency by voicing “*CLEARED TACTICAL*.”

4.9.2.2.4. Aircraft may not depart assigned altitude until within the confines of their scheduled airspace. Upon entering the NTTR, all aircraft in the flight will squawk their assigned tactical Mode 3/C IAW AFMAN 13-212V1, ACC Sup, NTTR Addendum A.

4.9.2.2.5. If holding in the Sally Corridor is approved by Nellis Control, aircraft will hold south of DREAM or as directed by ATC.

4.9.2.3. Early Entry.

4.9.2.3.1. Aircrew can contact Blackjack on the ground to see if early will be available. Blackjack will say “*EXPECT EARLY ENTRY*” or “*EARLY ENTRY NOT AVAILABLE*.” “*EXPECT EARLY ENTRY*” from Blackjack does not approve the flight for early entry and is advisory only. Aircrew requesting early entry from Nellis Control can expect to hear “*CLEARED EARLY ENTRY*” or “*CLEARED SCHEDULED*.” “*CLEARED SCHEDULED*” means to adhere to the GRR, early entry was denied. Note: Expect Reveille MOA times/altitudes as scheduled. Reveille MOA is coordinated with Salt Lake Center 24 hours in advance.

4.9.2.4. Range Exit.

4.9.2.4.1. Aircrew will attempt to obtain and report the current ATIS code on initial check-in for range exit with Nellis Control (Channel 7 or 8). If unable obtain ATIS due to distance from the Nellis transceiver site, aircrews shall obtain and report the current ATIS code on initial check-in with Nellis Approach (Channel 5 or 6). The controller will notify aircrew if the ATIS code they report is not current. It is the responsibility of the aircrew to ensure they are aware of current field conditions and airfield advisories.

4.9.2.4.2. Although ATC may assign headings and altitudes to assist pilots exiting the range, separation responsibility from both participating MARSA aircraft and UNSCHEDULED AIRSPACE rests with the pilot until the aircraft has exited the boundary of the scheduled SUA. Aircrew should report unable if they cannot comply with an ATC heading or altitude and deconflict from unscheduled airspace or MARSA aircraft.

4.9.2.4.3. Though aircraft are normally on an IFR clearance into and out of the NTTR, pilots MAY NOT exit the SCHEDULED AIRSPACE without approval from Nellis Control. An instruction to proceed to a point outside SCHEDULED AIRSPACE constitutes approval. If approval is not obtained or is questionable, pilots MUST remain in holding within SCHEDULED AIRSPACE until approval is granted.

4.9.2.4.4. Flights that wish to depart in non-standard formation during the day will advise Nellis Control of their request. Flights that wish to depart in ATC standard formation will ensure they are joined up prior to exiting assigned airspace. Once joined up in ATC standard formation, wingmen will squawk standby. This normally occurs prior to entering ATC assigned airspace.

4.9.2.4.5. Aircraft unable to contact Nellis Control and unable to climb VMC above 10,000 feet will relay range exit plan through Blackjack. Aircraft will then maintain VFR exiting the range and obtain Nellis Approach (Channel 5 or 6) clearance prior to entering Class B airspace.

4.9.2.4.6. 57 ATG aircraft have a requirement to exit/re-enter the NTTR under VMC conditions without specific clearance from the NATCF during high-intensity LFE only. ATG aircraft will notify NATCF in advance on NTTR entry if utilizing these procedures.

4.9.2.4.6.1. Aircraft executing these procedures must exist the NTTR at or below 17,500 MSL, squawk 1200 while outside the NTTR, monitor guard, navigate, hold and re-enter the NTTR when mission dictates. These are VFR procedures and it's the sole responsibility of the aircraft commander to maintain appropriate clearances IAW applicable AFI 11-MDS and CFR Part 91.

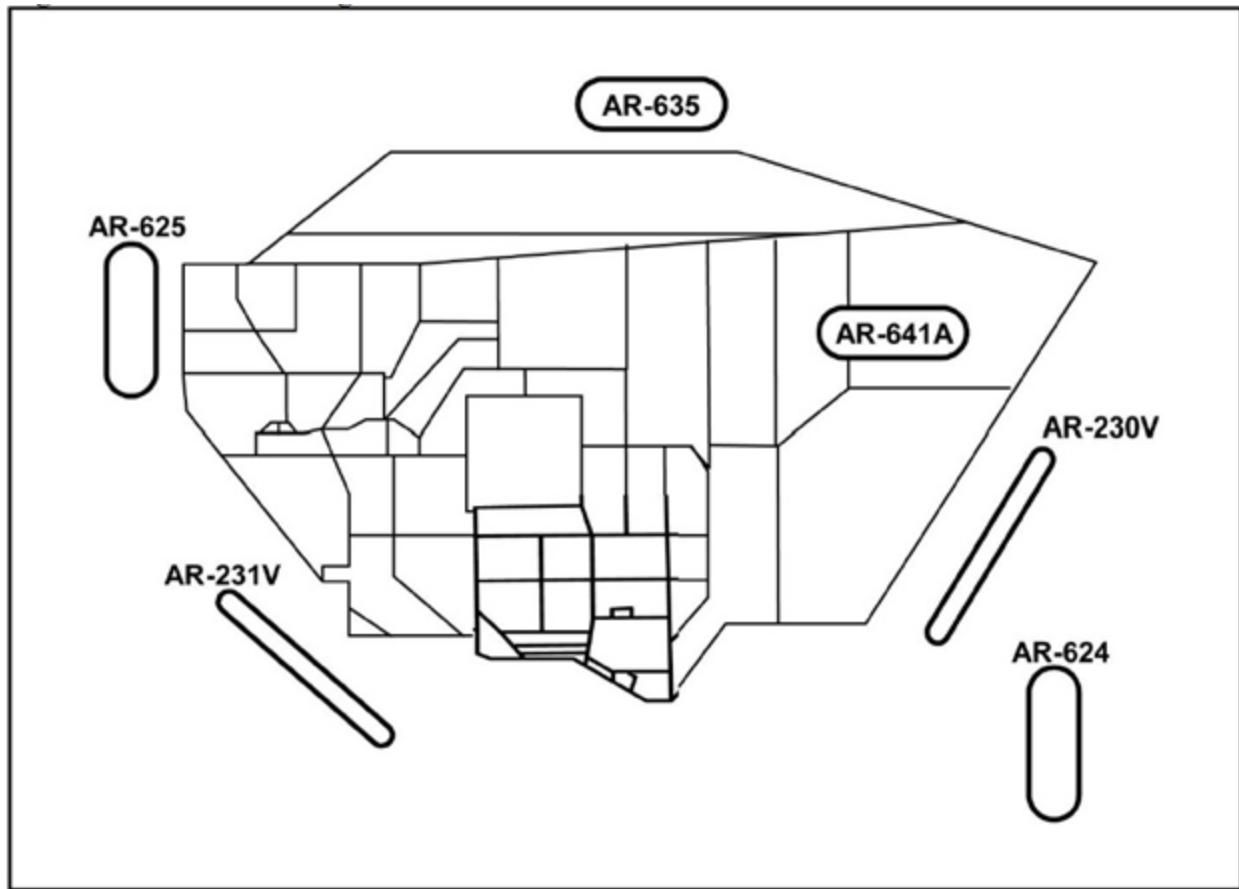
4.9.2.4.6.2. These procedures are designed primarily for aircraft operating along the western border of the NTTR. Specifically, the area that extends from Reveille North at N3814 southbound to EC South at N3651.

4.10. Air Refueling Anchors and Procedures. See [Figure 4.5](#) for a depiction of air refueling (AR) tracks and locations.

4.10.1. AR-625: High and low tracks are located in Oakland Air Route Traffic Control Center (ARTCC) Class A Airspace adjacent to the northwest corner of the NTTR. Published altitudes are FL180-FL210 and FL 230-FL250. AR-625 high and low may be scheduled simultaneously but not as a single block of airspace. The controlling agency is Nellis Control. Aircrews must receive ATC clearance prior to entering or exiting refueling airspace. The scheduling agency is 57 OSS/OSOS.

4.10.2. AR-641A: Located within the Caliente portion of the Desert MOA and ATCAA. Published altitudes are 12,000 feet MSL to FL 230. Refueling will be conducted on a tactical frequency. All aircraft operating in AR-641A are MARSA with aircraft operating in adjacent special use airspace in accordance with agreements on file with 57 OSS/OSA.

Figure 4.5. Air Refueling Tracks.



4.10.3. AR-624: Located 50 NM southeast of the NTTR within Los Angeles ARTCC Class A Airspace. The controlling agency is Los Angeles ARTCC. The scheduling agency is 57 OSS/OSOS.

4.10.4. AR-635: Located 25 NM north of the NTTR within Salt Lake City ARTCC Class A Airspace. The controlling agency is Salt Lake ARTCC or Clover Control during specific exercises. The scheduling agency is 57 OSS/OSOS.

4.10.5. AR-230V: Helicopter refueling track located in the east LATN area, LAS 026/47 to 0265/83. Los Angeles is the assigned ARTCC. The scheduling agency is the 57 OSS/OSOS.

4.10.6. AR-231V: Helicopter refueling track located in the west LATN area, BTY 123/44 to 125/05. Los Angeles is the assigned ARTCC. The scheduling agency is the 57 OSS/OSOS.

4.11. Training Area Operations. Aircrews must remain in their scheduled or assigned airspace. Nellis Control will transmit advisories on Guard when aircraft exceed the perimeter boundaries of the NTTR. The operating agency will transmit advisories for aircraft approaching boundaries on the range frequency if possible, and on Guard if required. Ground Control Intercept (GCI) and Blackjack will assist aircrews in remaining in assigned airspace. See [Attachment 14](#) for spill out procedures.

4.11.1. Low Level Hazard Reporting Procedures. In the event an uncharted or an unbriefed obstruction hazard is identified, the observing aircraft must notify 57 OSS/OSOS and provide the following: description (power line, tower, etc.), location (coordinates or geo-ref) and estimated height above surface. 57 OSS/OSOS will notify the appropriate Airspace Manager, Terminal Procedures Specialist (TERPS) and all Nellis AFB helicopter units.

4.12. Altimeter Setting Procedures.

4.12.1. Tactical aircraft entering and exiting the NTTR through the Sally corridor (Northern departures) use the Nellis AFB altimeter setting (also known as the ATC issued “range altimeter”) regardless of altitude to ensure deconfliction with other tactical aircraft entering and exiting the ranges.

4.12.2. In R-4808S and the Lee Corridor (Western departures), use the Nellis AFB altimeter up to but not including FL 180; at FL 180 and above use 29.92.

4.12.3. Within the confines of NTTR use the Nellis AFB altimeter at all altitudes.

4.12.4. Aircraft using AR-625 will use 29.92.

4.12.5. ATC shall ensure approved lateral or altitude separation for aircraft on a different altimeter settings (i.e., between tactical aircraft entering/exiting and non-participating aircraft set on a different altimeter at/above FL180).

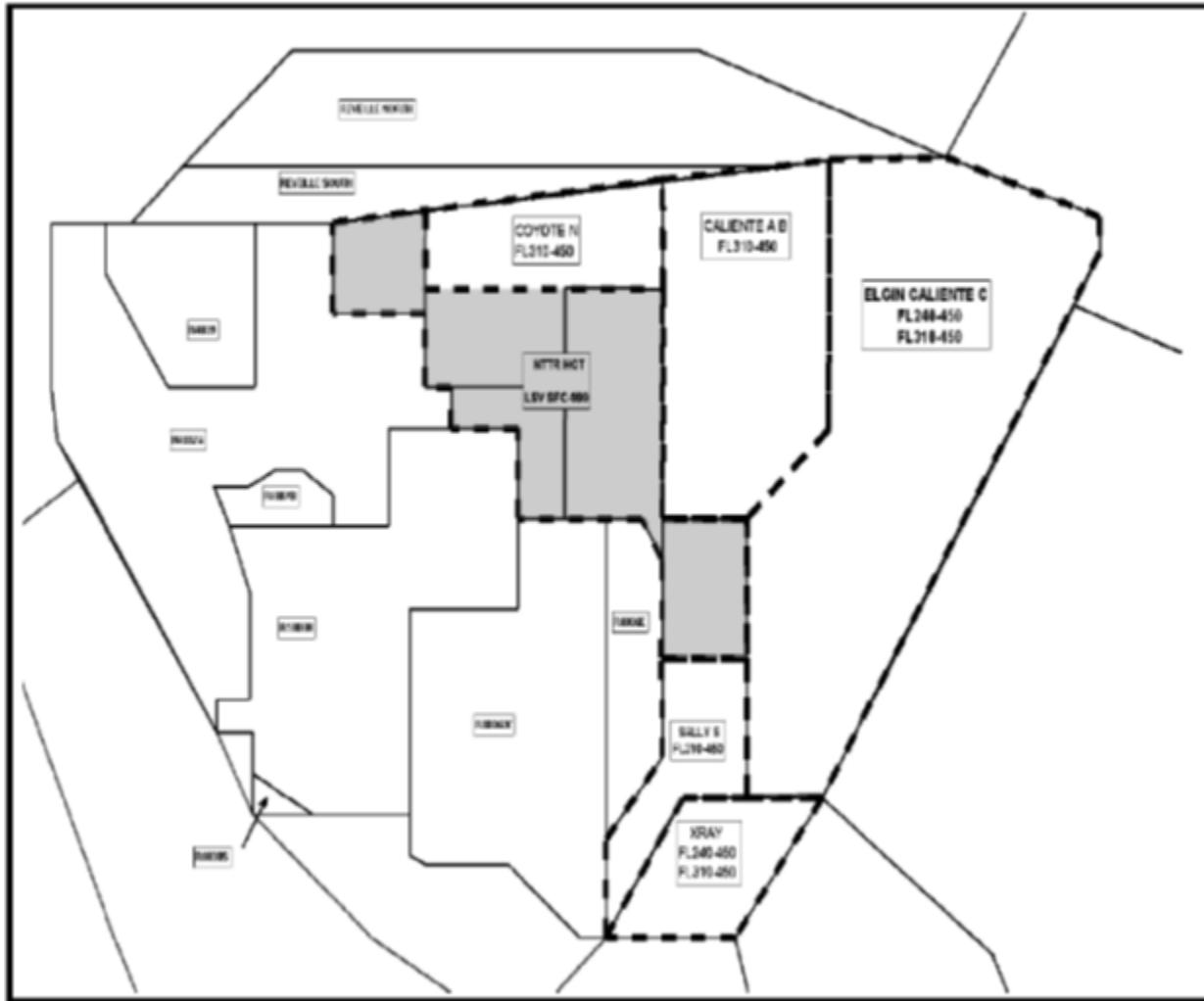
4.12.6. When considering use of an emergency/minimum safe altitude (ESA/MSA), aircrews will use caution when tactically utilizing an ATC issued range altimeter (Nellis AFB source) while operating in NTTR areas significantly distant from Nellis AFB (i.e., R4809, R4807, REVEILLE, etc.); as needed, aircrews will request an altimeter setting closer to their location (i.e. Tonopah, etc.).

4.13. Airspace Recall Corridors.

4.13.1. When severe weather phenomena (thunderstorms, etc.) occur that necessitate routing non-participating aircraft through the Desert or XRAY, ATCAA sub-areas, the Air Route Traffic Control Centers (ARTCC) may request the return of airspace as detailed within Control Procedures for the Nevada Testing and Training Range (NTTR) Complex and Nevada National Security Site Letter of Agreement.

4.13.2. Aircrews will be alerted of the airspace recall of weather deviation area Coyote N, Caliente A B, Caliente C W, Caliente C, Elgin, XRAY and/or Sally S ([Figure 4.6](#)). Note: Some weather areas may be released to ARTCC at or above FL240 based on operational need.

Figure 4.6. Airspace Recall Corridors.



4.14. Recovery Procedures. When recovering from SCHEDEDLED AIRSPACE, flights will contact Nellis Control 15 miles prior to the IFR/VFR pick-up point. Flights operating within 15 miles of the IFR/VFR pick-up point can expect at least one turn in holding prior to exiting SCHEDEDLED AIRSPACE. Only an instruction to proceed to a point outside the SCHEDEDLED AIRSPACE constitutes approval to exit the range. When ready to RTB, aircrews will use the call sign and squawk which was used with Nellis Control prior to range entry.

4.14.1. Northern Ranges Recovery. When recovering through the Sally Corridor from the northern ranges, Desert MOA or Reveille North/South MOA, the IFR/VFR fix point is abeam TEXAS LAKE (LSV 352/64). Aircrew will use EMPRS or CARPP if they do not have Caliente Alpha scheduled. Contact Nellis Control on local Channel 7.

4.14.2. Elgin Recovery. When recovering from Elgin, the VFR pick-up point is ACTON. Contact Nellis Control on local Channel 7.

4.14.3. Western/R2508 Ranges Recovery. When recovering from the western ranges contact Nellis Control on local Channel 8 when north of GARTH and expect to fly the JAYSN

Recovery (**Figure 4.7**). FLUSH (LSV 288/73) is the IFR/VFR fix point for western ranges recoveries. When recovering from R2508, BTY is the IFR/VFR fix point.

4.14.4. Split-ups and Join-ups. Flight split-ups and join-ups will be conducted under MARSA and completed prior to departing the range. Be prepared to hold as required by ATC to establish appropriate IFR spacing. Upon establishing contact with Nellis Control, flight leads will state the type of recovery desired. All aircraft within the flight will fly the same approach procedure. Emergencies may dictate exceptions.

4.14.5. VFR Recoveries. VFR recoveries will be used to expedite the flow of traffic into Nellis AFB. There are four VFR recoveries: STRYK, ACTON, ARCOE and MINTT (**Figures 4.8 through 4.11**). VFR Recoveries will be flown at 300 KIAS. If unable to maintain VMC on these recoveries, notify Nellis Approach.

4.14.5.1. STRYK Recovery. The STRYK recovery is used for aircraft recovering from the west of Nellis (**Figure 4.8**) and is a Day/VMC only procedure. Use caution in the area between STRYK and GASS PEAK due to numerous light civil aircraft practicing in the North Las Vegas Training Area, aircraft conducting practice ILS approaches into VGT and frequent air taxi flights between Beatty and VGT.

4.14.5.2. ACTON Recovery. The ACTON recovery is used for aircraft recovery from the ELGIN MOA when RWY 21 is the active runway (**Figure 4.9**) and is a Day/VMC only procedure.

4.14.5.3. ARCOE Recovery. The ARCOE recovery is primarily used for aircraft recovering from the northern ranges when RWY 21 is the active runway (**Figure 4.10**) and is a Day/VMC only procedure.

4.14.5.4. MINTT Recovery. The MINTT recovery is primarily used for aircraft recovering from the northern ranges when RWY 03 is the active runway (**Figure 4.11**) and is a Day/VMC only procedure.

4.14.5.5. ALAMO Recovery. The ALAMO recovery is primarily used for aircraft recovering when the ALAMO corridor is active IAW the ACP (**Attachment 24**).

4.14.5.6. Clearance for VFR recovery constitutes clearance into the Class B airspace. NATCF will clear the flight for a VFR recovery prior to STRYK, ACTON, ARCOE, or MINTT. When the pilot acknowledges receipt of the clearance, the IFR clearance is automatically canceled and VFR applies. While on a VFR recovery or if vectored off the VFR recovery, flights must maintain their own terrain clearance. All fixed wing fighter aircraft will recover to the overhead unless otherwise requested and approved.

Figure 4.7. JAYSN Recovery.

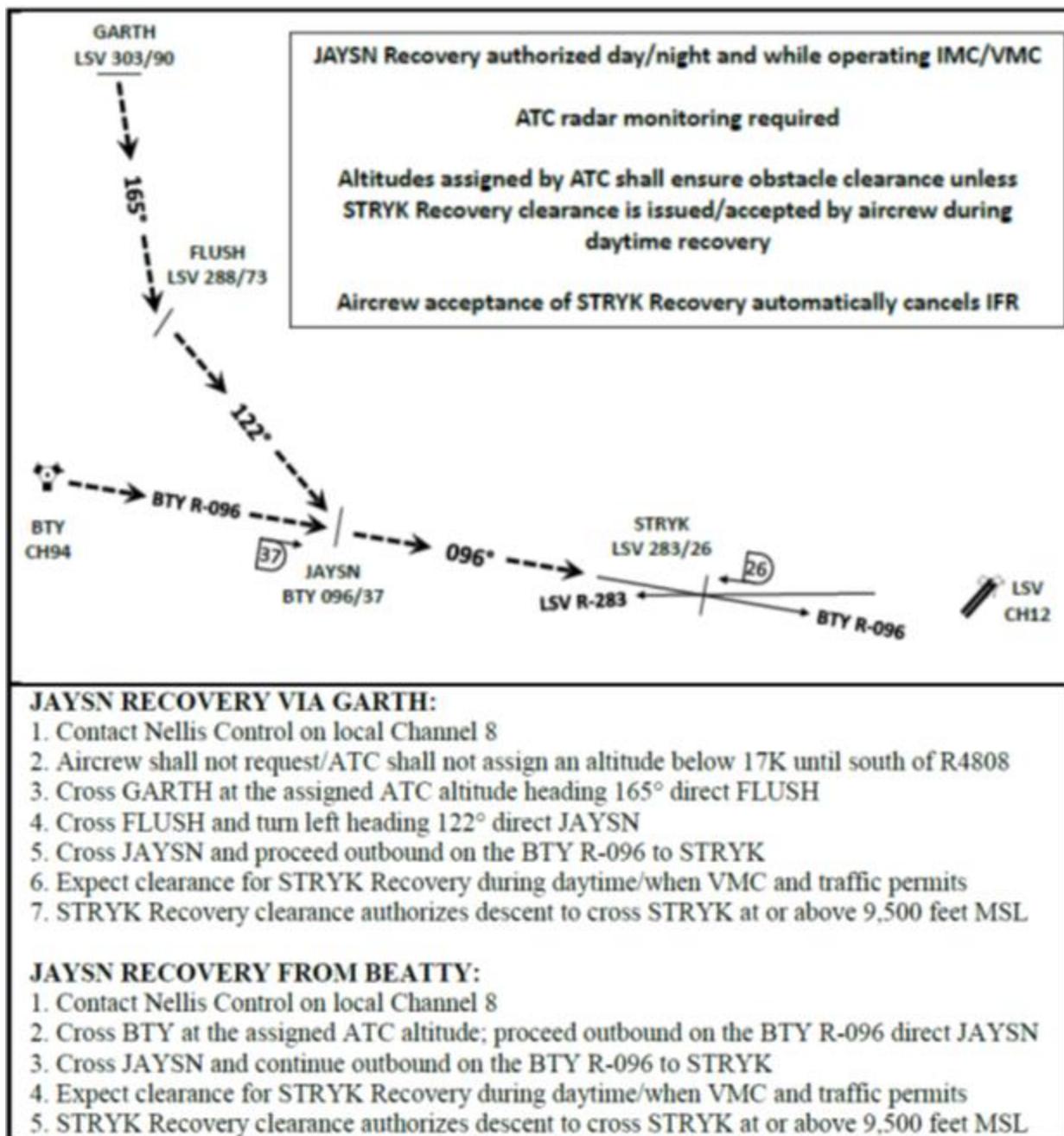
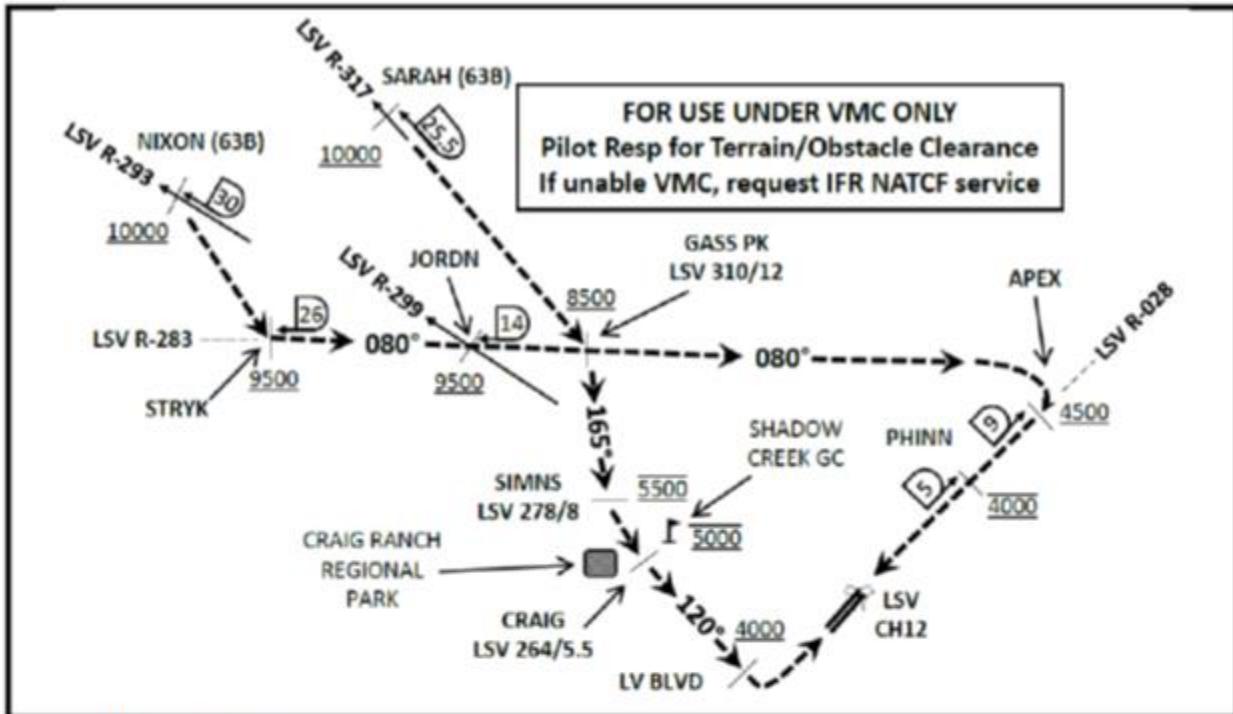


Figure 4.8. STRYK Recovery.

**OVERHEAD RWY 03:**

1. Cross STRYK at or above 9,500 feet MSL, proceed direct GASS PEAK.
2. Cross JORDN at or above 9,500 feet MSL.
3. Cross GASS PEAK at or above 8,500 feet MSL.
4. Proceed direct SIMNS and cross at 5,500 feet MSL.
5. Proceed direct CRAIG at 5,000 feet MSL.
6. Cross Las Vegas Blvd at or above 4,000 feet MSL then to 3,500 feet MSL for initial.
7. Remain within 4 DME of LSV on turn to final.

VFR STRAIGHT-IN RWY 03:

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

OVERHEAD RWY 21:

1. Cross STRYK at or above 9,500 feet MSL, proceed direct GASS PEAK.
2. Cross JORDN at or above 9,500 feet MSL.
3. Cross GASS PEAK at or above 8,500 feet MSL.
4. Cross APEX at or above 4,500 feet MSL then direct PHINN.
5. Descend to cross PHINN at 4,000 feet MSL.
6. Inside 5 DME, descend to 3,500 feet MSL for initial.

VFR STRAIGHT-IN RWY 21:

Cross APEX at 4,000 feet MSL. Descend to be at 3,000 feet MSL at PHINN.

RANGE 63B EXIT (MUST REQ ON INITIAL CONTACT & APVD BY NELLIS ATC)

SOUTH EXIT: Via NIXON at or above 10000 MSL, then direct STRYK.

EAST EXIT: Via SARAH, then direct GASS Peak, comply with remaining restrictions

NOTE: A-10 aircrews may request on initial contact to recover below published altitudes via NIXON when WX prevents compliance with higher restrictions. If approved by ATC, aircrew is responsible for NTTR airspace restrictions. Ground track is mandatory to include CRAIG/APEX altitude crossing restrictions.

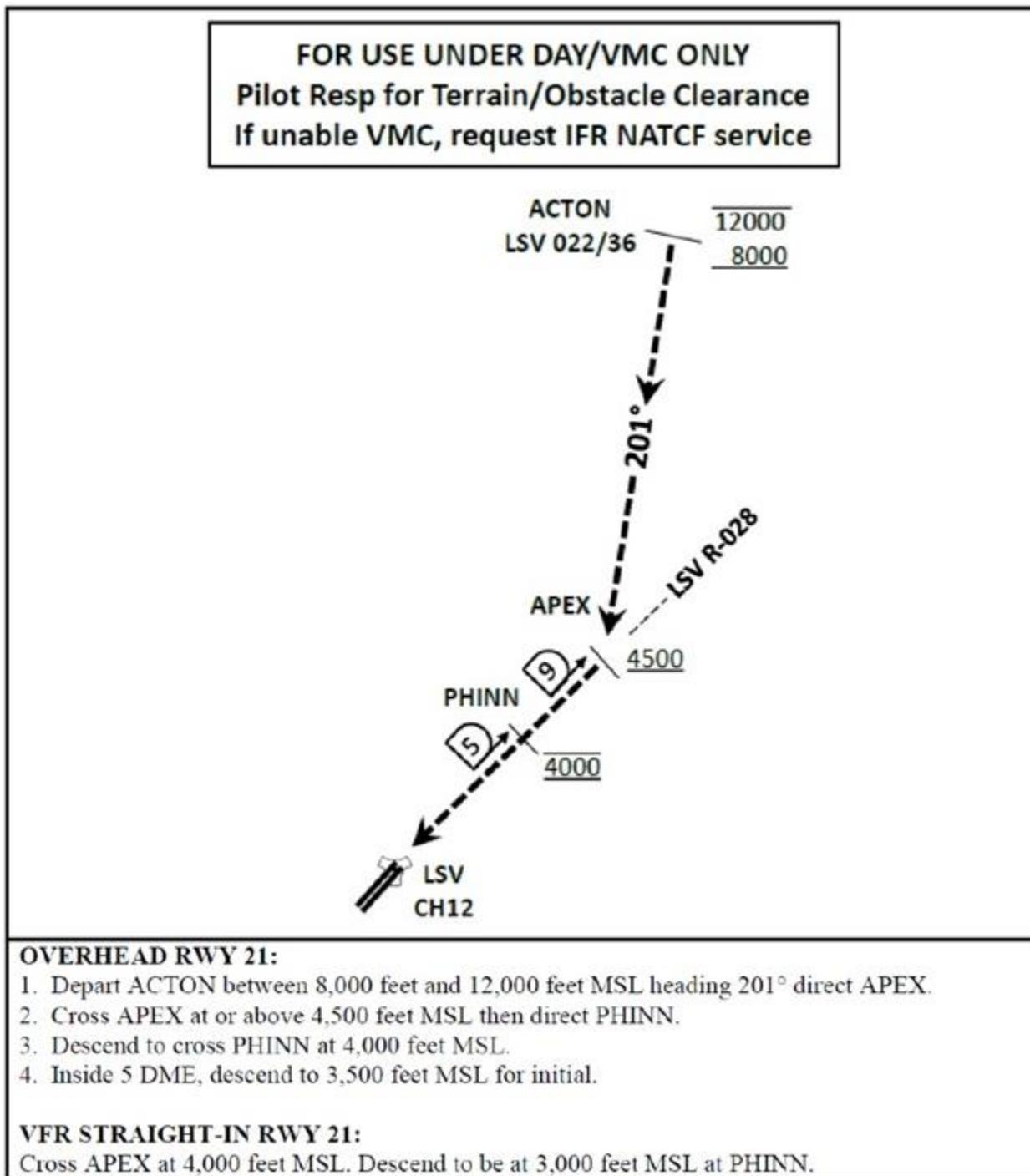
Figure 4.9. ACTON Recovery.

Figure 4.10. ARCOE Recovery.

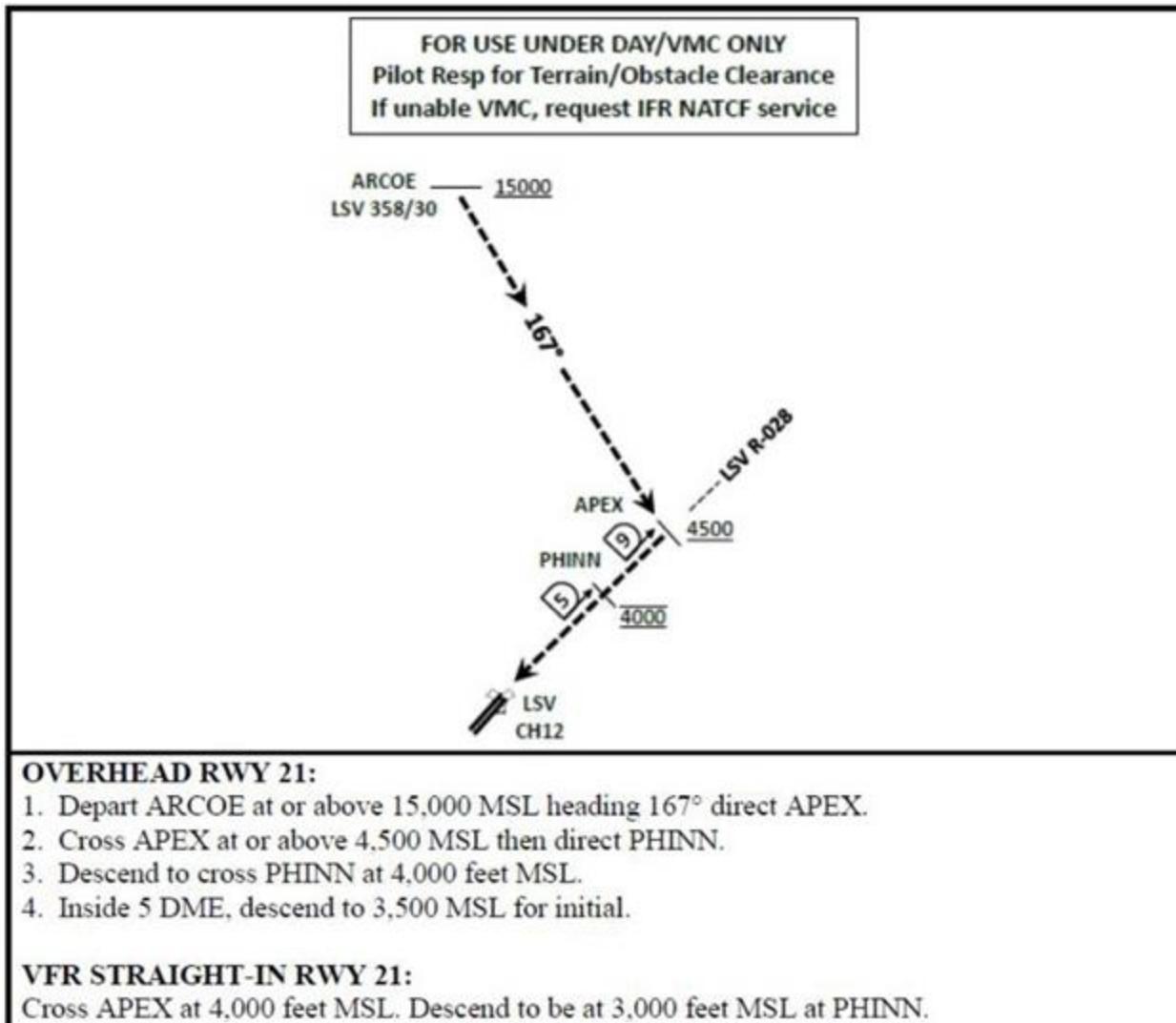
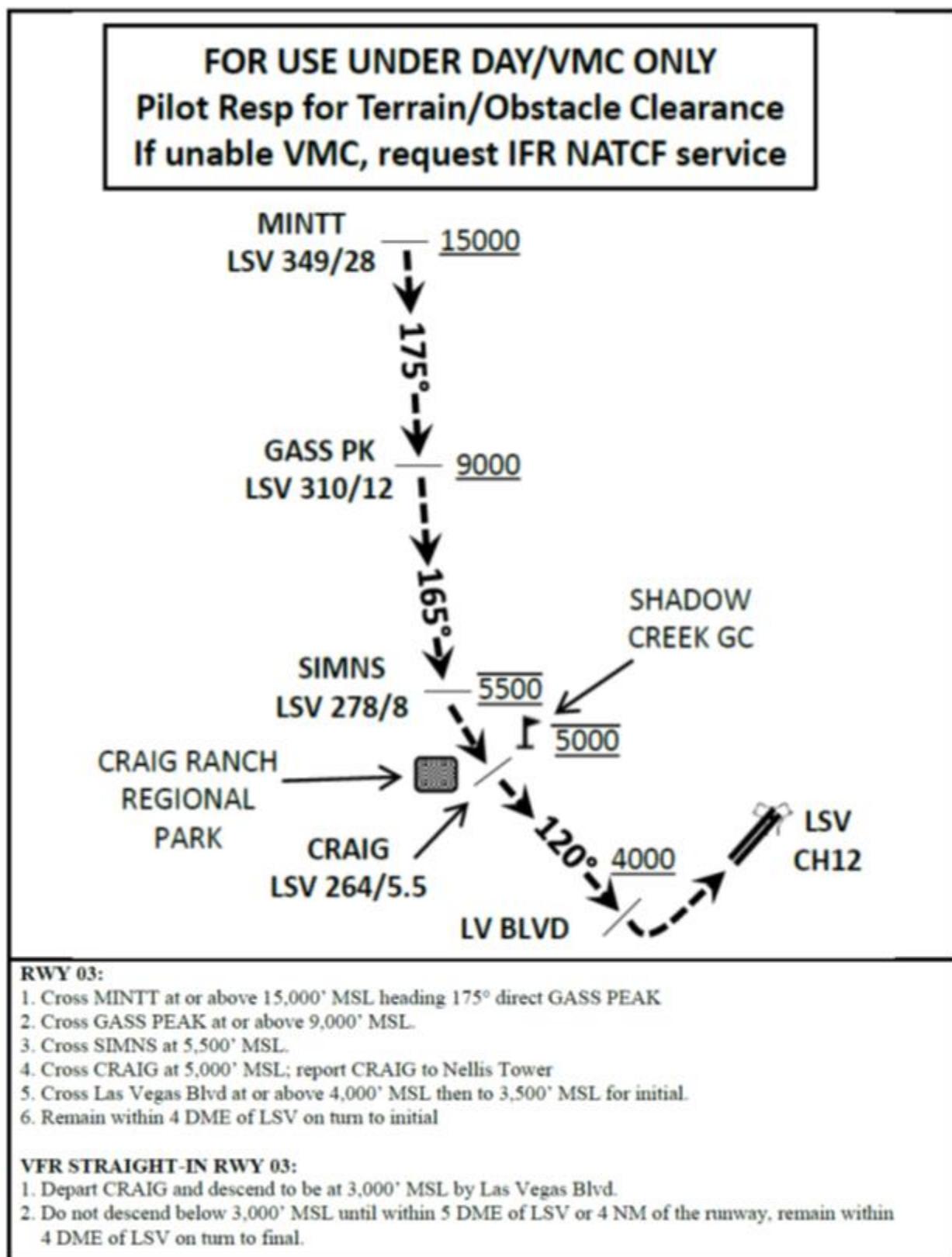


Figure 4.11. MINTT Recovery.



4.14.6. Night Recoveries. For night recoveries from the NTTR, proceed to the IFR pickup points outlined in paragraphs **4.14.1** and **4.14.3** and contact Nellis Control on the appropriate frequency. Expect vectors from Nellis Control/Approach for recovery to a precision, non-precision or visual approach to the field. RWY 21 is the preferred landing runway at night unless winds dictate RWY 03. Slow to 250 KIAS, or as directed by NATCF, when on vectors for the ILS or TACAN approach.

4.14.6.1. Night Recovery RWY 21. Expect vectors for the ILS or TACAN approach in both VMC and Instrument Meteorological Conditions (IMC).

4.14.6.2. Night Recovery RWY 03. Aircraft will recover in flights of two or single-ship. Aircraft should expect a visual approach (weather permitting). When flying a visual approach, frequency change to the tower will be no earlier than 10 NM from the field. Additionally, expect to be given either a charted visual approach clearance (DoD FLIP Low Altitude United States Vol-5) or "CLEARED VISUAL APPROACH RWY 03, CROSS LSV R-256 BETWEEN 5,400 AND 6,000, TURN BASE LEG WITHIN 4 DME." These instructions ensure appropriate airspace and aircraft separation from North Las Vegas and Harry Reid Airport patterns.

4.14.6.3. Night LFE Recoveries. Night LFEs are limited to a maximum number of 50 aircraft (fighters and/or heavies) when RWY 03 is briefed as the expected recovery runway. Mission Commanders may ask for a waiver to this restriction (57 OG/CC approval authority) if able to provide a plan to recover a maximum of four aircraft every five minutes when on RWY 03. This restriction does not limit the number of LFE participants in day missions or night missions when RWY 21 is the expected arrival runway.

4.14.7. Split-to-Land Procedures. A flight recovering to Nellis will request a split-to-land recovery with Nellis Control on initial contact or as soon as practical after range exit. Aircrew will use the following phraseology to make the request: "NELLIS CONTROL, MIG1, FLIGHT OF TWO/FOUR REQUEST (TYPE APPROACH), SPLIT TO LAND." Nellis Control/Approach will respond with "MIG1, SPLIT TO LAND APPROVED" or "MIG1, UNABLE SPLIT TO LAND." After approval is granted from ATC and not earlier than 3 NM from touchdown (approximately 2,800 feet MSL), each element of two will separate to land simultaneously on both the left and right runways. Flight leads will advise Tower on initial contact that they are split to land, and which element will land on which runway: "NELLIS TOWER, MIG1, FLIGHT OF TWO/FOUR, SPLIT TO LAND, MIG1 and MIG3 on 21L, MIG2 and MIG4 on 21R." Weather must be at least 2,000 feet AGL ceiling and 3 miles visibility. Flight leads should consider that RWY 03L/21R has PAPIs only; RWY 03R/21L has approach lights and PAPIs. If on a localizer or TACAN approach, the aircraft that intends landing on RWY 21R must not descend lower than published side-step minimums without having the runway environment in sight. Split-to-land from an ILS approach is not authorized.

4.14.8. Side-Step Maneuver. Pilots desiring to execute a site-step maneuver will use the terms "side-step" and descend no lower than published side-step minimums without having the runway environment in sight.

4.15. Radar Trail Recovery Procedures. Radar trail recoveries apply only to aircraft with suitable on-board systems and approved operational procedures. Radar trail recoveries are limited to a maximum of four aircraft. Aircrews will maintain their own separation by using on-board radar systems. The weather must be at or above the highest pilot weather category in the flight or

approach minimums, whichever is higher. Multiple practice radar in-trail approaches that do not terminate with a full stop landing shall be conducted only in VMC. During practice approaches in VMC, after an executed low approach/landing, the flight is responsible for their own separation until approved ATC separation is achieved between elements. Notify ATC of nonstandard formations.

4.15.1. Flight separation must be accomplished prior to departing assigned airspace. The lead aircraft will squawk assigned mode 3/C. The last aircraft/element in the flight will squawk mode 3/C (sequential mode 3). All others will squawk standby. ATC instructions to the lead aircraft will be to the entire flight. Reference [paragraph 4.3.1](#) for procedures when given altitude changes. All aircraft will plan to land on the same runway.

4.15.2. If contact is lost with the preceding aircraft, the flight lead will deconflict altitude and coordinate a separate clearance with ATC. If contact is lost after established on a segment of a published approach, flight members may continue the approach, but must confirm separation via navigation aids. If separation cannot be confirmed, notify ATC and comply with ATC instructions.

4.15.3. Missed Approach. If a missed approach is executed by a single aircraft, follow normal missed approach procedures. When executing the missed approach, use extreme caution while accelerating and use altitude deconfliction, if necessary, to avoid preceding aircraft. If more than one aircraft executes a missed approach, each trail aircraft is responsible for separation from the preceding aircraft until prescribed ATC separation is achieved. Should any element need to execute a break-out/go-around due to an unsafe situation, the pilot will execute the missed approach procedure for the instrument approach or standard climb-out for visual.

4.15.4. Low Approach/Climb Out. During climb out for additional radar patterns, individual aircraft will follow climb out instructions and request a separate clearance from ATC. Use normal climb out airspeeds and onboard systems to ensure separation from preceding/trailing aircraft prior to ATC assuming responsibility.

4.16. VFR Traffic Pattern Procedures. VFR is defined as 1,500 feet AGL and 3 SM visibility. Minimum VFR traffic pattern weather is 500 feet above pattern altitude and 3 SM visibility. Expect frequency change to Nellis Tower approximately 15 NM from Nellis. Nellis Tower will consider all aircraft a full stop from initial unless advised otherwise on initial contact. Nellis Tower will not issue landing clearance to each aircraft that are part of a single flight. When Nellis Tower issues the flight landing clearance to the flight lead, it is clearance for all aircraft in the flight to land. Flight lead will acknowledge landing clearance for flight. Subsequent flight members will make a “gear and intended landing runway” call only and do not need to state intentions (i.e. “HOSS 2, GEAR, LEFT/RIGHT”). Flight members who do not wish to land will make their request with Nellis Tower and receive a separate clearance (i.e. “HOSS 3, GEAR DOWN, LOW APPROACH, LEFT/RIGHT”). This procedure will reduce frequency congestion especially during LFE recoveries and complies with FAA JO 7110.65 guidance.

4.16.1. Overhead patterns: Initial will be flown to RWY 03L/21R, unless otherwise instructed, at 300 KIAS or less and 3,500 feet MSL within 3 NM of the field. Initial to the East (RWY 03R/21L) will be flown at 300 KIAS or less and 3,500 feet MSL within 2 NM of the field. See [Figure 4.12](#) for tower traffic patterns. Night overhead patterns will not be flown. Night is defined as the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac (converted to local time). Civil

twilight times may be found on the USNO Astronomical Applications Department website at <http://aa.usno.navy.mil> under “Data Services.” The Nellis weather website also has this link. In the event of a go around or low approach, heavy aircraft will contact Nellis departure for vectors to another straight-in pattern.

4.16.1.1. RWY 21 Initial. Aircraft arriving from ARCOE or ACTON have priority to initial. Aircraft entering from GASS PEAK must adjust their flight path to follow traffic inbound to APEX or as directed by ATC.

4.16.1.2. RWY 03 Initial. Aircraft arriving from STRYK have priority to initial. Aircraft entering from MINTT must adjust their flight path to follow traffic inbound from STRYK or as directed by ATC.

4.16.1.3. Overhead Break Procedures: Standard break is to the west for aircraft arriving RWY 03L/21R and to the east for aircraft arriving RWY 03R/21L (**Figure 4.12**). Nellis Tower will issue a direction of break and landing runway before aircraft reach 5 mile initial (RWY 21L/R) or 1 NM inside of Craig (RWY 03L/R). Aircraft will report initial and overfly the runway to which ATC has assigned. The break will be initiated over the approach end unless directed otherwise. Aircraft will fly a downwind ground track and adjust the final turn for the assigned landing runway. ATC may change the landing runway after the break based on real time traffic needs or at pilot’s request.

4.16.1.3.1. The following phraseology will be used to change the assigned runway and assigned direction of break: Changing only the assigned runway: “MIG01, CHANGE LANDING RUNWAY, RUNWAY 21 LEFT.”

4.16.1.3.2. Changing only the assigned break: “MIG01, CHANGE DIRECTION OF BREAK, MAKE LEFT BREAK.”

4.16.1.3.3. Changing both the assigned break and runway: “MIG01, CHANGE DIRECTION OF BREAK AND LANDING RUNWAY, MAKE LEFT BREAK RUNWAY 21 LEFT”

4.16.1.4. East Break to RWY 03. For RWY 03R, complete the final turn north of Lake Mead Blvd. Obtain separation from preceding aircraft by delaying the break as necessary. Do not widen the pattern or delay base turns to achieve separation. If separation becomes a problem after the break, request a 3,500 feet MSL base level turn back to initial.

4.16.1.5. Radar Vectors to Initial. An aircraft executing an overhead maneuver is considered VFR and the IFR flight plan is cancelled when the aircraft reaches the “initial point” on the initial approach portion of the maneuver. After an aircraft reports the airport or runway in sight, they can expect a visual approach clearance to initial. Sin City Visual (DoD FLIP Low Altitude United States Vol 5) may be used in lieu of vectoring to initial.

4.16.1.6. Rectangular Patterns. The rectangular pattern may be used by heavy aircraft in special circumstances when required for safety. Fly rectangular patterns to RWY 03L/21R unless directed otherwise. The standard pattern altitude is 3,000 feet MSL (**Figure 4.12**).

4.16.1.7. Non-Fighter Aircraft Traffic Pattern Procedures. The overhead pattern is primarily for fighter type aircraft. Large/heavy aircraft may be allowed in the overhead on a noninterference basis and specifically approved by the Tower WS. Non-transient heavy aircraft (exercise participants) may perform East/Sunrise breaks if remaining within 2 NM

of the LSV TCN until North of Sunrise Mountain to avoid mountainous terrain. Duck reentry is authorized provided PIC maintains 300' vertical obstacle clearance over Sunrise Mountain. Non-fighter aircrews should continue to plan recovery via VFR straight-in or Instrument approach should the overhead recovery be denied by ATC.

4.16.1.8. If spacing permits, aircraft will not configure until wings level on downwind and no earlier than abeam midfield. Fighter aircraft will remain within one mile of the runway.

4.16.2. Straight-In Patterns. Minimum weather requirement for a VFR straight-in are 1,700 feet AGL (3,500 feet MSL) ceiling, and 3 SM visibility. Request a straight-in approach upon initial contact with ATC. Straight-in altitude is 3,000 feet MSL. See [Figure 4.8](#) through [Figure 4.11](#) for straight-in procedures from VFR recoveries and [Figure 4.12](#) for straight-in procedures from reentry. VFR straight-ins to RWY 03 have short finals due to Harry Reid Airport's airspace to the south of Nellis. Use caution if flying a VFR straight-in or formation straight-in to RWY 03 due to tight turn to final (early configuration and a descending turn may be required).

4.16.3. Closed Traffic Maneuvers. Closed patterns will be accomplished at the departure end of the runway. Present position closed maneuvers are authorized with Nellis Tower approval. Aircraft executing a closed pattern will perform a climbing turn to enter the respective downwind.

4.16.4. Reentry Patterns. The FLEX reentry pattern is available for both runways and the DUCK reentry pattern is available for RWY 21 only.

4.16.4.1. FLEX Reentry. Aircrews will remain within 5 NM of Nellis AFB on Nellis Tower frequency and report FLEX (eastern most triangle). Fly the same ground track for reentry to overhead or straight-in patterns ([Figure 4.12](#)). During runway closures or traffic saturation, Tower may direct holding at high initial using the FLEX reentry ground track. Hold at the ATC assigned altitude.

4.16.4.1.1. Reentry RWY 21. Comply with the initial part of Noise Abatement Procedures of expediting climb to 2500–3000 feet MSL then climbing right turn direct FLEX at 4,000 MSL (eastern most triangles LSV 338/4). Turn to reenter initial and descend to 3,500 feet MSL. For a straight-in, descend to be at 3,000 feet MSL by I-15.

4.16.4.1.2. Reentry RWY 03. Perform a climbing left turn direct to direct FLEX at 4,000 feet MSL. At FLEX, turn Southwest to fly parallel with the runways. Passing Shadow Creek Golf Course, turn Left to reenter initial. Remain east of Craig Ranch Park to deconflict with VGT Airport traffic ([Figure 4.12](#)). Maintain 4,000 feet MSL until Las Vegas Blvd. For straight-in approach do not descend below 3,000 feet MSL until within 4 NM (5 DME from LSV) of the runway.

4.16.4.2. DUCK Reentry (RWY 21 only). Aircrews will remain on Nellis Tower frequency and perform a climbing left turn to between 4,000 and 4,400 feet MSL, remaining North of Lake Mead Blvd. Point towards the gap (between Frenchman Mountain and Sunrise Mountain). Fly no further East than 3.5 DME of LSV TACAN to avoid conflict with Harry Reid Airport Class B airspace. Turn northbound to fly directly over the eastern part of the MSA then direct DUCK. Report DUCK. Proceed West from DUCK to reenter initial, descending to 3,500 feet MSL. For a straight-in, descend to 3,000 feet MSL prior to turning final. During runway closure or traffic saturation, Tower may

direct holding at DUCK. Hold East of DUCK (remain 1.5 miles from DUCK) at 4,400 feet MSL.

4.16.5. Tactical and High-Tactical Initial. Formations request Tactical Initial or High-Tactical Initial with Nellis Control (Channels 7/8) on initial contact or as soon as practical.

4.16.5.1. Tactical Initial is flown to RWY 21 at 400 KIAS (or IAW ATC instruction) and 3,500 feet MSL. Intra-elements spacing is 3,000 feet to 4,500 feet line-abreast with 1 NM spacing between elements. Wingman break simultaneously at the approach end of the landing runway.

4.16.5.2. High-Tactical Initial crosses APEX at 5,500 feet MSL and maintains 5,500 feet MSL using the same ground-track, airspeed and spacing as Tactical Initial. When breaking towards inside downwind aircraft descends to establish a normal, configured, perch point at 3,500 feet MSL.

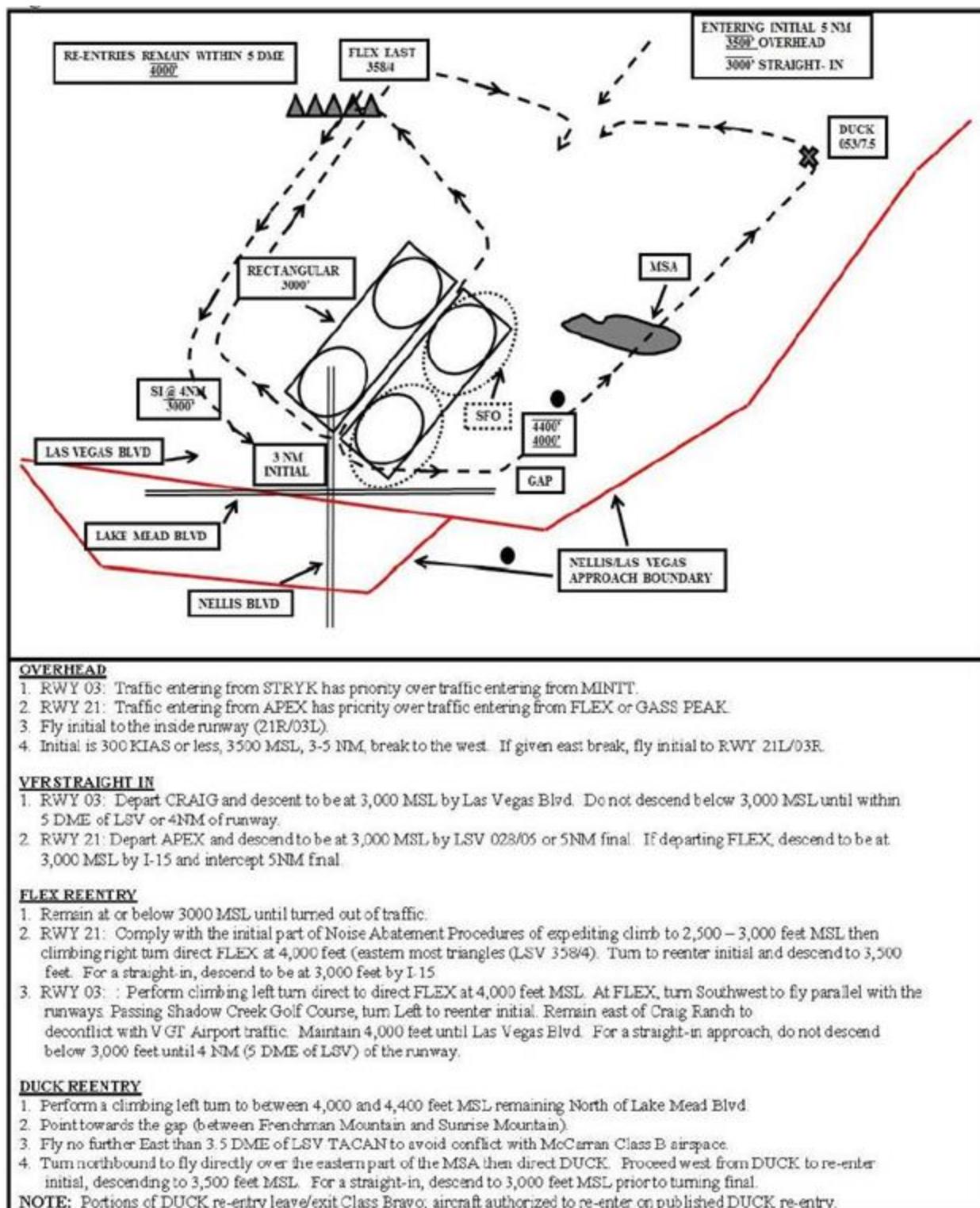
4.16.5.3. Aircraft breaking east must maintain within 2 NM of the runway threshold to avoid rising mountainous terrain.

4.16.5.4. SODO Application:

4.16.5.4.1. Tactical Initial is not authorized simultaneously during RWY 03 SODO.

4.16.5.4.2. High-Tactical Initial may be authorized simultaneously during RWY 03 SODO pending traffic/controller workload.

Figure 4.12. Nellis AFB Traffic Patterns.



4.17. Nellis Missed Approach Local Climb Out and Radar Vector Departure/Obstacle Departure Procedure.

4.17.1. Missed Approach Local Climb Out Departure ([Figure 4.13](#)).

4.17.1.1. Expect ATC to issue “EXECUTE LOCAL CLIMB OUT” under the following conditions:

4.17.1.1.1. Completion of an IFR/VFR instrument, IFR visual or VFR approach that terminates in other than a full stop landing and subsequent IFR radar services are requested by the aircrew.

4.17.1.1.2. ATC/aircrew initiate go around and subsequent IFR radar services are required (i.e., nighttime, etc.) or requested by the aircrew.

4.17.1.1.3. Nellis Control Tower traffic pattern saturation.

4.17.1.2. Local climb out clearance automatically provides aircrew a return IFR short-range clearance to Nellis.

4.17.1.3. RWY 21L/R E-3/E-8 aircraft executing local climb out will not intercept LSV R-268 outbound.

4.17.1.4. RWY 21L/R: 4,700' AGL/3 SM required to execute missed approach local climb out; when weather is below, 4,700' AGL/3 SM, expect ATC to issue “EXECUTE PUBLISHED MISSED APPROACH”; comply with FLIP published missed approach except noise abatement.

4.17.2. RWY 21L/R Radar Vector Departures.

4.17.2.1. Cross the departure end at or below 3,000 feet MSL. Turn right heading 300° to remain within 4 DME of LSV TACAN/do not penetrate the LAS VORTAC 7.5 DME ARC westbound. Cross LSV R-256 (military TACAN equipped) or LAS R-349 (civilian) westbound below 6,000 feet MSL. Intercept LSV R-268 outbound (N/A civilian) then expect additional radar vectors from ATC. Climb and maintain 10,000 feet MSL or as assigned by ATC. Requires minimum 281'/NM (military) or 296'/NM (civilian) climb gradient to 10,000' MSL. Advise ATC if unable to comply with climb out restrictions.

4.17.2.2. E-3/E-8 RWY 21L/R radar vector departures will not be instructed by ATC on their clearance to intercept the LSV R-268 outbound; primarily due to a potential emergency single-engine failure immediately on departure. Provided an engine failure does not occur, aircrews shall expect/ATC may issue radar vectors when aircraft reaches/passes the minimum vectoring altitude (as low as 5,400' MSL).

4.17.3. RWY 03L/R Obstacle Departure Procedure (ODP). Cross the departure end at or below 3,000 feet MSL. Fly heading 040°, expect radar vectors passing 5,400' MSL from NATCF. Climb and maintain 10,000 feet MSL or as assigned by ATC.

4.17.3.1. RWY 03L: Requires minimum 270'/NM (military/civilian) climb gradient to 3,700'.

4.17.3.2. RWY 03R: Requires minimum 245'/NM (military/civilian) climb gradient to 4,700'.

4.17.3.3. Advise ATC if unable to comply with climb out restrictions.

4.17.4. RWY 21L/R Obstacle Departure Procedure (ODP). Cross the departure end at or below 3,000 feet MSL. Fly heading 285°, expect radar vectors passing 5,400' MSL from ATC. Climb and maintain altitude as assigned by ATC.

4.17.4.1. RWY21L/R: Requires minimum 373'/NM (military) climb gradient to 13,300'.

4.17.4.2. RWY21L/R: Requires minimum 402'/NM (civilian) climb gradient to 13,300'.

4.17.4.3. Advise ATC if unable to comply with climb out restrictions.

4.17.4.4. During extensive radar/NAVAID outages affecting Nellis AFB, ATC may also issue RWY 21L/R obstacle departure procedure instructions as missed approach local climb out.

4.18. Lost Communications Procedures. If IMC and communications are lost, aircrews will climb and maintain 15,000 feet MSL and execute the HI-TACAN Z RWY 21L approach. NORDO aircraft will squawk 7600. If IMC and communication is lost during radar trail recoveries and positive radar contact (range, altitude, airspeed and closure) can be maintained, continue with the flight to landing. If radar contact cannot be maintained or the situation dictates leaving the formation, proceed direct to the IAF for the HI-ILS or LOC/DME Z RWY 21L or HI-TACAN Z RWY 21L approach. Make one turn in holding and then execute the published approach. If VMC, execute the ARCOE Recovery (from the north) or the STRYK Recovery (from the west).

4.19. Opposite Direction Procedures. Opposite direction departures on RWY 03 will be used when necessary for noise abatement procedures, departing aircraft carrying live or heavyweight inert ordnance (packages not to exceed eight aircraft). Aircrews will not request opposite direction departures for convenience, except as allowed by 4.19.1. A runway change will be accomplished if able for a LFE. Request an opposite direction takeoff with Nellis Ground on initial contact. The following cutoffs shall be applied in both IFR and VFR operations. Opposite direction cutoff procedures will be applied IAW tower and NATCF Operations Letter. A minimum 10 NM cut-off point from the airport will be used to deconflict all opposite direction traffic situations.

4.19.1. Opposite Runway EOR. Aircraft arming in EOR opposite the active runway may request opposite direction departure. This is to minimize taxi time of armed aircraft on the Nellis ramp from EOR to the active runway and is not mandatory to execute. Aircrew will request opposite direction takeoff with GC on initial contact and will provide appropriate reason. i.e. "NELLIS GROUND, RAMBO 1 TAXI 4, ROW 15, WITH ALPHA, REQUEST RUNWAY 03 FLEX NORTH DEPARTURE, SOUTH ARMING." Once the flight is ready for takeoff, Nellis Tower will issue takeoff clearance or an expected delay time. Flight Leads/Mission Commanders may cancel request for opposite direction takeoff and request taxi to active if delay does not meet mission requirements.

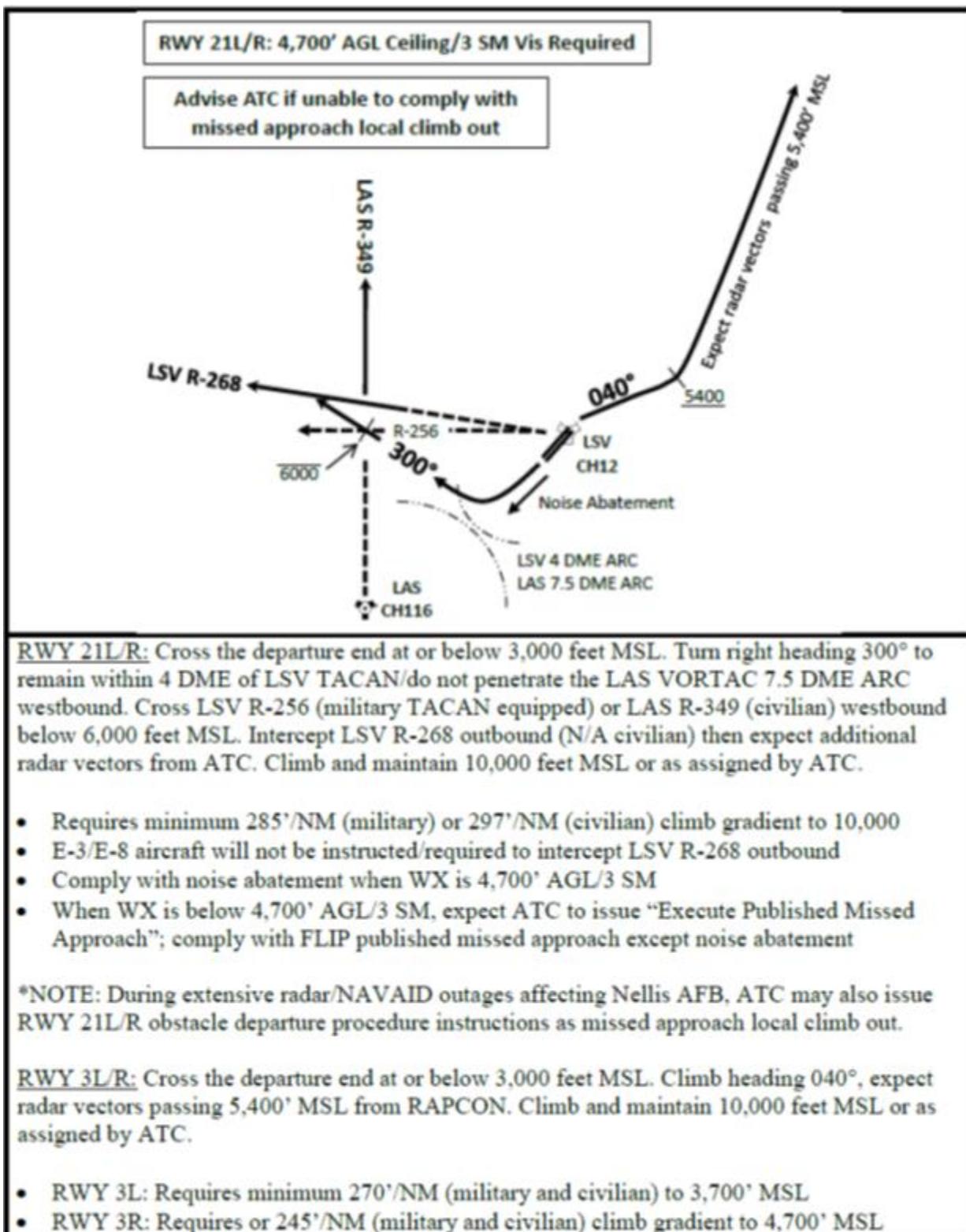
4.19.2. Opposite Direction Arrival versus Arrival. Opposite direction arrivals shall not proceed closer than 10 miles on final until the aircraft approaching the runway in use has touched down (full stop) or has completed a low approach/touch and go and turned to avoid conflict.

4.19.3. Opposite Direction Departure versus Arrival. Opposite direction departure must be airborne, turned to avoid conflict and established on a course diverging by at least 45° from the reciprocal of the final approach course before the arriving aircraft has reached a point 10 miles on final.

4.19.4. Opposite Direction Arrival versus Departure. Opposite direction arrival shall not proceed closer than 10 miles on final until the departing aircraft has turned to avoid conflict and is established on a course diverging by at least 45° from the reciprocal of the final approach course. Once an opposite direction arrival has reached 10 miles on final, the aircraft will be allowed to continue the approach and all departures will be held.

4.19.5. Due to civil encroachment issues to the south of Nellis AFB, live ordnance or heavyweight departures are only permitted on RWY 03 except as authorized in [paragraph 5.2](#). Aircrew will compute takeoff and landing data, to include maximum tailwind allowable (within mission design series (MDS) limits) for a RWY 03 departure. Unit supervisors will ensure aircrews understand the risk associated with downwind heavyweight takeoffs. Local Area Briefs to visiting units will highlight the potential for takeoff roll to exceed AFI 11-2 MDS-Specific Volume 3 and flight manual minimum runway length requirements. Other MDS considerations may include max tire speed limits and max abort/min go relationships. Host units will ensure visiting units are aware of this risk.

Figure 4.13. Missed Approach Local Climb Out.



4.20. Simultaneous Opposite Direction Operation Procedures. Simultaneous Opposite Direction Operation (SODO) procedures are authorized only for DoD fighter aircraft, after the

participating pilots have been specifically briefed in a Local Area Orientation (LAO) briefing. Noise abatement procedures, departures with live/heavyweight inert ordnance or mission requirements may dictate opposite direction RWY 03 departures. Acrews will not request opposite direction departures for convenience. The following stipulations also apply: Note: SODO operations are approved via AFFSA/MAJCOM waiver.

- 4.20.1. Only to be used between sunrise and sunset.
- 4.20.2. A minimum ceiling of 2,500 feet and 10 miles of visibility exists. Both runways will be in use. Note: During single runway operations, use of SODO is prohibited.
- 4.20.3. Traffic advisories are issued to both aircraft.
- 4.20.4. All separation and SODO requirements will adhere to FAA JO 7110.65.
- 4.20.5. The departing package shall not exceed 8 aircraft and must be on a FLEX NORTH/WEST Departure or A-10 VFR Departure.
- 4.20.6. To ensure protection of the overhead pattern, the departing package shall remain at or below 3,000 feet MSL until north of the Race Track and turned west/north bound from FLEX.
- 4.20.7. Participating pilots shall not overshoot the extended centerline of runway of intended landing or departure.
- 4.20.8. Arriving aircraft shall be under Nellis Tower control conducting a VFR straight in approach, or in the overhead pattern with an East Break issued NLT 5 NM initial.
- 4.20.9. Helicopters operating from Golf Taxiway are authorized opposite direction traffic using East rectangular patterns with prior approval from Nellis Tower.

4.21. Reduced Same Runway Separation (RSRS). See **Table 4.1** through **Table 4.4** for authorized RSRS.

- 4.21.1. C-130s are authorized the following RSRS when operating with base-assigned aircraft:
 - 4.21.1.1. C-130 full stop/low approach behind base-assigned aircraft (excluding other C-130) is 8,000 feet.
 - 4.21.1.2. Base-assigned aircraft (excluding other C-130) full stop/low approach behind a C-130 full stop is 8,000 feet.
 - 4.21.1.3. 509 WPS assigned KC-135 full stop/low approach behind base-assigned aircraft is 8,000 feet.
- 4.21.2. The minimum RSRS when either aircraft is a RC-135/E-3/E-8 or heavy class aircraft is 8,000 feet and dry runway conditions. Formation landings by heavy class aircraft are not authorized. RSRS is not authorized for a touch-and-go behind a full stop or low approach behind a touch-and-go when either aircraft is a heavy class aircraft.
- 4.21.3. All aircraft must maintain at least 500 feet lateral or vertical separation when over flying aircraft on the runway. Responsibility for separation rests with the pilot.
- 4.21.4. RSRS does not relieve the pilot of responsibility for wake turbulence separation.
- 4.21.5. Runway separation within the flight (similar or dissimilar) rests with the individual elements. This requirement does not preclude ATC from taking action in the event of an unsafe condition.

4.21.6. RSRS will not be applied to emergency aircraft or when either aircraft involved has been cleared for the option or when braking action reports of less than “medium” are reported.

4.21.7. AV-8 aircraft shall rollout to the end of the runway, maintaining rollout speed, unless authorized otherwise by Nellis Tower for early turnoffs or 60 KIAS landings. During normal operations, vertical takeoffs and landings are authorized under emergency conditions only; however, when crosswinds are out of limits for AV-8s to perform normal takeoffs and landings (20 knots), the SOF has the authority to approve vertical takeoffs and landings if Nellis Tower is able to sequence them into the traffic pattern. Vertical takeoffs and landings may be conducted on the entire length of both runways as long as the aircraft stay on the concrete portion of the runway (on RWY 03L/21R, the middle 7,879 feet of runway is concrete down the center only, 40 feet left and right of centerline).

4.21.8. Aircraft may request an early turn off at Taxiway Bravo if safing is not required and flight size is not more than two aircraft (this flight size restriction does not apply to AV-8s or the Thunderbirds). This request should be made to Nellis Tower as soon as possible for planning purposes. Note: Early turns at Taxiway Bravo are authorized for fighter aircraft dearming on the North/South End.

4.21.9. During wet runway conditions, minimum spacing between all fighters will be no less than 6,000 feet and a touch-and-go is not authorized behind a full stop IAW 11-202V3, ACC Supplement 1.

Table 4.1. RSRS for Similar Fighter Type Aircraft.

Day/Night, Dry Runway Only		LEAD AIRCRAFT		
TRAIL AIRCRAFT	FULL STOP	FULL STOP	TOUCH-AND-GO	LOW APPROACH
	FULL STOP	3,000 or 6,000 feet for formation landings	3,000 feet	3,000 feet
	TOUCH-AND-GO	6,000 feet if Day, VFR, Dry	3,000 feet	3,000 feet
	LOW APPROACH	3,000 feet	6,000 feet	3,000 feet

NIGHT: 6,000 feet is the minimum spacing for all similar night operations if ATC can safely determine distances; otherwise standard FAAO 7110.65 separation standards will apply. *6,000 feet is the minimum spacing for a single aircraft or a formation of aircraft, landing behind a formation landing. RSRS is measured between the trailing aircraft in the lead flight and the lead aircraft in the trailing flight. Note: Aircraft conducting a low approach or touch-and-go behind a full stop will not overfly aircraft on the runway. Responsibility for ensuring compliance rests solely with the pilot.

Table 4.2. RSRS for Dissimilar Fighter Type Aircraft.

Day/Night, Dry Runway Only		LEAD AIRCRAFT		
TRAIL AIRCRAFT	FULL STOP	FULL STOP	TOUCH-AND-GO	LOW APPROACH
	FULL STOP	6,000 or 8,000 feet for formation landings*	6,000 feet	6,000 feet
	TOUCH-AND-GO	6,000 feet	6,000 feet	6,000 feet

	LOW APPROACH	6,000 feet	6,000 feet	6,000 feet
NIGHT: 8,000 feet is the minimum spacing for all dissimilar night operations if ATC can safely determine distances; otherwise standard FAAO 7110.65 separation standards will apply. *8,000 feet is the minimum spacing for a single aircraft or a formation, landing behind a formation full stop. RSRS is measured between the trailing aircraft in the lead flight and the lead aircraft in the trailing flight. Note: Aircraft conducting a low approach or touch-and-go behind a full stop will not overfly aircraft on the runway. Responsibility for ensuring compliance rests solely with the pilot.				

Table 4.3. RSRS for C-130 vs. C-130.

Day/Night, Dry Runway Only		LEAD AIRCRAFT		
TRAIL AIRCRAFT	FULL STOP	FULL STOP	TOUCH-AND-GO	LOW APPROACH
	FULL STOP	5,000 or 8,000 feet for formation landings*	5,000 feet	5,000 feet
	TOUCH-AND-GO	Not Authorized	5,000 feet	5,000 feet
8,000 feet is the minimum spacing for a single aircraft landing behind a formation full stop. RSRS is measured between the trailing aircraft in the lead flight and the lead aircraft in the trailing flight. Note: Aircraft conducting a low approach or touch-and-go behind a full stop will not overfly aircraft on the runway. Responsibility for ensuring compliance rests solely with the pilot.				

Table 4.4. RSRS for 509 WPS TDY Assigned KC-135 vs. KC-135.

Day/Night, Dry Runway Only		LEAD AIRCRAFT		
TRAIL AIRCRAFT	FULL STOP	FULL STOP	TOUCH-AND-GO	LOW APPROACH
	FULL STOP	8,000 feet	8,000 feet	8,000 feet
	TOUCH-AND-GO	Not Authorized	8,000 feet	8,000 feet
RSRS 8,000 feet is the minimum spacing for a single aircraft behind a single aircraft. Note 1: Aircraft conducting a low approach behind a full stop will not overfly aircraft on the runway. Responsibility for ensuring compliance rests solely with the pilot. Note 2: Table only applies to 509 WPS KC-135 assigned aircrew. KC-135 aircrew will announce to Nellis Tower (Channel 4) acceptance of WPS RSRS on initial contact.				

4.22. Simulated Flame-Out/Precautionary Flame-Out Operations. Practice Simulated Flame-Out (SFO)/Precautionary Flame-Out (PFO) will be conducted IAW the following procedures by F-16/F-35 and Draken L-159/A-4/F-1 aircraft only (see [Figure 4.14](#)). SFO/PFO will only be conducted between official sunrise and sunset. The reported ceiling must be 1,000 feet AGL above the highest altitude to be flown and flight/ground visibility must be at least 5 SM. SFO/PFO will terminate in a low approach. Nellis Tower WS is the approval authority for

authorizing SFO/PFO approaches. Tower may disapprove or instruct pilots to discontinue an SFO/PFO at any time.

4.22.1. Overhead SFO/PFO. Pilots will request the SFO/PFO, including desired high key (MSL) altitude, with NATCF or Nellis Tower. Aircraft will squawk normal with altitude while conducting SFO/PFO. Nellis Approach will transfer SFO/PFO aircraft to Tower not later than CRAIG (RWY 03) or APEX (RWY 21). All SFO/PFO commence at high key. Alternate Entry SFO/PFO are not authorized. Overhead SFO/PFO airspace should usually be requested with NATCF on initial contact after range exit. ATC will make the overhead airspace available as soon as possible, but not later than five minutes after pilot request.

4.22.1.1. Pilot phraseology: "NELLIS APPROACH/TOWER, MIG 1, REQUEST HIGH KEY (MSL altitude). Controller phraseology, if approved: "MIG 1, RIGHT/LEFT TURNOVER APPROVED, REPORT HIGH KEY." Pilots will report "high key" "low key", and "base key, gear down low approach." Nellis Tower will issue clearance and/or other instructions when the pilot calls low key.

4.22.1.2. SFOs/PFOs may be conducted to all runways. Tower may approve SFOs/PFOs to a closed runway. All SFO/PFO to a closed runway shall terminate in a restricted low approach at or above 500 feet AGL (or as directed by ATC). F-16/L-159/A-4/F-1 aircraft must remain within 3.5 NM of the TACAN.

4.22.1.3. There shall be no more than two IFR and eight VFR aircraft under Nellis Tower control during SFO/PFO operations. No more than three aircraft may perform overhead procedure simultaneously (chase aircraft do not count toward the three aircraft limit).

4.22.1.4. The ATC deconfliction cutoff point for the SFO/PFO is 10 miles. Arriving aircraft on final (i.e., VFR straight-in, ILS/TACAN final, etc.) to the same runway as an SFO/PFO shall proceed no closer than 10 NM to the runway until the SFO/PFO reports low key.

4.22.1.5. Traffic information will be issued by tower between aircraft enroute to initial or on final and SFO/PFO aircraft. If the SFO/PFO aircraft does not have the traffic in sight prior to initial, Tower may provide visual separation between the aircraft. If tower is unable to provide visual separation and no other aircraft are conducting an SFO/PFO, the pilot can climb to low/high key or break out. If there is a second aircraft in the SFO/PFO the aircraft must break out.

4.22.1.5.1. If aircrew are visual with preceding/following traffic, report traffic in sight and maintain visual separation (i.e., "COMPANY TRAFFIC/PRECEDING TRAFFIC IN SIGHT, WILL MAINTAIN VISUAL").

4.22.1.5.2. Break out instructions: Terminate the SFO/PFO, descend to 4,000 feet MSL, proceed direct FLEX and comply with FLEX reentry procedures. A pilot may request to break out after reporting low key.

4.22.1.5.3. Controller phraseology; "SNAKE 1 BREAK OUT (reason if applicable) RE-ENTER VIA FLEX (other instructions necessary)."

4.22.2. Straight-in SFO (SI-SFO)/Straight-in PFO (SI-PFO). Pilots will request SI-SFO/SI-PFO approaches from Nellis Approach on initial contact. If holding is required, hold VFR over DRY LAKE, left turns and at an altitude as directed by NATCF/Tower.

4.22.2.1. Pilots phraseology: "NELLIS APPROACH, SNAKE 1, REQUEST STRAIGHT-IN SFO/PFO, 12,000" Controller phraseology, if approved: "SNAKE 1, STRAIGHT-IN SIMULATED/PRECAUTIONARY FLAMEOUT APPROVED, PROCEED DIRECT DRY LAKE (or other routing as necessary)." If disapproved: "SNAKE 1, UNABLE STRAIGHT-IN SIMULATED/PRECAUTIONARY FLAMEOUT (reason, if able), SAY INTENTIONS." If holding is required: "SNAKE 1, HOLD AT DRY LAKE AT (altitude as assigned by ATC), MAINTAIN VFR."

4.22.2.2. NATCF will frequency change to Nellis Tower NLT 15 NM. Pilots will report position and altitude to Nellis Tower on initial contact.

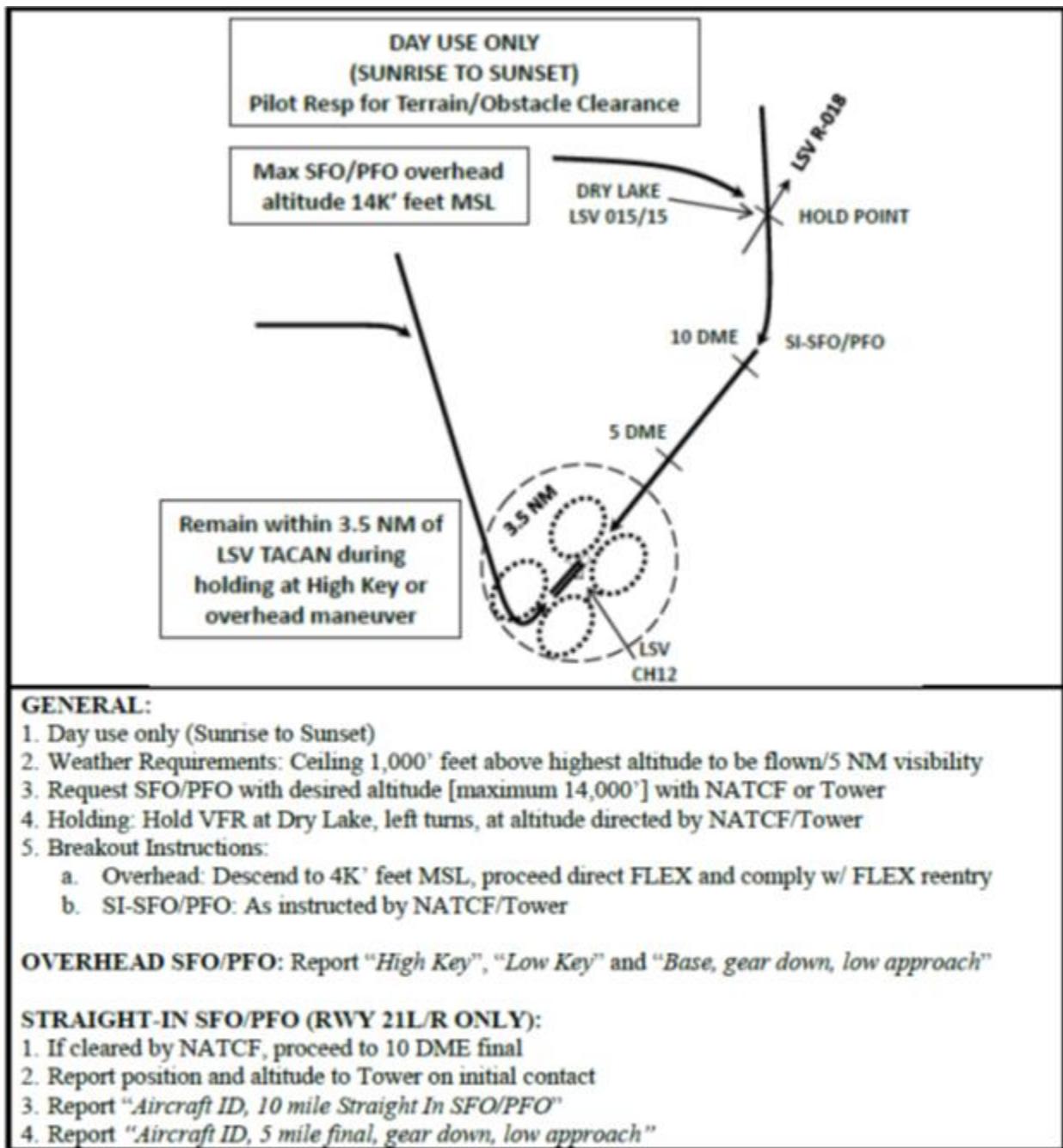
4.22.2.2.1. Pilot phraseology: "NELLIS TOWER, SNAKE 1, (altitude), (miles), STRAIGHT-IN SFO/PFO." Controller phraseology: "SNAKE 1, NELLIS TOWER, REPORT 10 MILES SIMULATED/PRECAUTIONARY FINAL."

4.22.2.2.2. At 10 DME final. Pilot phraseology: "SNAKE 1, 10 MILE STRAIGHT-IN SFO/PFO" Controller phraseology: "SNAKE 1, REPORT 5 MILE SIMULATED/PRECAUTIONARY FINAL"

4.22.2.2.3. At 5 DME final. Pilot phraseology: "SNAKE 1, 5 MILE FINAL, GEAR DOWN, LOW APPROACH." Controller phraseology: "SNAKE 1, RUNWAY 21L/R, WIND (DIRECTION/ SPEED, IF APPLICABLE), CLEARED LOW APPROACH (OR OTHER INSTRUCTIONS AS NECESSARY)."

4.22.2.3. SI-SFOs/SI-PFOs will be flown to RWY 21 only. During single runway operations, traffic permitting, Nellis Tower may approve SI-SFO/SI-PFO either to the sole operating runway or the closed runway. All SI-SFO/SI-PFO to the closed runway must terminate in a restricted low approach at or above 500 feet AGL (or as directed by ATC). Aircraft shall be aligned within five degrees of runway centerline no later than 5 DME final. Alternate entry SI-SFO/SI-PFO are not authorized. There shall be no more than two IFR and six VFR aircraft under Nellis Tower's control during the SI-SFO/SI-PFO. No more than two aircraft may perform SI-SFO/SI-PFO procedures simultaneously (chase aircraft do not count toward the two aircraft limit). The second aircraft will not be cleared inbound from DRY LAKE until the preceding aircraft reports five miles (does not apply to visual formation members).

Figure 4.14. Nellis AFB SFO/PFO Patterns.



4.23. Nellis Assigned Aircraft Operations.

4.23.1. MDS-Specific Guidance. Nellis assigned aircraft will abide by the guidance provided in the specific MDS attachment at the end of this instruction.

4.23.2. Survival Equipment. 57 WG aircrew flying in fighter aircraft equipped with survival kits are not required to wear survival vests during sorties in the local area. Use of survival vests for training or on cross-country sorties will be at the discretion of the unit commander. The decision of whether or not to wear the survival vest should include ORM considerations.

Unit Aircrew Flight Equipment (AFE) shops will ensure a custom fit is accomplished prior to aircrew members flying with a survival vest.

4.24. Fixed Wing Functional Check Flight (FCF) Procedures. The primary FCF areas are the ATCAA/MOA (utilizing the X-Ray extension). Aircrews are encouraged to pre-brief Nellis Control on the profile to be flown. Remain on Nellis Control frequency as long as possible for additional coordination.

4.24.1. Aircrews will file the DREAM Departure stereo route to and from the proposed work area and include FCF profile in the PEX remarks section (F-16 clearance should specify F-16 FCF).

4.25. Systems Checks and Tactical Exercises. Flights are authorized to conduct systems checks and tactical exercises (ranging, weapons system checks, roll slides, etc.) on departure, recovery or in the working area when above 5,000 feet AGL, traffic permitting. Flights must clear their flight paths visually and with radar (if applicable) due to the heavy VFR traffic density in/around Nellis and its departure/arrival corridors.

4.26. Extreme Weather Operations. Nellis AFB location and the surrounding desert environment often cause aircrew to operate under extreme weather conditions to include heat, high winds and lightning.

4.26.1. Hot Weather Operations. The Weather Flight (57 OSS/OSW) is responsible for determining and reporting the Fighter Index of Thermal Stress (FITS). The FITS level is posted on the 57 OSS Weather page and on ATIS. Based on AFI 11-202V3/ACC supplement, guidance and flight surgeon advice, the 57 OG/CC will make the decision to fly or to cancel sorties. General guidance for FITS zones is as follows.

4.26.1.1. FITS Caution.

4.26.1.1.1. Be aware of possible impairment due to heat stress.

4.26.1.1.2. Limit ground period (preflight and ground standby) to 90 minutes or less.

4.26.1.1.3. Minimum of 30 consecutive minutes of inactivity in an air-conditioned environment between flights.

4.26.1.2. FITS Danger.

4.26.1.2.1. Cancel low-level flights (below 3,000 feet AGL) if air-conditioning is inadequate.

4.26.1.2.2. Limit ground period to a maximum of 45 minutes.

4.26.1.2.3. Minimum of 30 consecutive minutes of inactivity in an air-conditioned environment between flights.

4.26.1.3. Cancellation Zone.

4.26.1.3.1. When FITS value is greater than 115, cancel all nonessential flights.

4.26.1.3.2. Cancel all chemical defense training flights.

4.26.1.4. FITS Zones.

4.26.1.4.1. Ground period time starts when aircrews leave the air-conditioned facility and ends with canopy down and environmental systems functioning correctly. In the

aircraft with the environmental system functioning correctly is considered an air-conditioned facility.

4.26.1.4.2. If environmental system is functioning correctly, restrictions to low-level flights and recovery time between flights does not apply to A-10/F-15/F-16/F-22/F-35 aircrews.

4.26.2. High Wind Operations. Nellis often experiences high winds year round. When operating under high winds, use the following guidance.

4.26.2.1. Take-offs for ejection seat aircraft will be suspended when the observed wind, including gusts, at Nellis AFB exceeds 35 knots. Airborne aircraft can continue their mission and land at Nellis AFB if crosswind is within MDS specific limits.

4.26.2.2. When range wind is forecast to exceed 35 knots (steady state), a decision to suspend or continue training operations for ejection seat aircraft will be made by the 57 OG/CC or representative.

4.26.2.3. If range surface wind exceeds 35 knots (steady state) flight leads of ejection seat aircraft will terminate missions on that range. Range wind can be determined by using aircraft systems or Tonopah Test Range Airfield (TNX) surface winds or other range sensors available to weather and operations personnel.

4.26.2.4. When 57 WG units (ejection seat aircraft only) are deployed and training operations will take place over water, operations will be suspended if winds exceeds 25 knots (steady state) or wave heights are ten feet or greater. When these conditions are forecast, by not yet actual conditions, a decision to suspend or continue training operations will be made by the unit commander.

4.26.2.5. The ASR-9 Surveillance Radar Antenna will be allowed to free-wheel when the wind is forecasted to be sustained at 60 knots with the possibility to exceed 85 knots, causing a loss of radar information. Once released by NATCF, NATCF will coordinate with RAWS to allow the antenna to free-wheel IAW applicable technical orders.

4.26.3. Thunderstorms within 10 NM Operations. When Nellis Weather declares “thunderstorms within 10 NM,” the 57 OG/CC or designated representative may authorize approaches or departures. Thunderstorms must not be producing hazardous conditions at either the airport or in the departure/arrival corridors being used. Thunderstorms must not be forecast or observed to be moving in directions that threaten either the airport or departure/arrival corridors.

4.26.4. Lightning Within 5 NM Operations. When Nellis Weather declares “LIGHTNING WITHIN 5 NM,” take the following action.

4.26.4.1. Aircraft in the Chocks. Aircraft at their parking space will be expeditiously shut down, after which ground personnel will take shelter. The decision to remain in the aircraft or seek shelter rests with the pilot in command.

4.26.4.2. Aircraft in the Air. Nellis Tower will make the following radio call on Tower frequencies: “NELLIS AFB IS LIGHTNING WITHIN 5 NM. ALL NELLIS-BASED AIRCREW CONTACT BULLSEYE SOF.” NATCF will make this broadcast on up range guard radios. If time and conditions permit, the SOF and OSS/OSW will inform the 57 OG/CC of weather cell location, direction of movement, forecast conditions and discuss

with the 57 OG the decision to divert or recover aircraft to Nellis. If time and conditions do not permit consulting with the 57 OG/CC, the SOF will make a determination on whether to recover aircraft at Nellis or divert them and inform the 57 OG/CC once time permits. Reference AFMAN 11-202V3 (and ACC supplement) for further guidance.

4.26.4.2.1. No SOF/No SOF in the Tower. In lieu of a SOF in the Tower or no SOF (i.e. reduced flying/weekend cross-country arrivals), the pilot in command is responsible for compliance with AFI 11-202V3_ACCSUP as well as amplifying instructions in **paragraph 4.26.4.2.**

4.26.4.3. Aircraft on the Ground. Aircraft on the ground, prior to arming or post de-arm, taxi back to the chocks. Armed aircraft on the ground will hold in the appropriate arm/de-arm area. Contact the SOF to determine the anticipated length of delay and fuel load of appropriate aircraft. Based on the SOFs information, the production superintendent will determine whether aircraft need to return to chocks and shut down or stay at the appropriate arm/de-arm area until lightning is no longer within 5 NM. Only the minimum personnel required to safely recover/ground aircraft will be used. Any other actions not accomplished during this recovery will be performed after lightning is no longer within 5 NM. The intent is to minimize exposure to ground personnel while minimizing possible damage to aircraft in the event they run out of fuel.

4.26.4.3.1. When aircraft reach emergency fuel, the SOF will coordinate with the MOC for de-arming (in the de-arm area) and shutdown (at the aircraft's assigned parking area) utilizing minimum personnel. Tail hook equipped aircraft will lower the hook before personnel will de-arm the aircraft (ground the aircraft in case of lightning strike). After de-arm, aircraft will taxi to parking. Flights of aircraft in the same parking area will be shut down together to minimize personnel exposure.

4.27. Charted Visual Flight Procedure (CVFP) Approach. Sin City Visual RWY 03L/R approach (DoD FLIP Low Altitude United States Vol-5) is authorized for day and night time operations. Approach is conducted while operating on an IFR flight plan which authorizes an aircraft to proceed visually remaining clear of clouds and terrain to Nellis AFB RWY 03L/R via visual landmarks as depicted on the CVFP FLIP plan view. Sin City Visual approach includes prominent landmarks, inbound course (LSV R-277) and mandatory crossing altitudes.

- 4.27.1. Approach is authorized for local/non-locally assigned aircraft.
- 4.27.2. Approach published within HIGH/LOW Altitude DoD FLIP products.
- 4.27.3. Clark County Shooting Range (CCSR) visible at night only during operating hours.
- 4.27.4. Approach has ceiling/visibility weather requirements (4100'6).
- 4.27.5. Antennas (3144' MSL) located North of HWY 95/Paiute Golf Course visible at night.
- 4.27.6. 250 knots recommended at HASIL.
- 4.27.7. ATC clearance may be issued to intercept LSV R-277 inside of HASIL for sequencing; comply with remaining altitude restriction.
- 4.27.8. Although described on plan view of FLIP as supplementary, inbound course radial (LSV R-277) protects from North Las Vegas Class Delta airspace; remain on radial until 6 DME (ONDAE)

4.27.9. ONDAE altitude restriction (5000' MSL) protects from routine North Las Vegas VFR northbound departures.

4.27.10. The 4 DME ARC from LSV TACAN used to protect from VFR overhead/base turn to final traffic landing RWY 03L/R.

4.27.11. Industrial park on base to final approach not discernable at night.

4.27.12. Nellis Control Tower and Nellis TACAN must be operational.

4.27.13. Aircrew will use the following phraseology to make request: “[NELLIS CONTROL or NELLIS APPROACH], MIG1 REQUEST SIN CITY VISUAL.” To expedite approach clearance, aircrews may specify ground reference is in sight: “[NELLIS CONTROL or NELLIS APPROACH], MIG1 HAS NORTHWEST CITY OUTLINE IN SIGHT, REQUEST SIN CITY VISUAL.”

4.27.14. Nellis ATC will issue the following clearance once aircrew reports initial approach ground reference is in sight: “MIG1, CLEARED SIN CITY APPROACH.”

4.27.15. Nellis ATC may also issue a CVFP approach clearance when an aircraft reports a preceding aircraft landing RWY 03 in sight and has subsequently been cleared for a CVFP: “MIG1, MAINTAIN VISUAL SEPARATION, CLEARED SIN CITY APPROACH.”

4.27.16. Aircrews may request/ATC may initiate use of the approach for initial pattern entry. Aircrews shall comply with inbound radial, altitudes and ground track until at initial/pattern altitude.

4.27.17. Aircrews should advise ATC if at any point they are unable to continue an approach or lose sight of a preceding aircraft.

4.27.18. CVFP approaches are not instrument approaches or have published missed approach segments. Missed approaches are handled as a go around. Aircrews are responsible for preplanning climb-out options based on aircraft performance and terrain features.

4.28. Breakout Procedures. ATC will issue breakout instructions to protect from high terrain IAW local guidance contained within ATC/AMOPS Coordination operations letter.

4.29. Unmanned Aerial System (UAS) & Remotely Piloted Aircraft (RPA) Operations.

4.29.1. Small Unmanned Aerial System (sUAS) Operations (sUAS Category—Groups 1-3). The Airspace Management office (57 OSS/OSOP) is the Point of Contact (POC) for sUAS (Drone) operations on or near Nellis AFB and Nevada Test & Training Range (NTTR) assigned airspace. Entities that desire to operate any sUAS on or near Nellis AFB must contact 57 OSS/OSOP, via email, 57OSS.OSOP.OSOP@us.af.mil or phone, 702-652-3309/7688/7891 NLT three (3) duty days prior to the proposed operation.

4.29.1.1. General. Requests for sUAS operations shall include site-specific procedures/supporting data, emergency procedures to terminate sUAS mission/recall airspace, landing location and altitude caps/limitations. In addition, provide the following minimum information:

4.29.1.1.1. Schedule of flight (date, time and duration).

4.29.1.1.2. Location where flight will occur (map with coordinates and radius) to include sUAS start area (start area may be designated by OSOP so as to minimize impact to flying operations).

4.29.1.1.3. Requested altitude.

4.29.1.1.4. Communication details (e.g. cell phone contact number).

4.29.1.2. Approval for sUAS flights is completely dependent upon mission impact.

4.29.1.3. 57 OSS/OSOP will coordinate approved sUAS/RPA operations with 57 OSS/OSA as required to ensure timely ATC training/familiarization. Note: DoD UAS/RPA Categories are defined in AFMAN 11-502.

4.29.1.4. A sub-working sUAS group will be held following each quarterly AOB. The sUAS working group will review sUAS policies and processes for the installation and will be comprised of 57 OSS, 99 SFS and 99 ABW/CP personnel.

4.29.2. RPA Operations. ATC provides air traffic services as needed to RPA operations within the NTTR & NATCF delegated airspace IAW appropriate UAS DoD/DoT guidance and specific Letters of Agreement (LOA), Certificates of Authorizations (COA) and Airspace Access Authorizations (AAA). NOTAM requirements are as directed by each COA. RPA LOA/COAs can be found in the 57 OSS/OSA publication library; documents are reviewed for currency IAW AFMAN 13-204.

4.30. Aircraft Flyover Requests. 57 OSS/OSOP (Airspace Management) is the Nellis AFB Point of Contact (POC) for coordinating all aircraft flyover requests involving Nellis AFB assigned aircraft. Units tasked to perform aircraft flyovers should contact 57 OSS/OSOP as early as possible but NLT one week prior to the event at 57OSS.OSOP.OSOP@us.af.mil or 652-3309/7688/7891.

4.30.1. Provide the following minimum information:

4.30.1.1. Flight specifics (i.e. date, departure time, call-sign, number of aircraft).

4.30.1.2. Departure intentions.

4.30.1.3. Requested holding location(s) and altitude(s).

4.30.1.4. Run-in profile route [i.e. heading/direction, ramp down altitudes, Time-over-Target (TOT), etc.]

4.30.1.5. Escape/follow-on intentions and any unique requests (i.e. missing man formation; left/right turn-out direct FLEX, etc.).

4.30.1.6. Communication requirements (e.g. need for discrete frequencies).

4.30.1.7. Unit POC phone number.

4.30.2. 57 OSS/OSOP will coordinate with the AOF/CC, brief the fly-over lead on approval/mitigations/amendments and CFRs governing the operation. 57 OSS/ OSOP will also coordinate the activity with FAA/FSDO (Flight Services District Office).

4.31. Airport Surveillance Approaches (ASR)/Precision Approach Radar Approach (PAR) Approaches and Monitoring Services. ASR/PAR approaches and associated radar monitoring are not available at Nellis AFB.

Chapter 5

WEAPONS EMPLOYMENT AND RANGE USE

5.1. General.

5.1.1. Range procedures are outlined in AFMAN 13-212V1, ACC Sup, NTTR Addendum A. Consult the NTTR web site at <https://wwwmil.nellis.af.mil/units/range/targets/> for target information.

5.1.2. **Table 5.2** provides a decision matrix aid for Nellis departures but is not inclusive of all guidance contained below.

5.2. Ordnance Departure Procedures. There are no departure restrictions for practice ordnance, hot guns, or internally carried inert/live ordnance when the bomb bay doors are closed for multi-engine aircraft or for captive-carry TGBU-15s/TAGM-130s, TGM-65s or TGM-88s. Aircraft carrying heavyweight inert/live ordnance externally (or internally for single engine aircraft) or FFO must depart RWY 03.

5.2.1. If winds or other special circumstances dictate aircraft configured with heavyweight inert ordnance must depart RWY 21, comply with paragraphs **5.2.2** through **5.2.2.3.5** before contacting Bullseye SOF to request approval from the 57 OG/CC (or his designated representative). Bullseye SOF does not have approval authority. Note 1: Nellis AFB assigned A-10 aircraft configured with live rockets (white phosphorus/Illum only, no HE) or Nellis based F-15E, PW-229 power aircraft carrying inert ordnance (no live munitions) do not require 57 OG/CC approval for RWY 21 departures. Note 2: If observed winds are expected to drive the need for RWY 21L/R departures for Nellis based F-15 aircraft, unit TOP-3s will brief aircrew on risk mitigation measures and highlight T.O. 1F-15E-1 single engine takeoff emergency procedures in the rare event of losing an engine on takeoff.

5.2.1.1. Externally carried live munitions and live forward-firing ordnance (with the exception of 2.75 inch rockets) are not allowed to depart on RWY 21 under any conditions.

5.2.2. The following decision tree lists considerations and restrictions regarding RWY 21 departures with externally carried heavyweight inert ordnance and will be used by all aircrew, flying unit leadership, SOFs and 57 OG designated representatives (“OG brick-holders”) to mitigate risk when requesting/granting RWY 21 heavyweight inert departures:

5.2.2.1. Only Nellis-based aircraft can be approved for RWY 21 heavyweight inert departures (no RED FLAG, GREEN FLAG-West or Weapons School support TDY units).

5.2.2.2. Single-engine aircraft with heavyweight inert internally or externally carried ordnance are not allowed to depart on RWY 21 under any conditions.

5.2.2.3. For multi-engine aircraft, the following conditions apply:

5.2.2.3.1. Can the heavyweight inert mission be delayed to later in the day or another day when conditions are favorable or cancelled altogether? If yes, then slip the mission instead of requesting a waiver.

5.2.2.3.2. If the mission is critical enough that it can't be rescheduled or cancelled, can risk be reduced by adjusting gross weight to make a RWY 03 departure possible with

non-category I/II TOLD (through the use of reduced fuel loads and/or reduced bomb loads)? If so, gross weight will be reduced instead of requesting a waiver.

5.2.2.3.3. Reduced bomb loads will still be considered even when a RWY 21 departure is required regardless of a weight reduction in order to reduce overall risk consistent with acceptable mission accomplishment.

5.2.2.3.4. 57 OG waiver requests for high gross weight F-15Es and A-10Cs will not be allowed if loss of an engine on takeoff would require the pilot to jettison heavyweight ordnance to achieve safe climb capability.

5.2.2.3.5. If a 57 OG waiver has been granted for a heavyweight inert departure on RWY 21, aircrew will continue to accomplish due diligence to reduce risk. If conditions allow, or are close to allowing a RWY 03 departure, arm at the south end of the airfield and evaluate the feasibility of a RWY 03 departure real-time. If not possible, taxi to and takeoff RWY 21.

5.3. Ordnance Employment Procedures. The Master Arm switch must be in the SAFE/SIM position when not on range or in the MOA of intended employment. Exceptions: F-15Es may perform simulated A/A attacks with Master Arm-ARMED, if all A/G combat stations are deselected. A10s may conduct simulated air-to-surface weapons employment IAW AIF 11-2A-10CV3. F-16 and F-15E may perform full switchology TGM-65 and TGBU-15/TAGM-130 off range provided no expendable stores are loaded. Additionally, AC-130s may perform full switchology for on-range or off-range dry attacks with the 40mm and 105mm guns, to include arming the Master Arm, provided these guns are not loaded.

5.3.1. While carrying weapons, bombers will not conduct simulated bomb or missile runs, unusual maneuvers, approach to stall, touch-and-go landings or other potentially hazardous activity. Carrying weapons does not preclude accomplishing fighter intercept exercises, air refueling, transition work excluding touch-and-go landings or Have Nap missile training using a captive air training missile.

5.3.2. All targets/coordinates must be positively identified/verified prior to weapons release. Aircraft may release above weather decks IAW AFI 11-2MDS series and following guidance below. In the absence of guidance, the following limitations will apply:

5.3.2.1. Visual Acquisition: The target is identified with the naked eye, electro-optically or with an IR sensor.

5.3.2.2. Radar Acquisition: The target or offsets must be identified with the aircraft's radar.

5.3.2.3. Inertially Aided Munitions (AIM)/Global Positioning System (GPS) Weapons. The target coordinates entered into the weapon will be verified on final prior to release according to MDS procedures.

5.3.3. Flight leads will contact Blackjack and report all ordnance released and targets used during recovery or after landing via landline. If no changes, pass "as fragged." If unable to contact Blackjack prior to recovery, call after landing. This is not applicable for RED FLAG, USAFWS WSINT and LFEs.

5.4. Unexpended Ordnance Recovery. There are no restrictions for aircraft with unexpended training/FFO, self-protection flares, captive missiles or internally carried munitions when bomb bay doors are closed. An East Break or straight-in is preferred for unexpended training ordnance.

5.4.1. Aircraft configured with external heavyweight inert ordnance will fly a straight-in approach to the active runway.

5.4.2. Aircraft configured with external live ordnance will fly a straight-in approach to RWY 21. If RWY 21 is not available, fly a straight-in approach to RWY 03.

5.5. Nellis Hung Ordnance Recovery. The following procedures apply to all recoveries with hung secure or hung unsecure ordnance:

5.5.1. Safe all armament switches and fly a straight-in approach, with chase if available, avoiding populated areas to the maximum extent possible.

5.5.2. Refer to Hung Ordnance Procedures, **Table 5.1**, for IFE, recovery base, runway and other information.

5.5.3. Contact Bullseye SOF with status and game plan; declare IFE if required.

5.5.4. Aircrew will confirm proper release of any ordnance that was attempted to be released. If aircrew cannot positively confirm weapons expenditures, aircrew will perform a straight-in to RWY 21 to the max extent possible, avoiding overflight of populated areas. If ordnance release was not attempted in flight, the ordnance will be considered unexpended.

Table 5.1. Nellis Unexpended and Hung Ordnance Procedures.

AIRCRAFT WITH EXTERNAL WEAPONS				
ORDNANCE	IFE	LAND	TAXI TO	NOTES
UNEXPENDED				
Training/FFO	No	Active	Dearm Pad	East Break
Inert	No	Active	Dearm Pad	1
Live	No	RWY 21	Dearm Pad	2
UNCONFIRMED EXPENDITURE				
Training/Inert/Live	No	RWY 21	Dearm Pad	2
HUNG SECURE				
Training	No	RWY 21	Dearm Pad	2, 4
Inert	No	RWY 21	Dearm Pad	2, 4
2.75" Rockets	No	RWY 21	Revet 1 or 2	2, 4, 7
Other FFO	Yes	RWY 21	Revet 1 or 2	2, 4, 7
Live	Yes	RWY 21	Revet 1 or 2	3, 4, 7
AGM-130	Yes	RWY 21	Revet 1 or 2	2, 4, 7, 12
EGBU-15	No	RWY 21	Dearm Pad	12
HUNG UNSECURE				
Training	Yes	Creech AFB	Dearm Pad	5
Heavy Weight Inert	Yes	Creech AFB	Dearm Pad	6
2.75" Rockets and Other FFO	Yes	Creech AFB	Dearm Pad	6
Live	Yes	Creech AFB	Dearm Pad	6
UNSAFE GUN	Yes	RWY 21	Revet 1 or 2	7, 11

HUNG SELF-PROTECT FLARES	Yes	RWY 21	Revet 1 or 2	2, 10
HUNG LUU FLARES	Yes	RWY 21	Revet 1 or 2	2, 8, 10
AIRCRAFT WITH INTERNAL WEAPONS (BOMB BAYS)				
ORDNANCE	IFE	LAND	TAXI TO	NOTES
UNEXPENDED WEAPONS	No	Active	Dearm Pad	No restrictions, 9
HUNG WEAPONS	Yes	Active	Dearm Pad	1, 9
HUNG/MISFIRED FLARES	Yes	RWY 21	Revet 1 or 2	2, 8, 10
Notes:				
<p>1. Straight-in to the active runway. Avoid overflight of populated areas to the maximum extent possible.</p> <p>2. Straight-in to RWY 21 (RWY 21L is the preferred landing runway). If RWY 21 is not available, fly straight -in to RWY 03, avoiding populated areas (RWY 03R is the preferred landing runway).</p> <p>3. Straight-in to RWY 21 (RWY 21L is the preferred landing runway). If RWY 21 is not available, divert to Creech AFB. If Creech AFB is not available, attempt to jettison ordnance or suspension equipment if applicable. Fly straight-in to RWY 03, avoiding populated areas.</p> <p>4. Secure ordnance is defined as: ordnance parallel to the station and/or suspension equipment and clearly positioned against the sway braces. Rockets are considered secure if no portion of the rocket extends from the pod. Ordnance will be assumed unsecure anytime a battle damage check cannot be performed.</p> <p>5. Jettison ordnance. If unable, declare IFE and recover to Creech AFB. Avoid populated areas.</p> <p>6. Jettison ordnance. If unable, jettison suspension equipment if applicable. If unable, declare IFE and recover to Creech AFB. If able to jettison ordnance with/without suspension equipment, normal recovery applies.</p> <p>7. Avoid pointing nose at populated areas. If munitions can be properly safed and/or FFO safed/chamber cleared, aircraft can taxi to normal parking area. Otherwise shut the aircraft down in the revetments.</p> <p>8. An attempt to expend a flare from a SUU-25 not resulting in an ignited flare is a hung flare, unless the pilot sees the flare depart the SUU. If flare remains and no indication of flare expenditure is noted by EOR, taxi back after the SUU is safed. If hung flare confirmed, shut down in revetment 1 or 2.</p> <p>9. Assumes internally loaded and bomb-bay doors closed. If externally loaded or bomb-bay doors open, refer to "Aircraft with External Weapons" matrix.</p> <p>10. EOD will meet aircraft at revetments and attempt to safe the flare after engine shutdown. Fir Chief will determine if further actions are necessary.</p>				

- 11.** AC-130/HH-60/CV-22. Terminate live fire and safe all guns. Contact Blackjack, inform them you have an unsafe gun and declare an emergency. Contact Bullseye SOF and relay intentions (remind SOF you are a side-firing weapon). Return to Nellis (VFR if able) and avoid bringing the guns to bear on populated areas. Request straight-in to RWY 21L (HH-60s may request a straight-in to Taxiway Golf and land abeam revetment #1) and exit at Taxiway Bravo. Make a left turn at Taxiway Bravo and then make a right turn onto Taxiway Golf. Continue to taxi to last revetment (revetment #1) and stop with the gun pointing between the revetment walls towards the berm (east). Shutdown engines (except HH-60) and EOD will secure the hot gun.
- 12.** A hung inert EGBU-15, although not an IFE, will be a ground emergency. Coordinate with SOF to ensure a ground emergency is declared. If cockpit indications show the control section battery of an AGM-130 or EGBU-15 may have been activated (i.e. PCO), a ground emergency must be declared. Toxic dust and intense heat may endanger ground personnel.

5.6. Jettison Procedures. Inert or live ordnance hung unsecure must be jettisoned. (Secure ordnance is defined in **Table 5.1**, Note 4). If ordnance cannot be jettisoned, attempt to jettison rack, if applicable. If unable to jettison ordnance (training, inert or live), 2.75" rockets or other FFO hung unsecure, recover to Creech AFB.

5.6.1. Inert ordnance, training ordnance and non-ordnance stores may be jettisoned at the pilot's discretion on any approved range or target provided clearance from Blackjack has been received.

5.6.2. Live ordnance will be jettisoned live on scheduled targets if possible. Minimum altitude will be 2,000 feet AGL or the minimum frag clearance altitude, whichever is higher. If jettison cannot be made on scheduled targets, contact Blackjack for a target. If unable, inform Nellis Control and expect to use Jettison Hill.

5.6.3. Jettison Hill. Jettison Hill may be used to jettison any ordnance or store in an emergency. Use a minimum altitude of 2,000 feet AGL or the minimum frag clearance altitude, whichever is higher, and a maximum altitude of 8,000 feet MSL on a 352 heading. Ordnance will be jettisoned in a safe condition with the base of the hill as an aim point. The pilot is the clearing authority for jettison on Jettison Hill. Coordinates for Jettison Hill are N36-19.88, W115-01.17, elevation 3,000 feet MSL (LSV 351/5.2). Note: Pilots will query Nellis Tower to confirm no helicopters are operating in Winner LZ (N36-20.33 W115-00.25) and visually confirm the area is clear prior to jettisoning any ordnance or stores.

5.6.4. Night or IFR Jettison. At night or IMC conditions crews will use all available means to ensure ordnance or store impacts the desired area. If weather precludes jettison of ordnance, NATCF will provide radar vectors to Range 62 Alpha, target 62-2 (airfield) or Jettison Hill. Target 62-2 is located N36-55.015, W115-25.887 with elevation 3,463 feet MSL. The minimum vectoring altitude (MVA) for Range 62 Alpha is 10,400 feet MSL and the MVA for Jettison Hill is 7,000 feet MSL. The controlling agency will inform the crew when 1 NM short of designated impact point. Heading and altitude restrictions will be followed to the maximum extent possible. In all cases the crew is ultimately responsible for proper impact location of jettisoned ordnance or stores.

Table 5.2. Ordnance Departure Procedures.

Depart RWY 03L/R	Allowed to Request 21	Aircrew Decision Tree to Request 21	
Aircraft must depart RWY 03L/R if meeting any of the below criteria: <ul style="list-style-type: none"> • External live/inert heavyweight ordnance (not including TGBU-15s / TAGM-130s / TGM-65s / TGM-88s) • Internal inert/live ordnance when the bomb bay doors are not closed • Forward firing ordnance 	Aircraft must meet all of the below to request a 21 departure: <ul style="list-style-type: none"> • Nellis homebased multiengine aircraft (not TDY to Nellis) • External munitions are inert or are 2.75" white phosphorous / illum rockets • Cannot depart 03 due to winds or other special circumstances • Has the capability to retain ordnance and continue the departure with a safe climb gradient with the loss of an engine. <p>*White phosphorous / illum rockets do not require OG approval to depart 21</p>	Can heavyweight mission be delayed when conditions are more favorable?	
		Yes	Slip mission
		No	Can risk be reduced by adjusting gross weight/allow RWY 03L/R dep w/ non-CAT I/II TOLD (through the use of reduced fuel loads and/or reduced bomb loads)?
		Yes	Reduce weight and do not request a waiver
		No	Consider reducing bomb loads regardless of weight reduction in order to reduce overall risk consistent w/ acceptable mission accomplishment—request a waiver
		If OG/CC waiver approval is granted, continue to accomplish due diligence to reduce risk and if conditions are close to allow a RWY 03L/R departure, arm at the south end/evaluate the feasibility of a RWY 03L/R departure real-time; if not possible, taxi to/takeoff RWY 21L/R	

Chapter 6

EMERGENCY PROCEDURES

6.1. General. The following procedures ensure the recovery of emergency aircraft is safe and effective. No directive can address all possible circumstances; therefore, situations not covered must be handled IAW flight manual procedures, SOF assistance and common sense. Aircraft emergencies can occur either in flight or on the ground. On and off base emergency response procedures will be IAW Nellis AFB Plan 10-2, Installation Emergency Management Plan.

6.2. Policy. Situations affecting safety of flight, air worthiness or necessitate other than normal handling require declaration of an emergency and termination of the mission. Emergencies may be declared by the aircrew, air traffic controllers, SOF or officials responsible for the operation of the aircraft.

6.3. Notification. Nellis Tower and AMOPS check the Primary Crash Alarm System (PCAS) and Secondary Crash Net (SCN) daily between 0730 to 0800 local. See [Attachment 17](#) for PCAS and SCN procedures.

6.4. Response. As directed by Nellis Tower in coordination with the Incident Commander, crash recovery, fire fighting vehicles, airfield management and flight safety vehicles will be parked on a taxiway at the approach end of emergency landing runway. All other emergency vehicles will be parked on the side of Taxiway Bravo, west of RWY 03L/21R.

6.5. Responsibilities.

6.5.1. The Incident Commander (IC). The Nellis Fire Chief, 99 CES/CEF, or his designated official is the IC for all aircraft GEs. In the event of a significant emergency where the Crisis Action Team (CAT) and/or Emergency Operations Center (EOC) are activated, e.g., IFE aircraft crashes on runway while attempting to land, unit leadership or their designated representative(s) assumes their position in the CAT and/or EOC. IAW AFIMS Standards & Procedures, the IC is the authority who can declare an emergency scene safe and terminates an emergency.

6.5.2. Senior Fire Officer. The on-scene Senior Fire Officer is ordinarily the IC, in command of aircrew rescue and/or IFE/GE aircraft recovery operations.

6.5.2.1. The on-scene Senior Fire Officer will normally be the IC until either emergency termination, relieved by or transfers incident command to a higher ranking Senior Fire Officer, or transfers command of a safed-scene to the Recovery Operations Chief (ROC) or Interim Safety Board (ISB) president.

6.5.2.2. Nellis Tower will release the appropriate UHF frequency to the senior fire officer when communications between ATC and the aircrew are no longer required.

6.5.3. The Airfield Manager or designated representative will respond to all in flight emergencies unless the SOF has waived the FOD sweep. AMOPS will respond to ground emergencies at the discretion of the Airfield Manager or the designated representative.

6.5.3.1. After the aircraft has cleared the runway, the Airfield Manager or designated representative will suspend runway operations. Unless waived by the SOF, AMOPS will conduct a runway check to ensure there is no FOD or damage to the runway.

6.5.3.2. Runway suspension operations include, but are not limited, to the following:

6.5.3.2.1. Emergency aircraft lands, aircraft mishap, aircraft is disabled on the runway or barrier engagements.

6.5.3.2.2. Runway conditions are unsafe.

6.5.3.2.3. Gate runner incidents. Note: Under special circumstances, the SOF may direct immediate opening of the runway for subsequent emergency recoveries. If the SOF directs opening of the runway he/she shall assume responsibility for the safety of the runway until AMOPS completes the required FOD check. All actions will be annotated in the AMOPS and Tower events log.

6.6. Hot Brake Procedures. Nellis Tower, upon notification or suspecting that an aircraft has hot brakes, will activate the PCAS. Tower will direct the aircraft to a designated hot brake area (**Figure 2.1**) and the aircrew should turn the aircraft into the wind to the maximum extent possible. The senior fire officer will determine if hot brakes exist and if so the aircraft will be shut down.

6.7. Emergency Single Frequency Approach Procedures. The primary discrete emergency frequency for Nellis AFB is 343.725 (Channel 10).

6.7.1. NATCF will assign 343.725 (Channel 10) or a UHF/VHF discrete frequency to radio equipped emergency aircraft as soon as practical unless otherwise requested by aircrew.

6.7.2. NATCF will provide emergency information to the tower, as soon as practical.

6.7.3. Tower will relinquish control of Channel 10 or UHF/VHF discrete frequency, to the senior fire officer IAW **paragraph 6.5.2.2**. If cable engagement occurs, tower will relinquish control of Channel 10 or UHF/VHF discrete frequency to senior fire officer or designated representative once IFE aircraft engages the barrier and comes to a complete stop. If an aircraft does not engage the cable and intends to shut down on the runway, tower will relinquish control of Channel 10 or UHF/VHF discrete frequency to the senior fire officer once the aircraft comes to a complete stop.

6.7.4. When an aircraft declares a ground emergency or emergency aborts on takeoff and the Incident Commander (IC) or designated representative requests use of Channel 10 or UHF/VHF discrete frequency, tower will coordinate with NATCF, then relinquish Channel 10 as soon as possible. If the emergency ground aborts on takeoff and remains on the runway, tower will coordinate with NATCF then relinquish control of Channel 10 or UHF/VHF discrete frequency to the IC.

6.7.5. Once the IFE aircraft establishes contact with GC, GC will ask pilot intentions. GC will ensure aircraft comes to a complete stop prior to relinquishing control of Channel 10 or UHF/VHF discrete frequency to the IC. Once the aircraft comes to a complete stop use the phraseology below:

6.7.5.1. “CHIEF 2/BATT 20 (AS APPLICABLE), NELLIS GROUND, CHANNEL 10 (OR UHF/VHF DISCRETE FREQUENCY) IS YOUR CONTROL, ADVISE TERMINATION.”

6.7.5.2. Once the emergency is terminated, the senior fire officer shall relinquish control of Channel 10 or UHF/VHF discrete frequency back to Nellis Tower on Channel 10 or UHF/VHF discrete frequency, “NELLIS GROUND, CHIEF 2/BATT 20 (AS

APPLICABLE), TERMINATE EMERGENCY ON (AIRCRAFT CALL SIGN), CHANNEL 10 (OR UHF/VHF DISCRETE FREQUENCY) IS YOUR CONTROL.” The Tower Watch Supervisor will be responsible for ensuring the frequency is released to NATCF upon emergency termination.

6.7.6. Nellis ATC may take control of Channel 10 or UHF/VHF discrete frequency from the IC at any time another aircraft declares an IFE on the emergency frequency. IC will revert back to relaying through the GC on the Crash Net. Once the additional IFE aircraft lands, GC shall give the IC control of Channel 10 or UHF/VHF discrete frequency and follow the guidelines written above.

6.8. No Radio/Radio Out (NORDO) Procedures.

6.8.1. Single-SHIP.

6.8.1.1. Departure. Complete the departure procedure as published, squawk in accordance with the Airman’s Information Manual or squawk 7600 and transition to assigned range/area.

6.8.1.2. VFR Recovery. Continue squawking in accordance with the Flight Information Handbook (FIH) and fly the recovery to STRYK, ARCOE or MINTT per the flight clearance. If no other problems exist, execute the recovery to a visual entry point (APEX or CRAIG) to enter the overhead pattern for 21R/03L. Rock wings on initial, break at midfield and look for a light gun signal from Nellis Tower.

6.8.1.3. IFR Recovery. Comply with the NORDO procedures contained in FIH. Fly to the appropriate IAF and execute an instrument approach to 21L/03R. If at any point prior to initial the recovery can be flown in VMC, proceed to the overhead pattern as in **paragraph 6.8.1.2.**

6.8.2. Formation flights.

6.8.2.1. VFR Recovery. Same as **paragraph 6.8.1.2.**

6.8.2.2. IFR Recovery. Aircraft in formation that experience NORDO will be led back to Nellis AFB for a straight in, full stop landing. NORDO aircraft will be dropped off on final once landing clearance has been received from Tower. The HI-ILS or LOC/DME Z RWY 21L is the standard approach and landing runway for all NORDO flights. ATC will inform the lead pilot of a NORDO formation if RWY 21L is unavailable and give the expected delay to the runway. The pilot can elect to enter published holding and wait for RWY 21L or execute a HI-ILS or LOC/DME Z RWY 21L or HI-TACAN Z RWY 21L approach side-step to land on RWY 21R. Expect a light gun signal from Nellis Tower. Note: Aircraft executing “side-step to land” from RWY 21L to RWY 21R will execute a side-step maneuver and will descend no lower than published side-step minimums without having the runway in sight.

6.8.3. Compound Emergencies. Compound emergencies and NORDO aircraft with or without unexpended inert training ordnance will squawk 7700 and fly the VFR or IFR recovery as appropriate to a straight in landing on 21L/03R.

6.8.4. NORDO with Hung Live Ordnance or any Hung Unsecure Ordnance will squawk 7700 continuously and comply with procedures outlined in **Chapter 5**. The approach and landing must be made to RWY 21 (RWY 08 Creech AFB) if ordnance has not been jettisoned. Tower

will use light gun procedures for any NORDO recovery including flights. If at all possible, the standard IFR approach and runway for all NORDO single-ship or formation flights will be ILS/DME RWY 21L.

6.8.5. Local helicopter NORDO procedures shall be IAW [Attachment 7](#) (A7.15).

6.9. Arresting System Engagement Procedures. Refer to [paragraph 2.2.1](#) for Nellis normal barrier configurations for day-to-day operations. If time is critical for the emergency aircraft (less than 20 minutes to engagement) Nellis Tower/SOF will issue a warning to the emergency aircraft stating that the approach end overrun barrier located approximately 40 feet into the approach end overrun is still connected. Note: In the event that one cable is removed/lowered to meet specific aircraft requirements, Nellis will not be considered Single Runway Ops. The SOF will inform airborne flights of the current cable configuration and allow the pilot in command to determine what runway he/she must land on.

6.9.1. Post Barrier Engagement Procedures. To ensure rapid reopening of the runway after an arresting system engagement, follow these procedures:

6.9.1.1. To preclude damage to personnel and equipment, all aircrew actions (up to the point of being cleared to taxi) will be as directed by the ground IC or pointman via hand signals as shown in AFMAN 11-218, Aircraft Operation and Movement on the Ground, or via UHF radio.

6.9.1.2. If a cable disengagement cannot be accomplished or the aircraft is unable to taxi clear of the runway safely, the aircraft will be shut down on a signal from the IC or pointman. The recovery team will tow the aircraft clear of the runway.

6.9.1.3. If feasible, the aircrew will stay in the cockpit during the towing operation to facilitate expeditious runway reopening.

6.9.1.4. The pilot will provide estimated aircraft gross weight and speed at time of cable engagement to the SOF and IC (99 CES/CEF; Fire Chief at Nellis AFB) prior to leaving the scene.

6.9.1.5. Successive cable engagements can be accomplished approximately 30 minutes after disengagement of the preceding aircraft.

6.9.2. Day-to-Day Coordination Procedures for Arresting Systems. AMOPS and barrier maintenance will check aircraft arresting system and ensure cables are tied down at the rubber mounts, tension is not loose, no damage to the cables/donuts and BAK-14 support blocks are not missing/misaligned during a runway inspection. Report any outages or abnormal indications to Nellis Tower and barrier maintenance. Pilots will taxi 25 knots or slower over raised cables and to the side of the runway to the max extent possible. Reference AFMAN 13-204V2 and TO 35E8-2-8-1, for further guidance.

6.9.2.1. Barrier Maintenance will provide AMOPS the status and results of daily arresting system inspections/maintenance. Provide the Airfield Manager a copy of the annual certification/actual engagement report. When notified by CE that the effective pendant height has fallen to less than 60 millimeters (2 inches), AMOPS will issue a NOTAM to inform pilots of the reduced arresting system reliability

6.10. Dropped Object, Inadvertent Release and Unintentional Release Procedures. Follow the procedures outlined in AFI AFMAN 13-212V1, ACC Sup, NTTR Addendum A. In all situations, the 99 ABW/CP will pass all information to 57 WG/SEF.

6.11. Airborne Incident Reporting.

6.11.1. Give airborne reports to the controlling ATC facility or Blackjack, as appropriate. Airborne incidents include:

6.11.1.1. Any known inadvertent release or loss of stores, suspension equipment, panels or drag chute in flight.

6.11.1.2. Any near mid-air collision.

6.11.1.3. Any incident or near accident when immediate dissemination of details would contribute to increased safety and efficiency.

6.11.2. After landing, aircrews must immediately provide details of the incident to their squadron commander, operations officer and squadron flying safety officer.

6.12. F-16 Hydrazine Procedures. For any ground or in flight EPU activation or suspected hydrazine leak, the pilot will accomplish applicable checklists and follow procedures in the 57 WG IFG and F-16 Supplement. Tower shall instruct all aircraft in the vicinity of the EPU aircraft to utilize 100% oxygen.

6.13. Controlled Bailout and Fuel Dump Procedures.

6.13.1. Controlled Bailout. The primary controlled bailout area is over Range 63 Bravo (LSV 315/28). Should it become necessary to use this area, proceed to N36 38 W115 20 (LSV 315/28) in Range 63 Bravo, turn to a heading of 360° and eject or bailout no lower than MDS controlled or uncontrolled minimums. If IMC proceed from LSV to the bailout area no lower than 11,500 MSL and eject or bailout; expect vectors from NATCF if required.

6.13.2. Fuel Dump Procedures. Fuel dump location and altitude is at the discretion of the aircrew with prior coordination with the appropriate ATC facility to provide required separation.

6.13.2.1. Federal and State laws/regulations require reporting of releases of fuel (any quantity greater than 25 gallons or 200 pounds to soil or other surfaces of land) to the appropriate regulatory agency.

6.13.2.2. This criteria will be used to determine when a fuel dump from an airborne aircraft must be reported. Additionally, any quantity released to water must be reported.

6.13.2.3. The appropriate organization will provide relevant fuel dump information to the Command Post. Relevant information will, at a minimum, include, but not be limited to, the cause of the release, date, time, specific point(s)-of-contact, specific organization(s) responsible for the release, type and quantity of fuel released, a description of any remedial action taken.

6.13.2.4. The Command Post will contact the 99 CES/CEIE (Environmental) spill reporting phone by calling (702) 277-1977.

6.13.2.5. 99 CES/CEIE may provide a form to be used to document release information, or may take information verbally, depending upon circumstances.

6.13.2.6. 99 CES/CEIE will submit spill information to the Nevada Division of Environmental Protection (NDEP).

6.13.2.7. 99 CES/CEIE may request additional details about the release.

6.13.2.8. 99 CES/CEIE will report the release to the NDEP no later than the end of the first duty day after the release. If new information becomes available after reporting to the NDEP, the organization with the information will provide the information to the Command Post, and the Command Post will notify 99 CES/CEIE, who will provide a revised report to NDEP.

6.14. Downed Aircraft and Search and Rescue (SAR) Procedures. Use the following procedures when providing RESCAP for a downed aircrew:

6.14.1. Broadcast an emergency distress call on Guard. Then, provide the following information to Nellis Control, Blackjack, 99 ABW/CP or the SOF:

6.14.1.1. Location of the crash site (TACAN Radial/DME, INS coordinates, Military Grid Reference System (MGRS) coordinates (if available), geographic references).

6.14.1.2. Call sign of downed aircraft.

6.14.1.3. Other pertinent information.

6.14.2. Blackjack will become the Rescue Coordination Center for all SAR inside NTTR for DoD assets. Nellis Control will provide all air traffic control services.

6.14.3. The On-Scene Commander (OSC) will remain in charge of the situation until relieved by another aircraft or reaching Bingo fuel. Have all nonessential aircraft RTB. A high combat air patrol may be used to provide a radio relay.

6.14.4. Contact the downed aircrew on Guard and then coordinate a frequency change to 282.8.

6.14.5. Non-DoD downed aircraft outside the NTTR and under the control of the NATCF.

6.14.5.1. ATC will use all available resources (i.e., SAR, airborne aircraft, civil air patrol, etc.) to assist emergency response assets plot and locate the downed aircraft.

6.14.5.2. To the maximum extent possible, use georeferenced coordinates (i.e., LAT/LON) or positional reference to fixed locations (i.e., airports, NAVAIDS, etc.) when relaying plotting information to first responders.

6.15. Response to Emergency Locator Transmitter (ELT) Signals.

6.15.1. Aircrews will inform appropriate air traffic control agencies upon detection of an emergency signal and assist in locating the source if possible.

6.15.2. Nellis Tower will:

6.15.2.1. Upon detection or notification of a signal, contact NATCF to determine if a possible emergency exists and if assistance is required.

6.15.2.2. Advise 99 ABW/CP of the time a signal was detected and the frequency.

6.15.2.3. Contact 99 ABW/CP and NATCF upon termination of the signal.

6.15.3. NATCF will:

6.15.3.1. Upon detection or notification of a signal, inform the appropriate ARTCC and Nellis Tower.

6.15.3.2. Report termination to appropriate ARTCC.

6.15.3.3. Inform tower of termination of ELT.

6.15.4. 99 ABW/CP upon detection or notification will notify 57th WG MOC.

6.15.5. 57 OSS/OSTL shall establish procedures for providing standby personnel and the appropriate equipment and means necessary to detect and locate emergency signals.

6.16. Weather Recall. Weather recalls are initiated by Bullseye SOF in coordination with the 57 OG/CC. Nellis Control will broadcast a weather recall on Guard, using all repeaters. Aircrews will terminate the mission and contact the SOF for instructions.

6.17. BASH. Local Bird/Aircraft Strike Hazard (BASH) Program Guidelines are IAW (Nellis, Creech and NTTR) PLAN 17, Bird Aircraft Strike Hazard Plan.

6.17.1. With the exception of helicopter operations, landing lights will be used for all takeoffs and landings when bird condition is reported as other than low.

6.17.2. When bird activity is observed or reported to be an immediate or potential hazard to aircraft operations, expect the SOF to direct appropriate actions to aircrews.

6.17.3. Procedures for the coded bird watch conditions are as follows:

6.17.3.1. Bird watch condition SEVERE.

6.17.3.1.1. Traffic Pattern. Only permit full stop landings. Formation takeoffs and landings are prohibited. The SOF may consider changing the runways, delaying takeoffs and landings, diverting aircraft, changing pattern altitude, etc.

6.17.3.1.2. Ranges and Training Areas. Identify a specific area and altitude. All flights must avoid using the range or area.

6.17.3.1.3. Low-Level Routes. Note and avoid specific routes or segments and altitudes.

6.17.3.2. Bird watch condition MODERATE.

6.17.3.2.1. Traffic Pattern. Limit touch-and-go landings and low approaches to the minimum number required for training. Takeoffs and landings permitted only when departure and arrival routes avoid identified bird activities. Pilots will be particularly cognizant of bird activity when on final approach.

6.17.3.2.2. Ranges and Training Areas. Make changes in flight profile or altitudes to avoid bird hazards.

6.17.3.2.3. Low-Level Routes. Make amendments to flight altitude to minimize bird hazards. Limit formation flying to a minimum for mission and training requirements.

6.17.3.3. Bird watch condition LOW. Continue with normal operating procedures.

6.17.3.4. Bird Watch Alert. In addition to the above bird watch conditions, the appropriate agency can declare a Bird Watch Alert. All aircrews should be aware of the increased likelihood of bird hazards to flight safety.

6.18. Request for Explosive Ordnance Disposal (EOD) Assistance. Any request for EOD support to aircraft loaded with munitions or aircraft weapon systems will require the aircraft be shut down prior to EOD personnel approaching the aircraft.

6.19. Aircraft Impoundment Items. Aircraft impoundment will be in accordance with DAFI 21-101.

6.20. Evacuation of Air Traffic Control Facilities. ATC facilities may be evacuated because of high wind, fire, bomb threat, total power outage or other situations that could endanger personnel. Nellis Tower will be evacuated when wind speed or gusts reach 70 knots. Whenever ATC facilities are evacuated, use the following procedures.

6.20.1. Tower Evacuation. Tower will release all airspace to NATCF and instruct all vehicles to exit the controlled movement area (CMA). Tower will relay intent to evacuate over the PCAS if there is time. Alternatively, Tower may relay this intent to AMOPS via LMR radio, and AMOPS will relay over the SCN. All tower personnel will relocate to AMOPS.

6.20.2. Contingency Recovery Procedures during Tower Evacuation. In the event tower evacuation is required and wing aircraft are airborne, one Watch Supervisor, one 5-Level controller, and the SOF will relocate to the most advantageous point on the airfield via the SOF truck with portable UHF/VHF/LMR radios to recover aircraft. The most advantageous point on the airfield will be determined by runway in use, forecast wind, visibility, etc. The following limitations will apply when tower ATC services are provided from anywhere other than the air traffic control tower:

6.20.2.1. Vehicle access to the CMAs will be limited to emergency response and airfield management requirements.

6.20.2.2. Departures and practice approaches are not authorized.

6.20.2.3. All arrivals will arrive via straight in to a full stop with standard radar separation between aircraft/flights.

6.20.2.4. Wind and weather information will not be available from tower controllers, but can be obtained from NATCF.

6.20.2.5. Reduced same runway separation will not be applied; all aircraft must report off of runway.

6.20.2.6. Transient arrivals are not authorized.

6.20.2.7. Once all wing aircraft have been recovered, the controllers will relocate to AMOPS and the airfield will be closed until the control tower is returned to a safe state.

6.20.3. NATCF Evacuation. In the event of NATCF evacuation, all controllers will relocate to AMOPS (Bldg 805). Acrews shall recover VFR via the appropriate VFR recovery. If IMC, acrews will contact Los Angeles ARTCC.

6.20.4. The Watch Supervisor or Senior Controller will notify the 57th OSS ATCALS Focal Point when the wind is forecast to be sustained at 60 knots with the possibility to exceed 85 knots. The ASR-9 will be released to maintenance as traffic permits. When the LSV ASR-9 is released, notify 57 OSS/OSAD (Automation) and switch to the LAS ASR-9. If the LAS ASR-9 is not available, the enroute mosaic mode will be used by terminal positions. See **paragraph 4.26.2** for high wind operations.

6.21. NATCF Non-Radar Airspace Recall Procedures. In the event all radar capability is lost, NATCF may recall the non-radar airspace in order to provide safe and expeditious recovery of aircraft. Non-radar airspace is defined as Elgin, Sally Corridor and the Alamos south of the N 37 17 below FL 200. NATCF will notify Blackjack, GCI and Tower they are recalling the non-radar airspace. NATCF will also broadcast non-radar airspace recall on Guard, using all repeaters.

6.22. Evacuation of Airfield Management Operations (AMOPS) Facility. In event of evacuation of the AMOPS facility (building 805), AMOPS will relocate to the Tower (primary) or NATCF (alternate). The AMOPS Supervisor will ensure all duties are accomplished within this instruction.

6.23. Unauthorized Aircraft Landing/Unscheduled Aircraft. Procedures are in AMOPS OI and Nellis AFB Plan 5, Unauthorized Aircraft Movement, Theft or Hijack “STOP ALERT” and AFI 10-1801, Foreign Governmental Aircraft landings at United States Air Force Installations.

6.24. Air Evacuation Notification and Response Procedures. Tower will provide AMOPS a minimum of 15 NM call on all arriving Air Evacuation aircraft.

6.25. Backup Power. Generators supporting RAWS equipment have “auto start” capability for uninterrupted ATC service in the case of a commercial power outage. These generators will be run-tested monthly by 99 CES Power Production. 99 CES shall coordinate with ATC prior to testing any of these generators.

6.26. Single-Runway Operations. Nellis AFB is considered under single-runway operations anytime there is a planned or unexpected closure of one runway that is anticipated to last more than 30 minutes.

6.26.1. Single-runway operations will be announced on ATIS and placed in the NOTAMs, if applicable. If unexpected runway closures occur, the 57 WG SOF will ensure that notification of the closure is broadcast on guard and that the notification is passed to NATCF and Blackjack.

6.26.2. When single-runway operations are in effect, the SOF will declare a “divert airfield” for all fighter aircraft operating at Nellis. The SOF will coordinate with the divert airfield to ensure the airfield is available to accept divert aircraft. Under normal, day-VFR conditions, Creech AFB will be the divert airfield. If Creech is unavailable, the divert airfield will be the nearest suitable military airfield unless a civilian field is authorized by the 57 OG brickholder. The divert airfield will be announced on ATIS.

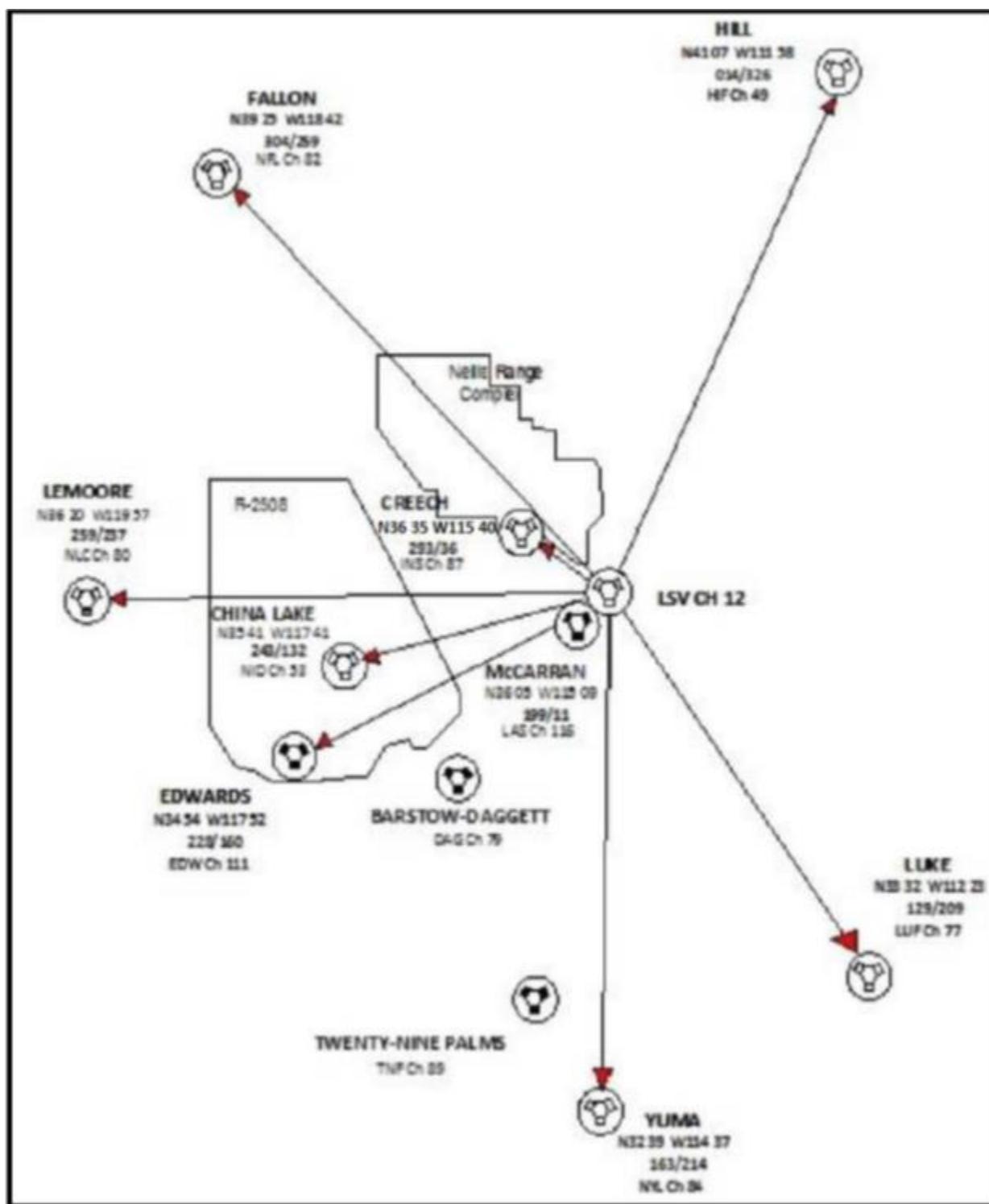
6.26.3. During single-runway operations, all pilots will set their bingo fuels to arrive at initial or the FAF at Nellis with enough fuel to divert to the SOF-declared divert airfield and arrive at initial or the FAF with no lower than minimum fuel. Aircrew will consider the weather conditions at Nellis and at the divert airfield when setting bingo and divert fuels.

Chapter 7

DIVERT PROCEDURES AND EMERGENCY AIRFIELDS

7.1. Divert Procedures. Airborne diverts from Nellis AFB may be directed for dual runway closure or weather. In the case of dual runway closure, flight leads should be prepared to divert their flights to an alternate airfield—Creech AFB, Edwards AFB and Luke AFB in that order unless the situation dictates otherwise. Harry Reid Airport may be used if emergency fuel prevents divert to a base previously listed. B-52 aircraft will divert if RWY 03L/21R (inside runway) becomes unusable (Edwards AFB is a suitable alternate). See [Figure 7.1](#) for a divert airfield quick look diagram for military diverts near Nellis AFB. Nellis Control will announce on Guard frequency any runway closures. Aircraft working in the NTTR or enroute to Nellis AFB will be notified of runway closures or weather diverts by NATCF or Blackjack on Guard frequency. After notification, contact the SOF for clarification or instructions. Upon arrival at the divert airfield, contact Nellis 99 ABW/CP and Bullseye SOF with aircraft status and intentions.

Figure 7.1. Nellis Divert Base Quick Look.



7.2. Divert Airfields.

7.2.1. Creech AFB. Creech AFB (CAFB) is the primary VFR divert airfield for Nellis aircraft and is located 36 NM to the northwest of Nellis AFB. Creech AFB has two runways. RWY

08/26 is the primary runway with 9,002 X 150 feet of usable runway. There are E-5 and BAK-12 arresting systems installed at both ends of the runway. The BAK-12 for RWY 08 is 1,400 feet from the approach end; the E-5 is 135 feet into the departure end overrun. The BAK-12 for RWY 26 is 1,200 feet from the approach end and includes a BAK-14 cable retraction system; the E-5 is 24 feet into the departure end overrun. When RWY 08 is the active runway, RWY 08 approach end BAK-12 is disconnected for MQ-1/MQ-9 operations; contact Creech Tower 20 minutes prior to arrival for activation. The departure end cable for the active runway will always be configured and operational. The tail hook cable is connected in the departure end overrun and disconnected in the approach end overrun for the active runway. RWY 13/31 (Day/VFR Use Only) is 5,002 feet x 100 feet with no cables. Creech Tower, AMOPS, TA and Fire Department are open and operational during Nellis' flying window and can normally support up to 25 divert fighter aircraft at a time. To activate the Pilot Controlled Lighting when Creech Tower is closed, key the mike on the Tower VHF frequency three times for Low Intensity, five times for Medium Intensity and seven times for High Intensity. For information regarding Creech AFB, see CAFBI 11-250. If diverting to Creech AFB is not possible, the following airfields should be considered:

7.2.2. Edwards AFB. Edwards AFB is located 160 NM to the southwest of Nellis AFB. Edwards has two parallel runways, 04/22 (11,998 feet x 200 feet and 15,024 feet x 300 feet), with BAK-12s available on both ends of 04R and only one BAK-12 at the approach end of 04L.

7.2.3. Luke AFB. Luke AFB is located 209 NM to the southeast of Nellis AFB. Luke has two parallel runways, 03/21 (10,012 feet x 150 feet and 9,904 feet x 150 feet), with BAK-9s and BAK-12s on both runways (BAK-9s in the overruns).

7.2.4. Harry Reid International Airport. Harry Reid International Airport is located 11 NM southwest of Nellis AFB. There are two sets of parallel intersecting runways, 08/26 (14,512 feet x 150 feet)/(10,525 feet x 150 feet) and 01/19 (8,985 feet x 150 feet)/(9,775 feet x 150 feet). There are no arresting systems.

7.2.4.1. The earliest possible notification of intent to divert to Harry Reid Airport will assist in divert sequencing. Upon arrival, crews can expect a flight lead directed split up for VFR straight-in approaches to the active runway or ILS approaches to RWY 26 (IMC).

7.2.4.2. Non-hazardous Situations. Aircraft will park wherever the airport operations coordinator deems acceptable.

7.2.4.3. Hazardous Situations. Aircraft with hazardous or a potentially hazardous situation (known or suspected) will park at the location determined by the airport operations coordinator. Hazardous conditions include hot brakes, EPU activation, hung training or inert ordnance, hung or unexpended live ordnance, or any other condition that aircrew, aircraft rescue and firefighting (ARFF) personnel, or the airport operations coordinator feels may pose a hazard. The ARFF personnel will bring any equipment out to the airplane that is necessary. Aircrews will make every effort to make sure that any FFO is pointed in the least hazardous direction. In the event of EPU activation only ARFF personnel with self-contained breathing apparatus and protective clothing will approach the aircraft. Harry Reid Airport is the last option divert for hazardous situations.

7.2.5. China Lake. China Lake is located 132 NM to the southwest of Nellis AFB. China Lake has three runways, 03/21 (9,991 feet x 200 feet), 14/32 (9,011 feet x 200 feet) and 08/26 (7,701 feet x 200 feet) with a single E-28 cable on each of the three runways. Normal operating hours are 0630L-2230L.

7.3. Emergency Airfields.

7.3.1. Tonopah Test Range (TNX) Airfield. TNX Airfield, located in R4809A (N 37 48' W 116 47'), is available for emergency landings. The 12,000 x 150 feet runway is oriented 14/32 with a bi-directional BAK-12 located 1,599 feet from the approach end of RWY 32 and a bi-directional BAK-14 located 1,500 feet from the approach end of RWY 14. The field elevation is 5,547 feet. Taxiway Bravo is closed to all aircraft. Taxiways Alpha and Echo are designated "Arm-Dearm, Hot Brake and Hazardous Cargo" areas. Airfield hours of operation are 0500 to 1900L on weekdays with fire protection available 24 hours/7 days a week. AM32A-60A and AMA32A-86 power carts and JP-8 fuel are available during normal operating hours. Airfield lighting will remain on during the Nellis AFB fly window. Diverting aircraft should announce their intention to land at TNX on the Nellis Control or Silverbow Tower frequencies.

7.3.2. Mercury (Desert Rock) Airfield. Mercury Airfield, located approximately 17 NM west of Creech AFB, can be used as a last ditch emergency airfield. Mercury Airfield's runway is a 7,515 feet asphalt runway with no overruns. RWY 02/20 has a 2.5 degree upslope on RWY 02. There are no aircraft arresting systems or ATC facilities. Airport traffic advisories are available from 0800-1620 local on VHF UNICOM 122.8 (Mercury Radio), UHF 261.1/255.8 and VHF 126.15 (Dreamland Approach frequencies).

7.3.3. Cedar City Regional Airfield. Cedar City Regional, located approximately 20 NM east of Cal C, can be used as a last ditch emergency airfield. Cedar City's runway is 8,600 feet (asphalt with no overruns). There are no aircraft arresting systems or ATC facilities. Airport traffic advisories are available on VHF UNICOM 123.0. Due to crown in RWY 02/20 departing aircraft are unable to observe aircraft departing in opposite direction. Cedar City is in the vicinity of high terrain, which may cause turbulence. RWY 20 is the calm wind runway.

7.3.4. St. George Municipal Airfield (SGU): St. George Municipal, located approximately 40 NM east of ELGIN can be used as a last ditch emergency airfield. St. George's runway is 9,300 feet (asphalt with no overruns). There is no aircraft arresting systems or ATC facilities. Airport traffic advisories are available on VHF UNICOM 122.8.

TODD R. DYER
Colonel, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

FAA JO 7110.65Z, Air Traffic Control, 17 June 2021

FAA JO 7350.9Y, Location Identifiers, 26 July 2021

AFI 10-1801, Foreign Governmental Aircraft Landings at United States Air Force Installations, 24 September 2018

AFI 10-201, Force Readiness Reporting, 21 December 2020

AFI 10-701, Operations Security, 23 July 2019

AFI 10-2501, Emergency Management Program, 10 March 2020

ACCI 11-USAFADSV3, Operational Procedures –Thunderbirds, 3 January 2018

AFMAN 11-2A-10CV3, A-10C Operations Procedures, 22 January 2020

AFMAN 11-2F-15EV1, F-15E–Aircrew Training, 20 June 2019

AFMAN 11-2F-16V3, F-16–Operations Procedures, 25 May 2021

AFMAN 11-2F-35AV3, F-35A–Operations Procedures, 24 May 2018

AFI 11-202 Volume 3, General Flight Rules, 10 August 2016

AFMAN 11-217, Flight Operations, 10 June 2019

AFMAN 11-218, Aircraft Operation and Movement on the Ground, 4 April 2019

Creech AFB Instruction 11-250, Flying Operations, 16 April 2019

AFI 11-418, Operations Supervision, 27 February 2020

DAFMAN 13-201, Airspace Management, 9 December 2020

AFMAN 13-204 V1, Management of Airfield Operations, 22 July 2020

AFMAN 13-204 V2, Airfield Management, 22 July 2020

AFMAN 13-204 V3, Air Traffic Control, 22 July 2020

AFMAN 13-204 V4, Radar, Airfield and Weather Systems, 22 July 2020

AFI 13-207-O, Preventing and Resisting Aircraft Piracy (Hijacking), 4 February 2019

AFMAN 13-212V1, ACC Sup, NTTR Addend A, Range Planning & Operations, 24 July 2020

AFMAN 13-213, Airfield Driving, 3 February 2020

AFMAN 17-1302-O, Communications Security (COMSEC) Operations, 8 April 2020

DAFI 21-101, Aircraft and Equipment Maintenance Management, 1 October 2021

DAFI 33-360, Publications and Forms Management, 30 November 2015

AFI 33-322, Records Management and Information Governance, 27 July 2021

AFMAN 91-203, Air Force Consolidated Occupational Safety, Fire, and Health Standards, 10 December 2018

Adopted Forms

AF IMT 483, Certificate of Competency.

AF Form 847, Recommendation for Change of Publication

DD Form 1801, DoD International Flight Plan

Abbreviations and Acronyms

AAS—Aircraft Arresting Systems

AB—Afterburner

ACP—Airspace Control Plan

AFE—Aircrew Flight Equipment

AGE—Aerospace Ground Equipment

AGL—Above Ground Level

AMOPS—Airfield Management Operations

AOB—Airfield Operations Board

AR—Air Refueling

ARFF—Aircraft Rescue and Firefighting

ARTCC—Air Route Traffic Control Center

ASR—Approach Surveillance Radar

ATC—Air Traffic Control

ATCAA—Air Traffic Control Assigned Airspace

ATG—Adversary Tactics Group

ATIS—Automatic Terminal Information Service

ATREP—Air Traffic Representative

BAK—Barrier Arresting Kit

BASH—Bird Aircraft Strike Hazard

BDOC—Base Defense Operations Center

BLD—Boulder City TACAN Identifier

BTY—Beatty TACAN Identifier

CAF—Creech Air Force Base

CAT—Crisis Action Team

CCF—Central Control Facility

CE—Civil Engineering

CMA—Controlled Movement Area

COA—Certificate of Authorization

CP—Command Post

CVFP—Charted Visual Flight Procedure

DME—Distance Measuring Equipment

DOD—Department of Defense

DOE—Department of Energy

DP—Departure Procedure

DV—Distinguished Visitor

DZ—Drop Zone

DZC—Drop Zone Controller

ELT—Emergency Locator Transmitter

EOC—Emergency Operations Center

EOD—Explosive Ordnance Disposal

EOR—End of Runway

EPU—Emergency Power Unit

ETA—Estimated Time of Arrival

FAA—Federal Aviation Administration

FAF—Final Approach Fix

FCF—Functional Check Flight

FCIF—Flight Crew Information File

FFO—Forward Firing Ordnance

FITS—Fighter Index of Thermal Stress

FL—Flight Level

FLIP—Flight Information Publications

FM—Frequency Modulation

FOD—Foreign Object Damage/Debris

GC—Ground Controller

GCI—Ground Control Intercept

GDSS—Global Decision Support System

GRR—Graphical Range Restriction

HCP—Hot Cargo Pad

HIRL—High Intensity Runway Lights

IC—Incident Commander

IAF—Initial Approach Fix

IFE—In Flight Emergency

IFG—In Flight Guide

IFR—Instrument Flight Rules

ILS—Instrument Landing System

IMC—Instrument Meteorological Conditions

INS—Inertial Navigation System

INS—Creech AFB TACAN Identifier

IR—IFR Military Training Route

KIO—knock It Off

KTAS—Knots True Airspeed

LAS—Las Vegas TACAN Identifier

LATN—Low Altitude Tactical Navigation Area

LFE—Large Force Exercise

LL—Low Level

LLA—Low Level Avoidance

LOA—Letter of Agreement

LOLA—Live Ordnance Loading Area

LSV—Nellis TACAN Identifier

LZ—Landing Zone

MAJCOM—Major Command

MARSA—Military Authority Assumes Responsibility for Separation of Aircraft

MDS—Mission Design Series

MFF—Military Freefall

MMM—Mormon Mesa TACAN Identifier

MOA—Military Operations Area

MOC—Maintenance Operations Center

MSL—Mean Sea Level

NATCF—Nellis Air Traffic Control Facility

NACTS—Nellis Aircraft Tracking System

NAVAID—Navigational Aid

NM—Nautical Miles

NORDO—No Radio

NOTAM—Notice to Airmen

NS—Noise Sensitive

NTTR—Nevada Test and Training Range

NVG—Night Vision Goggles

OI—Operating Instruction

OPLAN—Operational Plan

OPR—Office of Primary Responsibility

ORM—Operational Risk Management

OTF—Over the Field

PAPI—Precision Approach Path Indicators

PCAS—Primary Crash Alarm System

PEX—Patriot Express

PFO—Precautionary Flameout

PFPS—Portable Flight Planning Software

PPR—Prior Permission Required

RAWS—Radar, Airfield, Weather Systems

RPA—Remotely Piloted Aircraft

RSC—Runway Surface Condition

RSRS—Reduced Same Runway Separation

RTB—Return to Base

RTO—Range Training Officer

RWY—Runway

SAR—Search and Rescue

SCN—Secondary Crash Net

SDO—Squadron Duty Officer

SFA—Single Frequency Approach

SFO—Simulated Flameout

SI—Straight-in

SM—Statute Miles

SODO—Simultaneous Opposite Direction Operations

SOF—Supervisor of Flying

SUA—Special Use Airspace

TA—Transient Alert

TAC—Tactical

TACAN—Tactical Air Navigation

TDY—Temporary Duty

TFR—Temporary Flight Restriction

TO—Technical Order

TOT—Time Over Target

TRACON—Terminal Radar Approach Control

UHF—Ultra High Frequency

UNICOM—Uniform Communication

USAFWC—USAF Warfare Center

USAFWS—USAF Weapons School

VFR—Visual Flight Rules

VGT—North Las Vegas Airport

VHF—Very High Frequency

VMC—Visual Meteorological Conditions

VORTAC—VHF Omnidirectional Range Tactical Air Navigation

VR—VFR Military Training Route

VTR—Video Tape Recorder

WS—Watch Supervisor

WX—Weather

WSINT—Weapons School Integration

Terms

Airfield—The area of the base on which fixed wing aircraft and helicopters are operated, including the runways, taxiways, helipads, parking ramps, hangars, and all open areas surrounding the runways, taxiways, and parking ramps.

Controlled Movement Area—Both runways, overruns, helipads, and the area within 100' of the runways, overruns and helipads.

Emergency Response Vehicles—For the purpose of this instruction, the term “Emergency Response Vehicle” applies only when these vehicles are responding to an actual emergency or an approved exercise. These vehicles will follow normal flight line vehicle or airfield service routes and air traffic control regulations at all times.

Flight line—For the purpose of this instruction, the term “flight line” includes runways, infields, taxiways, helipads, aircraft parking ramps, hangars and associated maintenance/servicing areas where aircraft may be encountered.

Foreign Object Damage/Debris (FOD) checks—Inspection of vehicles prior to entering the flight line to ensure they are free of loose debris that may fall out of the vehicle and present a FOD hazard. This includes the tire tread, nuts, bolts, straps, packing materials, rocks, cups, cans, paper, etc.

Forward Firing Ordnance (FFO)—Weapon systems or munitions (guns, rockets, and missiles) that pose an additional hazard because of their directional response and potential long range if inadvertently activated on the ground.

General Purpose Vehicles—Those vehicles of commercial design and manufacture such as pickup trucks and sedans.

Heavyweight Ordnance—Ordnance that is 500 lbs or greater.

Hung Ordnance—Munitions items that fail to deploy when a release pulse is initiated from the cockpit.

Inadvertent Release—Ordnance fired or dropped without command from the aircrew. (system induced).

Inert Ordnance—Munitions items or components whose explosives material has been replaced by an inert material.

Limited Flight line Driving Privileges—Flight line driving privileges that restrict an individual to a specific area on the flight line. Limited privileges may be granted by the Airfield Manager on a case-by-case basis, in order to satisfy mission requirements. The specific area where they are authorized to operate vehicles will be annotated on the individual’s AF IMT 483, Certificate of Competency.

Live Ordnance—All munitions items or components filled with or containing explosives or incendiary materials.

Practice Ordnance—Live or inert ammunition, live or inert bombs and inert warhead missiles possessing live missile motors used to give aircrew target practice over live-fire ranges.

Special Purpose Vehicles—Vehicles designed and used for a specific purpose in the course of aircraft servicing and maintenance such as forklifts, tugs, golf carts, tractors, multi-purpose servicing units, bomb lifts, etc.

Training Ordnance—Empty or inert munitions items or components used solely for classroom or weapons load training or training demonstrations.

Unexpended Ordnance—Ordnance retained onboard with no attempted release.

Unintentional Release—Ordnance fired or dropped through aircrew error (aircrew induced)

Weapon—Any instrument used to dispense or deploy a munitions item or component whether inert or live.

Attachment 2**NELLIS AFB PARKING PLAN**

A2.1. Purpose. To establish local procedures for aircraft parking, and to formalize parking rows and apron use in support of the daily flying mission and maintenance operations.

A2.2. Responsibilities. The 57 OG/CC is responsible and maintains final authority for all ramps and parking rows. Specific rows and ramps are assigned to local organizations. The primary users of parking rows and ramps are listed below.

- A2.2.1. Rows 1-9: Deployed aircraft. (Not marked) Note: Rows 3, 6 and 9 are taxilanes.
- A2.2.2. Rows 10-11: Falcon AMU (F-16/10 spots per row).
- A2.2.3. Rows 12-14: Strike AMU (F-15E/7 spots per row).
- A2.2.4. Rows 15-16: Eagle AMU (F-15C/7 spots per row).
- A2.2.5. Rows 17-18: Bolt AMU (F-35/6 spots per row)
- A2.2.6. Rows 19-22: Lightning AMU (F-35/6 spots per row).
- A2.2.7. Rows 23-24: Deployed aircraft. (6 marked spots per row)
- A2.2.8. Rows 25-26: DRAKEN International (A-4/L-159/F-1/11 spots per row).
- A2.2.9. Row 27: Fire Lane (emergency vehicle access lane).
- A2.2.10. Rows 28-31: Deployed aircraft (unmarked).
- A2.2.11. Rows 32-34: Raptor Flight (F-22A/rows 32-33 have 7 spots per row/row 34 has 6).
- A2.2.12. Rows 35-37: Deployed aircraft. (Unmarked) (Row 37 partial taxilane when large aircraft on row 36)
- A2.2.13. Rows 38-39: USAFADS (Thunderbirds). (10 spots each row. Row 38 unmarked). Row 39 is shared by USAFADS and Viper Flight.
- A2.2.14. Rows 40-42: Viper Flight (F-16C/9 spots per row).
- A2.2.15. Rows 43-44: Tomahawk Flight (F-16C/12 spots per row).
- A2.2.16. Rows 45, 46: Transient aircraft. 5 marked spots on Row 45 for fighters. Row 46 unmarked.
- A2.2.17. Transient West: Transient and Deployed aircraft. (7 spots).
- A2.2.18. Transient East: Transient and Deployed aircraft (11 spots).
- A2.2.19. Revetments 1-25: As required for live weapons loading. Note: Revetments 1 & 2 are reserved for hot gun and hung ordnance. Revetments 12 and 13 not authorized for Forward Firing Ordnance (FFO) due to fuel tank proximity. Revetment 25 not authorized for FFO due to Line D/Flare build-up facility open storage pad proximity.
 - A2.2.19.1. Revetment Overflow Priorities. During overflow movement, the following priorities apply:

A2.2.19.1.1. Aerospace Control Alert (ACA) taskings (does not include practice operations).

A2.2.19.1.2. Overseas units (US & Coalition) expending live ordnance ISO RF/GF.

A2.2.19.1.3. Weapons School syllabi (live vs. swapping to inert).

A2.2.19.1.4. All other requirements.

A2.2.20. LOLAs:

A2.2.20.1. North and East LOLAs: Thunder Flight (A-10/6 spots per leg). A-10s will retain priority.

A2.2.20.2. South LOLA: Various fighter aircraft use (22 spots for F-35 or smaller or 11 spots for A-10). South LOLA is to be utilized by all locally assigned units prior to being offered to RF or GF TDY units. During overflow movement, the following priorities apply:

A2.2.20.2.1. 57th WG assigned units.

A2.2.20.2.2. 53rd TEG assigned units.

A2.2.20.2.3. USAF TDY units ISO RF/GF.

A2.2.20.2.4. Coalition Forces.

A2.2.20.2.5. All other requirements.

A2.2.21. Bomber pad spots 1, 2 and 3. TDY B-52 aircraft or smaller. FFO not authorized on bomber pad.

A2.2.22. Helicopter aprons: Helicopter main aprons have 14 HH-60 spots. Taxilane Juliet has 5 HH-60 spots.

A2.3. Ramp Parking Scheduling. All ramp parking to include revetments is scheduled by the 57 OSS/DO as the 57 OG/CC's representative. Organizations requiring ramp parking will contact the Deputy Airfield Manager (57 OSS/DO's representative) for parking space assignment. Ramp parking scheduling meetings are held bi-weekly in the 57 OSS (Bldg 94); contact the Deputy Airfield Manager at 652-4601 for date/times. Representatives from the following organizations should attend: AMOPS, 57 OSS Scheduling, USAFWS, 422 TES, Deployment Liaison, Nellis Support Center, 414 CTS, 549 CTS, 57 MXG TA, 57 WG/SEF/SEG, and any local unit requiring revetments or parking outside of their assigned rows. Using agencies must check the master aircraft parking plan (maintained on the 57 OSS SharePoint site) for accuracy and currency prior to the parking meeting.

A2.4. LOLA/Revetment Overflow Priorities. During LOLA/revetment overflow movement, the following priorities will apply:

A2.4.1. ACA taskings (does not include practice operations)

A2.4.2. Overseas units expending live ordnance and supporting RED FLAG/GREEN FLAG

A2.4.3. Weapons School syllabi (live vs. swapping to inert)

A2.4.4. All other requirements.

Attachment 3

NAVIGATION POINTS

A3.1. Navigation Points. **Table A3.1** lists Nellis local area navigation points/fixes. Asterisk points/fixes are published fixes and are included with aircraft FMS/DAFIF/NASR/FAAO 7350.9 updates; non-asterisk points/fixes are local and must be entered manually via unit mission planning software.

A3.2. Nellis TACAN Service Volume Limitation. Nellis TACAN is a category L NAVAID/usable to 40 NM IAW FAA service volume limitations; use caution when using navigational points that extend beyond 40 NM of Nellis TACAN.

Table A3.1. Local Navigation Points.

ATC POINT			
ACTON	LSV 022/36	N 3644.52	W 11436.45
ALAMO	LSV 339/63	N 3716.98	W 11513.85
APEX	LSV 028/9	N 3621.58	W 11454.34
*ARCOE	LSV 358/30	N 3644.26	W 11455.02
BIGHORN	LSV 348/97	N 3752.00	W 11502.00
*CESAR	LSV 291/85	N 3700.49	W 11630.51
CARPP	LSV 356/63	N 3717.00	W 11450.72
Dry Lake	LSV 018/15	N 3627.68	W 11452.21
CRAIG	LSV 264/5.5	N 3615.25	W 11508.27
*DREAM	LAS 352/66	N 3710.34	W 11459.53
DUCK	LSV 053/7.5	N 3617.84	W 11453.09
ELKXX	LSV 002/100	N 3752.00	W 11430.00
EMPRS	LSV 344/62	N 3717.00	W 11507.05
FLEX	LSV 338/04	N 3618.62	W 11502.36
*FLUSH	LSV 288/73	N 3650.80	W 11620.27
FROZE	MMM 221/47	N 3620.35	W 11505.44
*FYTRR	LSV 270/33	N 3621.44	W 11541.47
GARTH	LSV 303/90	N 3717.96	W 11621.26
GAASS PEAK	LSV 310/12	N 3624.14	W 11510.66
Gunfighter DZ	LSV 077/1.5	N 3614.70	W 11459.70
*HASIL	LSV 277/12	N 3618.58	W 11515.54
HAYFORD PEAK	LSV 332/26	N 3639.70	W 11510.41
*JAYSN	BTY 096/37	N 3634.42	W 11602.44
JENID	BTY 175/27	N 3621.50	W 11651.05
Jettison Hill	LSV 351/5.2	N 3619.88	W 11501.17
JORDN	LSV 299/14	N 3623.87	W 11514.59
*JUNNO	BLD 344/44	N 3643.80	W 11452.77
*KRYSS	LSV 030/21	N 3630.37	W 11444.19
Leach Lake	DAG 338/40	N 3537.51	W 11640.67
*LIDAT	BTY 310/46	N 3725.81	W 11716.68
*MINTT	LAS 349/38	N 3642.74	W 11506.29
MOOSE	LSV 017/94	N 3736.77	W 11404.42
MOPAR	BTY 344/29	N 3717.00	W 11645.00
NIXON	LSV 293/30	N 3632.01	W 11532.25
*NUGGE	BLD 344/68	N 3707.83	W 11453.30
*ONDAB	LSV 277/6	N 3616.63	W 11508.52
PHINN	LSV 028/5	N 3618.51	W 11457.53

*PIUTE	INS 243/21	N 3630.68	W 11605.69
PRATT	MMM 219/25	N 3632.48	W 11442.68
RAMMM	LSV 025/38	N 3645.00	W 11433.33
SARAH	LSV 317/25.5	N 3636.45	W 11518.03
SIMNS	LSV 278/8	N 3617.34	W 11510.75
*STRIP	INS 112/24	N 3620.60	W 11516.48
*STRYK	LSV 283/26	N 3625.62	W 11530.70
STUCKEY'S PEAK	LSV 004/51	N 3704.10	W 11444.30
Texas Lake	LSV 351/64	N 3719.00	W 11457.50
TIMBR	LSV 012/33	N 3645.00	W 11444.58
*TUCKY	BTY 209/18	N 3635.23	W 11700.62
*VETTT	LSV 031/31	N 3637.33	W 11435.24
Winner LZ	358/5.7	N 3620.33	W 11500.25

Attachment 4**NELLIS STEREO ROUTES****Table A4.1. Range Complex Routes for Use with REVEILLE MOA/ATCAA:**

LSV100	KLSV 190	F16/P	400
KLSV.DREAM6.DREAM.LSV352066.ILC200050/D0+15.RVELE.R4807.FLUSH.JAYSN. STRYK.KLSV			
RMKS: RF MARSA REVEILLE			
LSV101	KLSV 190	F16/P	400
KLSV.DREAM6.DREAM.ILC200050/D0+15.RVELE.R4807.DREAM.ARCOE.KLSV			
RMKS: RF MARSA REVEILLE			
LSV102	KLSV 200	F16/P	400
KLSV.FYTTR6.FYTTR.BTY100030.FLUSH.R4807.RVELE.ILC200050/D0+15.FLUSH. JAYSN.STRYK.KLSV			
RMKS: RF MARSA REVELLE			
LSV102C	KLSV 200	F16/P	400
KLSV.FYTTR6.FYTTR.BTY170005.BTY340027.R4807.RVELE.ILC200050/D0+15. BTY340027.BTY170005.STRYK.KLSV			
RMKS: RF MARSA REVEILLE			
LSV103	KLSV 200	F16/P	400
KLSV.FYTTR6.FYTTR.BTY100030.FLUSH.R4807.RVELE.ILC200050/D0+15.ARCOE.K LSV			
RMKS: RF MARSA REVEILLE.			
LSV109	KLSV 160	F16/P	400
KLSV.FYTTR6.FYTTR.BTY.BTY318044.MVA118055.TPH.TPH063036.ILC200050/D0+2 5. FLUSH.JAYSN.STRYK.KLSV			
RMKS: REVEILLE AND NTTR ONLY/NOT FOR AR625H/L USE			

Table A4.2. Range Complex Routes for Use with REVEILLE MOA/ATCAA Authorized for Use By Foreign Nationals Transition To/From Western Ranges:

LSV127	KLSV 200	F16/P	400
KLSV.FYTTR6.FYTTR.BTY.BTY345020.R4807.RVELE.ILC200050/D0+15.BTY. BTY100020.STRYK.KLSV			
RMKS: FOREIGN NATIONAL			
LSV128	KLSV 200	F16/P	400

KLSV.FYTTR6.FYTTR.BTY.BTY345020.R4807.RVELE.ILC200050/D0+15.DREAM.
 ARCOE.KLSV
 RMKS: FOREIGN NATIONAL

Table A4.3. Range Complex Routes Not Including REVEILLE MOA/ATCAA:

LSV104	KLSV 190	F16/P	400
KLSV.DREAM6.DREAM/D0+15.ARCOE.KLSV			
RMKS: RANGES			
LSV105	KLSV 200	F16/P	400
KLSV.FYTTR6.FYTTR.BTY100030.FLUSH.R4807/D0+15.STRYK.KLSV			
RMKS: RANGES			
LSV135	KLSV 190	F16/P	400
KLSV.MMM221025.LSV332026...LSV339063/D0+15.LSV332026.KLSV			
RMKS: ALAMO DEPARTURE ONLY			

Table A4.4. Range Complex Routes for Use with Refueling Operations:

LSV106	KLSV 200	F16/P	400
KLSV.FYTTR6.FYTTR.BTY.BTY310033.MVA163077.AR625.MVA142059.R4807.RVEL E.			
ILC200050/D0+25.FLUSH.JAYSN.STRYK.KLSV			
RMKS: AR625H OR L REVEILLE			
LSV107	KLSV 200	F16/P	400
KLSV.FYTTR6.FYTTR.BTY.BTY310033.MVA163077.AR625.MVA142059.MVA122072. R4807/D0+30.FLUSH.JAYSN.STRYK.KLSV			
RMKS: AR625H OR L			
LSV108	KLSV 200	F16/P	400
KLSV.FYTTR6.FYTTR.BTY.BTY310033.MVA163077.AR625.MVA149084.BTY283050. R-2508			
RMKS: AR625H OR L THEN FILE LSV213A FOR RETURN			
LSV130	KLSV 230	F16/P	400
KLSV.MMM7.MMM.MLF039022.MLF289042.AR635.MLF260023.MLF.MMM.KRYSS.K LSV			
LSV131	KLSV 190	F16/P	400
KLSV.MMM7.MMM.MLF.MLF289042.AR635.MLF2600023.ILC.RVELE/D0+15.ARCOE. KLSV			
RMKS: REVEILLE			

Table A4.5. AWACS Fly Orbit:

LSV132	KLSV 230	H/E-3/P	400
KLSV.MMM7.MMM.BERYL.ILC.ILC181025/D2+30.LSV355030.KLSV			
RMKS: ENTR NAS RTE REQD FOR MSN/ORBIT IN EL-CAL AT FL300			

Table A4.6. R-2508, R-2502, and R-2524 Routes:

LSV113	KLSV 160	F16/P	400
KLSV.FYTTR6.FYTTR.BTY100030.TUCKY.R2502			
RMKS: D0+15 THEN FILE LSV213A FOR RETURN			
LSV113A	R2508 170	F16/P	400
R2508.TUCKY.JAYSN.STRYK.KLSV			
LSV114	KLSV 160	F16/P	400
KLSV.FYTTR6.FYTTR.BTY100030.TUCKY.R2508/ETE			
RMKS: D0+30 THEN FILE LSV213A FOR RETURN			
LSV115	KLSV 160	F16/P	400
KLSV.FYTTR6.FYTTR.BTY100030.TUCKY.R2524			
RMKS: D1+00 THEN FILE LSV213A FOR RETURN			

Table A4.7. LATN Area Routes:

LSV133	KLSV VFR	F16/P	400
KLSV.MMM7.MMM			
RMKS: VFR TO LATN EAST			
LSV117	KLSV 160	F16/P	400
KLSV.FYTTR6.FYTTR.INS/D3+00.INS.STRYK.KLSV			
RMKS: REQUEST FYTTR LO, LATN WEST			

Table A4.8. AR & Military Training Routes:

LSV118	KLSV 160	F16/P	400
KLSV.FYTTR6.FYTTR.LSV280042.IR286.OAL074014.R4807/D0+20.FLUSH.JAYSN.ST			
RYK.			
KLSV			
RMKS: IR286 E PT A T/O +15 MIN X PT G T/O +35 MIN			
LSV134	KLSV 230	F16/P	400
KLSV.MMM7.MMM.BCE.BCE183038.AR624.BCE157057.RSK085050.IR126.MMM0010			
19.			
KRYSS.KLSV			

RMKS: E PT A T/O +55 X PT X T/O +95

Table A4.9. R-2501 and 29 Palms Routes:

LSV129 KLSV 220 F16/P 400 KLSV.FYTTR6.FYTTR.CLARR.ZELMA.JOTNU.TNP.TNP330008.R2501 RMKS: LIVE ORDNANCE D0+30 THEN VFR FILE LSV229A FOR RETURN
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LSV129A R2501 210 F16/P 400 R2501.TNP330008.TNP.JOTNU.ZELMA.KLSV

Table A4.10. Thunderbird Practice Area Route:

LSV110 KLSV VFR F16/P 400 KLSV.LSV270005.LSV270020.INS.INS001008/D0+30.STRYK.KLSV RMKS: VFR TO R4806 PRACTICE AREA
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Table A4.11. Green Flag AOMSW:

LSV136 KLSV 280 F16/P 400 KLSV.FYTTR6.FYTTR.WHIGG.HEC.PDZ.PYRAS/D+30.PYRAS.SXC.LIMBO.POM.DA G. CLARR.STRYK.KLSV
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Attachment 5**CLASS B DEPARTURES**

A5.1. Authorization. Class B airspace VFR departures are available for aircraft authorized and desiring to depart VFR. Military fixed wing aircraft are not authorized to use Class B departures to transition to and from the NTTR, except those aircraft unable to meet published DP climb gradients.

A5.2. Class B West Departure.

A5.2.1. RWY 03: CROSS DEPARTURE END AT OR BELOW 3,000, TURN LEFT HEADING 300°. EXPECT RADAR VECTORS ON COURSE AFTER CROSSING I-15, MAINTAIN VFR. REMAIN CLEAR OF NORTH LAS VEGAS CLASS D AIRSPACE.

A5.2.2. RWY 21: CROSS DEPARTURE END AT OR BELOW 3,000, TURN RIGHT HEADING 300°. EXPECT RADAR VECTORS ON COURSE AFTER CROSSING I-15, MAINTAIN VFR. REMAIN CLEAR OF NORTH LAS VEGAS CLASS D AIRSPACE.

A5.3. Class B Northeast Departure.

A5.3.1. RWY 03: CROSS DEPARTURE END AT OR BELOW 3,000, FLY RUNWAY HEADING, MAINTAIN VFR, EXPECT RADAR VECTORS.

A5.3.2. RWY 21: CROSS DEPARTURE END AT OR BELOW 3,000, TURN RIGHT HEADING 340°. AFTER CROSSING I-15 TURN RIGHT HEADING 030°, MAINTAIN VFR, REMAIN CLEAR OF NORTH LAS VEGAS CLASS D AIRSPACE, EXPECT RADAR VECTORS.

Attachment 6**THUNDERBIRD PROCEDURES**

A6.1. General. Thunderbird procedures contained within this attachment will be reviewed annually by 57 OSS/OSA and Thunderbird leadership.

A6.1.1. Communications:.

A6.1.1.1. ATC can expect limited radio communications during the initial phase of a Thunderbird departure (i.e., Thunderbird Split-S Departure, Thunderbird Loop Departure, etc.) due to increased inter-flight aircrew communications.

A6.1.1.2. ATC can expect normalized communications “after” the Thunderbird lead reports their position to the departure controller and is ready for radar identification. Thunderbird lead will re-establish ATC communications once established on LSV R-270 outbound and prior to 5 NM.

A6.1.1.3. ATC traffic calls issued during the initial Thunderbird departure stage may not be acknowledged by the Thunderbird lead and ATC must be ready to re-issue traffic on radar-identification or as soon as possible.

A6.1.1.4. During a Thunderbird aerobatic demonstration that is associated with a TFR, Thunderbird pilots do not monitor guard frequencies during the duration of the demonstration.

A6.1.2. Non-standard Thunderbird arrivals/departures (not included in this attachment) will be coordinated with the Nellis Control Tower/NATCF leadership in advance to the maximum extent possible.

A6.1.3. Thunderbird NAS departures will file IAW the AP-1 but formation departures may request a Class B VFR departure and request IFR pick-up after departure to allow for an expedited join-up.

A6.1.4. Thunderbird pilots “not” requesting a Thunderbird Departure (i.e., Thunderbird Split-S Departure, Thunderbird Loop Departure, etc.) will file/request an LSV210 stereo route. Unless specified by ATC, aircrew will comply with the applicable departure procedures/restrictions (i.e., RWY03L/R FLEX Departure, RWY 21L/R noise abatement, etc.) and are not authorized to turn early to join the LSV R-270 on departure.

A6.2. Airspace.

A6.2.1. All references to Nellis aerobatic airspace/nautical miles/radials/arcs in this attachment will be centered on Show Center as defined in the Las Vegas TRACON, Las Vegas Airport Traffic Control Tower, NATCF, Nellis Airport Traffic Control Tower and North Las Vegas Airport Control Tower Letter of Agreement.

A6.2.2. Performances at Nellis. Aerobatic maneuvers shall be contained within the arcs defined by a 3 NM radius from the LSV 093-243 degree radial and a 5 NM radius from the LSV 243-093 degree radial, from the surface to 18,000 feet MSL. The 3 NM area may be expanded to 5 NM with prior approval from Las Vegas TRACON. The 5 NM shelf must be coordinated NLT 72 hours in advance with Las Vegas TRACON.

A6.2.3. Training at Creech AFB. The area used for Thunderbird training is at Creech AFB up to 18,000 feet MSL. This area extends 5 NM from show center (approximately the center of RWY 08/26). Aircraft must remain clear of this area when Thunderbird Airspace is active. For information on Thunderbird activities from Nellis AFB, contact 57 OSS/OSOS (scheduling) or the USAFADS. Creech AFB AMOPS will ensure NOTAMs are published outlining active Thunderbird airspace times at least 24 hours prior to use.

A6.3. Thunderbird Departures.

A6.3.1. A Thunderbird Departure is a VFR departure specified in this attachment (i.e., Thunderbird Split-S Departure, Thunderbird Loop Departure, etc.) with an AB climb to altitude requested and a turn to intercept the LSV R-270 outbound within 5 DME. Thunderbird aircrew will file the LSV210 stereo route when departing on a Thunderbird Departure and requesting Creech AFB/R4806 training airspace.

A6.3.1.1. After completion of a Thunderbird Departure, the flight will then complete the applicable departure (i.e., LSV210 stereo route) or request direct Creech AFB from departure control.

A6.3.1.2. Thunderbird Departures may be combined with one another (i.e. Thunderbird Split-S Departure with Loop, Thunderbird West Departure with Split-S and Loop, etc.); when being combined, the departure phraseology will be combined.

A6.3.2. Thunderbird Split-S Departure. On takeoff, the aircraft performing the Split-S will perform an AB climb no higher than 7,000 feet MSL and then reverse course vertically to a low approach opposite direction. The aerobatic maneuver will remain within the confines of the airfield (no farther than either end of the departure runway). The flight will then complete the applicable departure or request direct Creech AFB from departure. Note: The first aircraft airborne will perform the Spilt-S maneuver and pull up to west downwind once complete, unless coordinated differently with tower. Subsequent aircraft will fly the normal ground track and altitudes for the active runway. The Split-S aircraft will join the flight from west downwind at the departure end of the runway. The entire procedure takes place within tower airspace. After join-up all aircraft will fly the filed departure procedure.

A6.3.2.1. PHRASEOLOGY: "*NELLIS GROUND, THUNDERBIRD 1 REQUEST TAXI WITH INFORMATION BRAVO, THUNDERBIRD SPLIT-S DEPARTURE, EIGHT THOUSAND, FIVE HUNDRED.*" "*THUNDERBIRD 1, NELLIS GROUND, RUNWAY 21, TAXI VIA (ROUTE AS NECESSARY), THUNDERBIRD SPLIT-S DEPARTURE, EIGHT THOUSAND, FIVE HUNDRED ON REQUEST.*" "*NELLIS TOWER, THUNDERBIRD 1 READY FOR DEPARTURE, THUNDERBIRD SPLIT-S DEPARTURE, EIGHT THOUSAND, FIVE HUNDRED ON REQUEST.*" "*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD SPLIT-S DEPARTURE, EIGHT THOUSAND, FIVE HUNDRED APPROVED, (takeoff clearance).*"

A6.3.2.2. Estimated time to complete the Thunderbird Split-S Departure is 1+30 from when the Thunderbird lead element begins departure roll until the lead is established on LSV R-270 outbound.

A6.3.3. Thunderbird Loop Departure. On takeoff the Diamond will perform a loop over the airfield then execute the filed departure. The apex of the loop will be at a requested altitude.

A6.3.3.1. PHRASEOLOGY: “*NELLIS GROUND, THUNDERBIRD 1 REQUEST TAXI WITH INFORMATION BRAVO, THUNDERBIRD LOOP DEPARTURE, NINE THOUSAND.*” “*THUNDERBIRD 1, NELLIS GROUND, RUNWAY 21, TAXI VIA (ROUTE AS NECESSARY), THUNDERBIRD LOOP DEPARTURE, NINE THOUSAND ON REQUEST.*” “*NELLIS TOWER, THUNDERBIRD 1 READY FOR DEPARTURE, THUNDERBIRD LOOP DEPARTURE, NINE THOUSAND ON REQUEST.*” “*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD LOOP DEPARTURE, NINE THOUSAND APPROVED, (takeoff clearance).*” Note: Aircraft may not be holding at the intersection of Taxiway Bravo and the runway being utilized for the loop departure when the loop departure is being executed.

A6.3.3.2. Thunderbird lead would prefer to delay their departure rather than accept a lower altitude loop restriction. The altitude requested has been preplanned prior to departure and amending the altitude may impact safety. As needed, Nellis Tower will inform the Thunderbird lead of the expected delay.

A6.3.3.3. Thunderbird pilots may delay departure roll when the lead visually observes civilian traffic safely transitioning “above” the loop altitude due to concerns with activating TCAS on-board the civilian aircraft. Thunderbird lead will advise Nellis Tower of any delays to their departure roll.

A6.3.3.4. Estimated time to complete the Thunderbird Loop Departure is 2+30 from when the Thunderbird lead element begins departure roll until the lead is established on LSV R-270 outbound.

A6.3.4. Thunderbird West Departure. On takeoff the Diamond will proceed in a westerly direction toward FLEX (but not overflying FLEX) and climbing to a requested altitude. They will then turn back inbound from the vicinity of FLEX to fly over the Thunderbird hangar at 500 feet AGL. Crossing the runways the formation will turn in the appropriate direction to execute the filed departure.

A6.3.4.1. PHRASEOLOGY: “*NELLIS GROUND, THUNDERBIRD 1 REQUEST TAXI WITH INFORMATION BRAVO, THUNDERBIRD WEST DEPARTURE, EIGHT THOUSAND, FIVE HUNDRED.*” “*THUNDERBIRD 1, NELLIS GROUND, RUNWAY 21, TAXI VIA (ROUTE AS NECESSARY), THUNDERBIRD WEST DEPARTURE, EIGHT THOUSAND, FIVE HUNDRED ON REQUEST.*” “*NELLIS TOWER, THUNDERBIRD 1 READY FOR DEPARTURE, THUNDERBIRD WEST DEPARTURE, EIGHT THOUSAND, FIVE HUNDRED ON REQUEST.*” “*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD WEST DEPARTURE, EIGHT THOUSAND, FIVE HUNDRED APPROVED, (takeoff clearance).*”

A6.3.4.2. Estimated time to complete the Thunderbird West Departure is 3+30 from when the Thunderbird lead element begins departure roll until the lead is established on LSV R-270 outbound.

A6.3.5. Thunderbird Clover Loop Departure. On takeoff execute the Thunderbird West Departure. Once approaching the runways from over the Thunderbird hangar the formation will begin a pull up into a loop, apexing at no higher than 12K MSL. At the apex of the loop the formation will rotate 90 degrees right to align with a RWY 03L/R heading and continue to

pull through until recovered aligned with the runway. Once the Clover Loop is complete the formation will turn to execute the filed departure (i.e., LSV210 stereo route).

A6.3.5.1. Thunderbird Clover Loop Departure is only authorized when combined with the Thunderbird West Departure.

A6.3.5.2. PHRASEOLOGY: “*NELLIS GROUND, THUNDERBIRD 1 REQUEST THUNDERBIRD WEST DEPARTURE WITH CLOVER LOOP, TWELVE THOUSAND.*” “*THUNDERBIRD 1, NELLIS GROUND, TAXI TO RUNWAY 21, THUNDERBIRD WEST DEPARTURE WITH CLOVER LOOP, TWELVE THOUSAND ON REQUEST.*” “*NELLIS TOWER, THUNDERBIRD 1 READY FOR DEPARTURE, THUNDERBIRD WEST DEPARTURE WITH CLOVER LOOP, TWELVE THOUSAND ON REQUEST.*” “*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD WEST DEPARTURE WITH CLOVER LOOP, TWELVE THOUSAND APPROVED, (takeoff clearance).*”

A6.3.5.3. Estimated time to complete the Thunderbird West Departure with Clover Loop is 5+10 from when the Thunderbird lead element begins departure roll until the lead is established on LSV R-270 outbound.

A6.3.6. Thunderbird Diamond Split-S Departure. On takeoff the Diamond formation will perform an AB climb no higher than the altitude requested (no higher than 12K MSL) and then reverse course vertically to a low approach the opposite direction. This maneuver may extend 1NM past the end of the runway where the vertical apex occurs.

A6.3.6.1. The flight will then complete the applicable departure or request direct Creech AFB from departure.

A6.3.6.2. PHRASEOLOGY: “*NELLIS GROUND, THUNDERBIRD 1 REQUEST THUNDERBIRD DIAMOND SPLIT-S DEPARTURE, TWELVE THOUSAND.*” “*THUNDERBIRD 1, NELLIS GROUND, TAXI TO RUNWAY 21, THUNDERBIRD DIAMOND SPLIT-S DEPARTURE, TWELVE THOUSAND ON REQUEST.*” “*NELLIS TOWER, THUNDERBIRD 1 READY FOR DEPARTURE, THUNDERBIRD DIAMOND SPLIT-S DEPARTURE, TWELVE THOUSAND ON REQUEST.*” “*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD DIAMOND SPLIT-S DEPARTURE, TWELVE THOUSAND APPROVED, (takeoff clearance).*”

A6.3.6.3. Estimated time to complete the Thunderbird Diamond Split-S Departure is 2+30 from when the Thunderbird lead element begins departure roll until the lead is established on LSV R-270 outbound.

A6.3.7. Thunderbird Departure Combined Phraseology Example. “*NELLIS GROUND, THUNDERBIRD 1 REQUEST TAXI WITH INFORMATION BRAVO, THUNDERBIRD WEST DEPARTURE WITH SPLIT-S AND LOOP, EIGHT THOUSAND FIVE HUNDRED.*” “*THUNDERBIRD 1, NELLIS GROUND, TAXI TO RUNWAY 21, THUNDERBIRD WEST DEPARTURE WITH SPLIT-S AND LOOP, EIGHT THOUSAND FIVE HUNDRED ON REQUEST.*” “*NELLIS TOWER, THUNDERBIRD 1 READY FOR DEPARTURE, THUNDERBIRD WEST DEPARTURE WITH SPLIT-S AND LOOP, EIGHT THOUSAND FIVE HUNDRED ON REQUEST.*” “*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD WEST DEPARTURE WITH SPLIT-S AND LOOP, EIGHT THOUSAND FIVE HUNDRED APPROVED, (takeoff clearance).*”

A6.3.8. Denials. Phraseology to deny a departure request will be “unable *name of procedure or portion of the procedure.*”

A6.3.8.1. Denial Phraseology Example. “*THUNDERBIRD 1, NELLIS TOWER, UNABLE THUNDERBIRD SPLIT-S DEPARTURE WITH LOOP, THUNDERBIRD WEST DEPARTURE, EIGHT THOUSAND FIVE HUNDRED APPROVED* (*takeoff clearance*).”

A6.4. Arrival Procedures.

A6.4.1. Thunderbird Pitch Arrival.

A6.4.1.1. The Thunderbird formation will enter the pattern from FLEX or VFR recovery procedure. The formation then descends to execute a low approach at 380 to 450 KIAS and 200 to 500 feet AGL followed by single ship, closed traffic patterns. The Thunderbird Pitch will not be approved to RWY 03L/R if there are aircraft in the pattern to RWY 03L. Thunderbird solo pilots will conduct the Thunderbird Pitch from a starting point of an upright or inverted position.

A6.4.1.2. Thunderbird aircrew may request a specific altitude (no higher than 9,500' MSL) when landing RWY 21L/R. If approved by ATC, the aircraft will begin an expedited descent NLT 5 NM from LSV.

A6.4.1.3. PHRASEOLOGY: “*NELLIS TOWER, THUNDERBIRD 1, 15 TO THE WEST REQUEST THUNDERBIRD PITCH ARRIVAL.*” “*THUNDERBIRD 1, NELLIS TOWER, LEFT PITCH RUNWAY 21L.*”

A6.4.2. Thunderbird Delta Blue Out Pitch Up Arrival. An aerobatic maneuver that can begin with any arrival procedure. At the ‘pitch’, the Solo pilots (far left and right) will pull closed in both directions. Simultaneously, the Diamond pilots will perform a Thunderbird pitch. The Solo pilots will perform low approaches from left and right downwind concluding with closed pull-ups from either aileron rolls or inverted flight. The Solos time the low approaches and pull-ups to inside downwind to fall in trail with the other aircraft to land in numerical order. Note: This procedure will not be approved if any other aircraft are operating within Nellis Tower’s AOR, or if other aircraft are inbound within one minute of the Thunderbird flight. It takes approximately 45 seconds for the Solos to conclude the maneuver and level on west downwind.

A6.4.2.1. PHRASEOLOGY: “*NELLIS TOWER, THUNDERBIRD 1, 15 TO THE WEST REQUEST THUNDERBIRD DELTA BLUE OUT PITCH UP ARRIVAL.*” “*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD DELTA BLUE OUT PITCH UP ARRIVAL APPROVED, LEFT PITCH RUNWAY 21L.*”

A6.4.3. Thunderbird West Arrival.

A6.4.3.1. An arrival procedure beginning between GASS PK and Clark County Shooting Park and proceeding in an easterly direction to cross directly over the Thunderbird hangar at 500 feet AGL, then up into a 6,000 feet MSL vertical turnaround to the landing runway, followed by a Thunderbird Pitch to a full stop landing. Note: This procedure will not be approved if any other aircraft are operating within Nellis Tower’s AOR.

A6.4.3.2. PHRASEOLOGY: “*NELLIS TOWER, THUNDERBIRD 1, 15 TO THE WEST REQUEST THUNDERBIRD WEST ARRIVAL.*” “*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD WEST ARRIVAL APPROVED, LEFT PITCH RUNWAY 21L.*” Note: If

the Thunderbirds choose to follow the Thunderbird West Arrival with a Delta Blue Out Pitch Up, they will make that request in conjunction with the Thunderbird West Arrival request.

A6.4.4. Thunderbird Rapid Recovery.

A6.4.4.1. RWY 21L/R. A recovery procedure that terminates a pre-coordinated Las Vegas flyby located south of Nellis such as a professional event (i.e., Las Vegas Raiders, etc.). After the flyby event and Thunderbird lead is communicating with Nellis ATC, the recovery procedure continues north (Thunderbirds specify ground track/altitudes; remain w/in 5 nm and no higher than 4K MSL) to a full stop landing. Note: This procedure will not be approved if any other aircraft are operating within the Nellis Tower's AOR.

A6.4.4.2. RWY 03L/R. A recovery procedure that terminates a pre-coordinated Las Vegas flyby located south of Nellis such as a professional event (i.e., Las Vegas Raiders, etc.). After the flyby event and the Thunderbird lead is communicating with Nellis ATC, the recovery procedure continues north (Thunderbirds specify ground track/altitudes; remain w/in 5 NM and no higher than 4K MSL) to a full stop landing. Note: This procedure will not be approved if any other aircraft are operating within the Nellis Tower's AOR.

A6.4.4.3. PHRASEOLOGY: "*NELLIS TOWER, THUNDERBIRD 1, 10 MILES TO THE SOUTH, REQUEST THUNDERBIRD RAPID RECOVERY RUNWAY 21R.*" "*THUNDERBIRD 1, NELLIS TOWER, THUNDERBIRD RAPID RECOVERY RUNWAY 21R APPROVED.*"

A6.5. Confirmation of Clearances.

A6.5.1. If there is any confusion from the read back ATC receives from the Thunderbirds, ATC must clarify before allowing the procedure to commence.

A6.5.2. If the Thunderbirds do not hear ATC read back all of their requests, they must query ATC before proceeding with the procedure.

A6.6. Thunderbird Over-the-Field Nellis Procedures, USAFADS Over the Field Practice, COMACC Acceptance Show and Aviation Nation.

A6.6.1. USAFADS Over The Field (OTF) restrictions. During the time periods where the USAFADS is executing OTF Nellis, the following restrictions apply to local flying and ground operations when the USAFADS aerobatic container is active ([Figure A6.3](#)):

A6.6.1.1. Airfield restrictions are:

A6.6.1.1.1. No taxi, take-offs, landings, or low approaches.

A6.6.1.1.2. Aircraft with emergency situations will recover to Nellis if required by checklist guidance. The practice will be suspended during recovery of the emergency aircraft. Aircraft airborne during the aforementioned periods will plan mission fuel to RTB NET the end of the window.

A6.6.1.2. Ground movement restrictions: Prior to the commencement of the Thunderbird OTF event, all aircraft, vehicles and personnel will be clear of the aerobatic container (See [Figure A6.1](#)). During the flying demonstration, all aircraft, vehicles and personnel will remain clear of the area east of the red line that lies between the main ramp and taxiway F, from the south to the north end of the airfield, to include west and south of the Primary Hot

Cargo Pad, the DOE ramp, Transient East and the segment of taxiway G to taxiway B, and taxiway A.

Figure A6.1. Aerobatic Container.



A6.6.2. The USAFADS will inform 57 OSS/OSOS via normal O-71 scheduling process (~ 60 days prior) to request OTF Nellis airspace and activation of Thunderbird aerobatic container. 57 OSS/OSOS will process this request and deconflict from local flying via normal scheduling procedures. Once approved, 57 OSS/OSOS will disseminate the OTF times via “Nellis Distro A” email group to include the above restrictions (A6.5.1.1 and A6.5.1.2) and aerobatic container depiction ([Figure A6.3](#)). Email recipients, particularly those who work on the flight line, please ensure dissemination to all affected personnel in your organization.

A6.6.3. 57 OSS/OSAA will issue the appropriate NOTAM and 57 OSS/OSAT will place the necessary information on the ATIS. The USAFADS Operations Officer will inform the SOF that the ground movement restrictions are no longer in effect if the Thunderbird OTF event ends early.

A6.6.3.1. Example NOTAMS:

A6.6.3.1.1. Aviation Nation: DURING THUNDERBIRD DEMO (XXXX-XXXXXL)
ALL VEHICLE/PERSONNEL MUST REMAIN CLEAR OF TWY FOXTROT (

EAST OF THE RESTRICTED AREA LINE) ALONG THE MAIN PARKING APRON TO TWY GOLF BETWEEN TWY ALPHA AND TWY ECHO TO INCLUDE TRANSIENT EAST AND DOE RAMP EXCEPT AS AUTHORIZED BY THUNDERBIRD CONTROL. DURING ALL OTHER AERIAL DEMONSTRATIONS, VEHICLE MOVEMENT IS RESTRICTED TO ALL BUT ESSENTIAL OPERATIONS ON TWY FOXTROT (EAST OF THE RESTRICTED AREA) ALONG THE MAIN PARKING APRON AND ON TWY GOLF BETWEEN TWY ALPHA AND TWY ECHO. ESSENTIAL OPERATIONS ARE VEHICLES AUTHORIZED BY AIRBOSS OR AUTHORIZED VEHICLES DIRECTLY SUPPORTING AIRSHOW FUNCTIONS (POL, OPS, SWEEPER, FIRE DEPT, ETC.).

A6.6.3.1.2. USAFADS OTF practice/COMACC acceptance show: USE CAUTION HIGH SPEED DEMONSTRATION ACFT SURFACE TO 18,000 MSL WITHIN 5NM OF LSV. AIRSPACE WILL BE SANITIZED FROM XXXX-XXXX (NO ARR/DEP). EXPECT DELAYS IF UNABLE TO DEPART PRIOR TO XXXXL. ACFT MAY TAXI/DEPART PRIOR TO XXXX AND MUST NOT INTERFERE WITH DEMO ACFT. ALL VEHICLE/PERSONNEL MUST REMAIN CLEAR OF TWY FOXTROT (EAST OF THE RESTRICTED AREA LINE) ALONG THE MAIN PARKING APRON EAST TO (AND INCLUDING) TWY GOLF BETWEEN TWY BRAVO AND TWY ECHO TO INCLUDE THE HOT CARGO PAD, TRANSIENT EAST, THE DOE RAMP AND TWY ALPHA EXCEPT AS AUTHORIZED BY THUNDERBIRD CONTROL.

A6.6.3.1.3. Ramp Freeze: NO VEHICLE, PERSONNEL, OR AIRCRAFT MOVEMENT ON TWY FOXTROT BETWEEN ROWS 36-42. NO ENGINE STARTS/RUNS ON ROWS 32-46 DURING THUNDERBIRD GROUND DEMONSTRATIONS. OPERATIONS ARE UNRESTRICTED FOR THE REMAINDER OF THE RAMP, REVETMENTS, AND LOLA.

A6.6.3.1.4. Show markers: Corner Markers: UNLIT OBSTRUCTION (VEHICLES) LOCATED AT THE INTERSECTION OF TAXIWAY FOXTROT AND DELTA (N36.14.042, W115.2.447.). UNLIT OBSTRUCTION LOCATED SOUTH OF THE INTERSECTION OF TWY BRAVO AND FOXTROT (N36.14.765, W115.1.810.) 44 Pax Bus: UNLIT OBSTRUCTIONS (VEHICLES) LOCATED ON SOUTHSIDE OF TWY B NEXT TO RUNWAY 21L (N36.14.242, W115.1.900). UNLIT OBSTRUCTION LOCATED 100FT INFIELD OF RUNWAY 21L (N36.13.954, W115.2.213).

A6.7. USAFADS Support Aircraft Parking.

A6.7.1. Airfield Operations (57 OSS/OSAA), and Nellis Support Center (99 LRS) will arrange parking for USAFADS support aircraft (Callsign TBIRD 14/15) using the following prioritized options.

A6.7.1.1. Parking spots for C-17 aircraft supporting USAFADS (in priority order):

A6.7.1.1.1. Option 1: TBIRD 14 will be parked on spot 36 “outboard” with the nose of the aircraft facing north. The purpose of this location is to minimize jet blast and

FOD for F-22s parked south of row 36 while also ensuring efficient upload and download of USAFADS personnel and cargo.

A6.7.1.1.2. Option 2: In the event Spot 36 outboard is unavailable, TBIRD 14 will be parked on spot 36 “inboard” with the nose facing south. USAFADS F-16s will take necessary measures to ensure they are not negatively impacted by the C-17s jet blast.

A6.7.1.1.3. Option 3: In the event that spot 36 (inboard and outboard) are unavailable, TBIRD 14 will be parked on transient west or transient east. Transient west is preferable over transient east for upload and download efficiency.

A6.7.1.2. Parking spots for C-130 aircraft supporting USAFADS (in priority order):

A6.7.1.2.1. Option 1: Both aircraft will be parked on spot 36 (inboard and outboard).

A6.7.1.2.2. Option 2: Both aircraft will be parked in close proximity on transient west or transient east. Transient west is preferable over transient east for upload and download efficiency.

A6.7.2. 57 OSS/OSAA will balance the USAFADS requests for spots 36 and transient west with other units’ requirements for these spots (Red Flag, Green Flag, WIC integration, etc.). The parking option chosen will be communicated via the bi-monthly parking meeting hosted by 57 OSS/OSAA.

Attachment 7**HELICOPTER AND TILTROTER OPERATIONS**

A7.1. Introduction. This attachment provides procedural guidance, training restrictions and general information pertinent to helicopter and tiltrotor operations at Nellis AFB. Throughout this attachment, the term helicopter also refers to tiltrotor aircraft. This attachment is not a single source document and must be used in conjunction with unit standard operating procedures (SOP) and policy directives. If a perceived conflict exists between this chapter and other applicable publication, the most restrictive guidance applies. Flight procedures changes of an immediate nature are in the FCIF, Operations Read File and the Aircrew Information File.

A7.2. General Policy. Unless otherwise specified below, this attachment applies to all helicopter aircrew assigned, attached or deployed to Nellis AFB. 57 WG/WGV is responsible for developing and administering the contents of this attachment. Proposed changes should be processed through 57 WG/WGV.

A7.3. Mission Planning/Preparation. In accordance with unit SOP.

A7.3.1. Portable Flight Planning Software (PFPS) Support. For administrative PFPS support, contact the System Support Representatives or 57 WG/WGV.

A7.4. Clearance and Taxi Procedures. Locally based helicopters will normally park in the Jolly Ramp area in front of 66th Rescue Squadron (66 RQS) or the Ramp in front of the hush houses adjacent to Juliet Taxilane. Helipads are controlled movement areas requiring aircraft to receive clearance from Nellis ATC prior to entry and exit. Aircraft will contact Nellis Ground with: call sign, ATIS information, pad (Jolly or Transient), departure, squawk and flight-following intentions prior to taxi. Aircraft will contact Nellis Tower short of the pad to receive clearance to taxi onto the pad. Aircraft will monitor Nellis Tower once established on the helipad. Following hover checks, contact Nellis Tower for takeoff clearance.

A7.4.1. Arriving aircraft will be directed to an open helipad if traffic is located on the requested landing pad. After landing at Jolly or Transient Helipad, aircraft will clear off the pad with Tower then taxi direct to parking while monitoring Nellis Ground.

A7.4.2. Tower will direct all transient helicopter traffic to the Transient Helipad. AMOPS or TA normally assigns specific parking.

A7.4.3. V-22 aircraft will not takeoff, land or conduct hover operations on the Jolly Pad.

A7.5. Operations within Class B Airspace. Upon departing Class B airspace, aircraft shall not re-enter without ATC approval. ATC clearance for any of the Class B departures/arrivals constitutes clearance to operate within Class B airspace.

A7.6. Helicopter VFR Departure/Arrival Routes. Departure routes are detailed below. For arrivals, fly the reverse of the departure routing. If other routings are desired, coordinate with Nellis Tower. Clearance will be obtained from Nellis Tower prior to crossing the extended runway within 5 NM. Avoid North Las Vegas Class D airspace during west arrivals and departures. Use caution for five antennas located at LSV R-312 1.7 DME (2,248 feet MSL). All procedures are not for use in IMC. Comply with AFI 11-2MDSV3 VFR weather minimums for all procedures. Aircrew are responsible for terrain/obstacle avoidance. During periods of inclement weather when the reported ceiling and/or visibility is less than VFR minimums, helicopter pilots may request a

Special VFR clearance to depart/arrive Nellis AFB. Class Bravo clearances will be issued in accordance with direction of flight requested.

A7.6.1. Teardrop Modification. A modification to a published departure to initially takeoff southerly or arrival procedure to land northerly for adverse winds. Example of clearance: "REQUEST TEARDROP GASS PEAK DEPARTURE." Takeoff south-bound avoiding over flight of aircraft on the taxiway when below 200 feet AGL. Remain west of the inside runway. Remain below 500 feet AGL and proceed with requested departure.

A7.6.2. GASS PEAK Departure/Arrival. Depart helipad north direct Las Vegas International Speedway marquee/I-15. Avoid five 300' towers just to the West of Sloan Ln. Once reaching marquee/I-15, turn west direct I-215 and Pecos Rd intersection (just north of the VA hospital) and then on course. Remain at or below 500' AGL until clear of Class B airspace. Use caution for power lines in the vicinity ([Figure A7.1](#)).

A7.6.3. Dry Lake Departure/Arrival. Depart north/northeast to cross the North Gap (approximately 2 NM east of Jettison Hill with power line going through the gap). Remain at or below 500 feet AGL until clear of Class B airspace. Use caution for aircraft operating at Winner LZ.

A7.6.4. Red Horse Departure/Arrival. Depart helipad north until intersecting I-15. Turn right to parallel I-15 until abeam the sand dunes (N36 36.87 W114 56.05). Proceed direct to the sand dunes and remain at or below 500 feet AGL until clear of Class B airspace.

A7.6.5. Sunrise Departure/Arrival. Depart the helipad direct to the South Gap (Lake Mead Blvd between Sunrise and Frenchman Mountain). Remain at or below 500 feet AGL until clear of Class B airspace.

A7.6.6. RED FLAG Departure/Arrival. Helicopters parked on the DOE ramp should depart the airfield from Taxiway Golf, paralleling the active runway to the northeast until cleared by Nellis Tower controllers to cross the runway's extended centerline. Continue departure and maintain at or below 500 feet AGL until clear of Class B airspace and proceed to "Dry Lake" (N3627.68 W11452.21). During arrivals or departures, monitor local helicopter common frequency (UHF-AM 259.0) for advisory of helicopter traffic using call signs "Jolly, Mongoose or Sting." (POC is RED FLAG Chief of Rotary Wing Operations).

A7.7. Traffic Pattern.

A7.7.1. At Nellis. RWY 03/21 pattern altitude 2,500 feet MSL, with downwind east of the field. Base and crosswind limits are the Golf Course to the south and within 300 meters of Perimeter Road fire pit to the north. On a workload permitting basis, locally assigned helicopters will be authorized to fly practice approaches to Taxiway Golf with prior approval from Nellis Tower. Helicopters will not fly below 200 feet AGL over any parked or taxiing aircraft or vehicle, except in an emergency or when mission requirements dictate flight below this altitude. Do not over fly aircraft on the DOE ramp. Practice instrument approaches for helicopters are normally flown to RWY 21L. Standard climb out for subsequent VFR approaches will be: "CROSS DEPARTURE END AT OR BELOW 3,000, TURN RIGHT HEADING 350, MAINTAIN VFR AND CONTACT APPROACH."

A7.7.2. During periods of inclement weather when the reported ceiling and/or visibility is less than VFR minima, local helicopter pilots may request a Special VFR clearance to depart/arrive LSV. Class Bravo clearances will be issued IAW direction of flight requested.

A7.8. Helicopter Air Refueling (AR) Anchors.

A7.8.1. AR-230V: Helicopter refueling track located in the east LATN area, LAS VORTAC 025/46 to 025/81. Los Angeles is the assigned ARTCC. The scheduling agency is the 57 OSS/OSOS.

A7.8.2. AR-231V: Helicopter refueling track located in the west LATN area, BTY VORTAC 124/42 to 124/05. Los Angeles is the assigned ARTCC. The scheduling agency is the 57 OSS/OSOS.

A7.8.3. There are two rotary wing hot refueling areas on Taxiway Hotel north of the Transient Helipad.

A7.9. Water Operations. Water operations are conducted at Lake Mead in the vicinity of Black Island (N36 06.00 W114 46.20). Only locally assigned units may conduct water operations at Lake Mead. Transient units require prior coordination with the National Park Service before conducting operations. Training activities will be conducted near the center of the water area and must not interfere with the normal activities of the public. Use caution for air tour operators (VHF 120.650 is Lake Mead traffic common frequency) and boaters. If expendables are used (to include chem lights), pass their coordinates to the boat party so they can retrieve them from the water. Sea dye or smokes are not authorized in Lake Mead. Other areas in Lake Mead may be used if coordinated with Park officials and approval is obtained prior to operations. Additional activities requiring coordination/approval with park officials are any training on weekends and holidays and parachute operations at any time.

A7.10. Local Gunnery and Range Procedures/Restrictions. Prior to takeoff, the aircraft commander/flight lead will confirm the range schedule and live-fire targets with Blackjack. After takeoff and prior to range entry, contact range control and request "tactical." Once "cleared as scheduled, cleared tactical" is received, aircraft are cleared for scheduled ranges/times and cleared to fire on coordinated target. Prior to departing the range, contact range control with status. Aircraft commanders will ensure specific range procedures are briefed to ensure fields of fire procedures are thoroughly understood. All other gunnery and range procedures will be IAW NAFBI 11-250, AFI 11-2MDSV3, AFMAN 13-212V1, ACC Sup, NTTR Addendum A, MDS gunnery procedures and unit SOP.

A7.10.1. Hot Gun Procedures. Terminate live fire, safe all switches and return to Nellis. Contact Blackjack and Nellis Approach, inform them you have an unsafe gun and declare an emergency. Contact Tower, relay intentions and advise the aircraft is configured with side firing guns. Return to Nellis and request an approach to Golf taxiway revetments 1-2 (see **Attachment 2**). Land with the gun pointed between the revetment walls towards the berm. Wait for maintenance to secure the gun. Aircraft engine shutdown is not necessary.

A7.11. FCF Procedures. FCF procedures requiring a runway will be conducted at Nellis AFB. FCFs will normally be flown in the airspace as described below:

A7.11.1. West FCF Area. Northern Boundary: An east-west line running through GASS (N36 23.7). Southern Boundary: An east-west line running through N36 17.0. Eastern

Boundary: Power lines running north and south on the east side of Apex peak (Elevation 4,108 feet MSL). Western Boundary: US 95. Floor is 500 feet AGL and the ceiling is as directed by ATC.

A7.11.2. East FCF Area. Area boundary references are: Sunrise Mountain (N36 14.0 W114 59.0), Gypsum Mine (N36 13.0 W114 53.0), Piute Point (N36 27.0 W114 40.0) and the Road Bend (N36 28.0 W114 44.0). The floor is 500 feet AGL and the ceiling is as directed by ATC.

A7.12. Instrument Procedures. IAW AFMAN 11-202V3 and AFMAN 11-2HH60V3.

A7.12.1. Practice instrument approaches for helicopters are normally flown to RWY 21L. Standard IFR climb out for subsequent approaches will be IAW [paragraph 4.17](#).

A7.12.2. Search and Rescue (SAR) IFR “Active/Training” Departure Procedures.

A7.12.2.1. SAR IFR “Active” Departure. Designed to assist 66 RQS respond to SAR missions routed southeast of Nellis and when an expedited VFR east/southeast departure/Special VFR clearance cannot be executed due to IMC conditions.

A7.12.2.2. SAR IFR “Training” Departure. Designed to assist local rotary units (66 RQS/88 TES/34 WPS) to conduct instrument departure training from Nellis AFB. To the maximum extent possible, SAR IFR “Training” departures will be scheduled so as to limit impact to fixed wing flying operations.

A7.12.2.3. SAR IFR “Live/Training” crews shall file DD Form 1801 (LSV.LAS.BLD.southeast mission routing at 9,000 MSL) and include “Request radar vectors to LAS/Live “or” Training SAR mission” in the remarks section of the flight plan.

A7.12.2.4. NATCF shall assign a radar vector (RWY 21L/R) or obstacle departure procedure (RWY 03L/R) and initially assign 7,000; expect 9,000 10 minutes after departure.

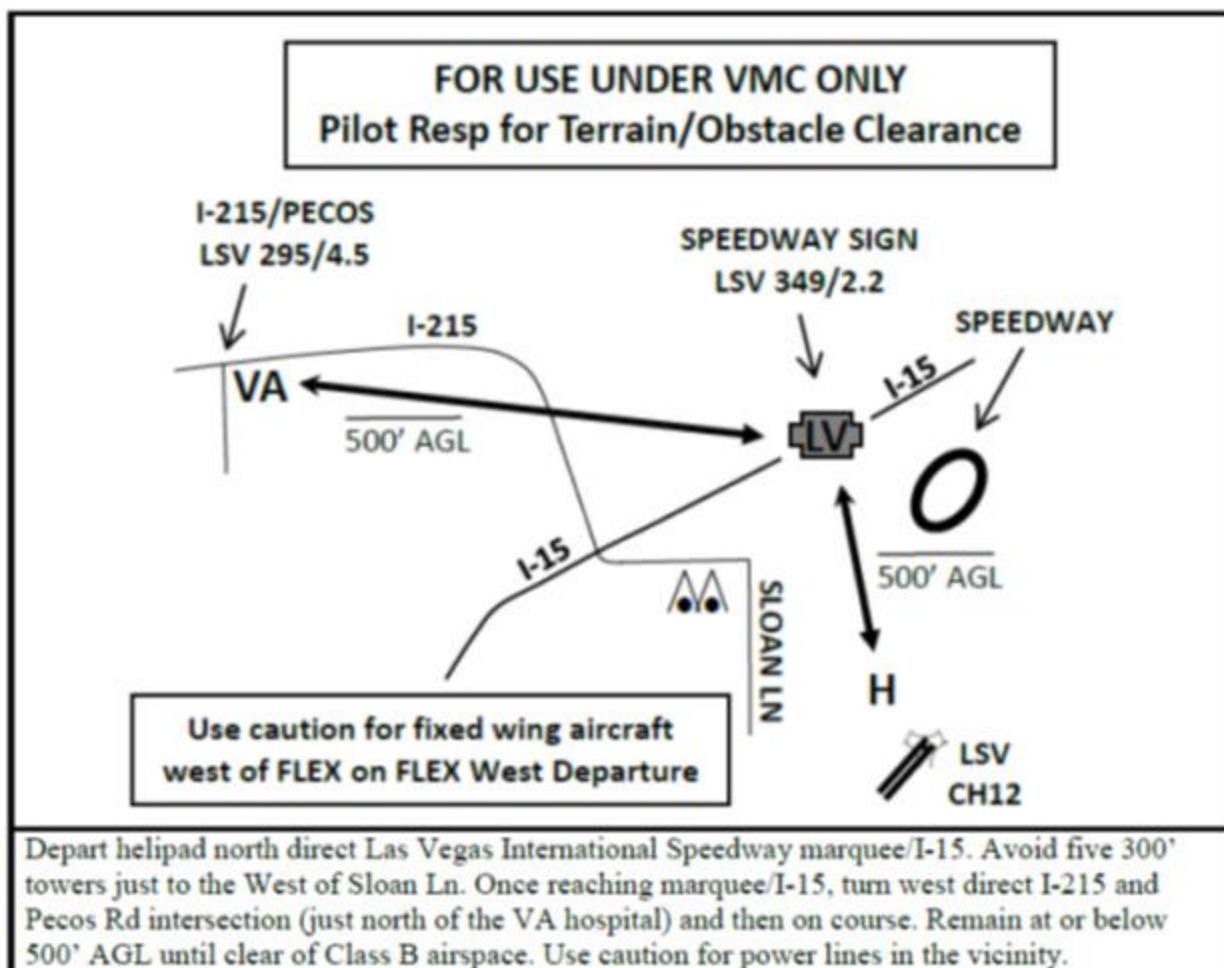
A7.13. Air Operations Security. IAW AFI 13-207-O, Preventing and Resisting Aircraft Piracy (Hijacking) (FOUO) and NAFB Plan 5.

A7.14. OPSEC/COMSEC Procedures. IAW AFI 10-701, Operations Security (OPSEC), AFMAN 17-1302 Communications Security (COMSEC) Operations.

A7.15. Lost Communication Procedures. If lost communications are experienced while VMC, squawk 7600, turn on landing/strobe lights and proceed with the GASS Peak or Red Horse arrival procedure. Follow Nellis Tower light gun signals to Jolly helipad. If lost communications are experienced while IMC, comply with the Flight Information Handbook.

A7.16. Gunfighter/Cobra Landing Zone (LZ) Procedures. The Gunfighter LZ is located to the northeast of Nellis runways at N36 14.701 W114 59.696. The Cobra LZ is located at N36 15.18 W114 58.98. The LZs are for use by Nellis assigned helicopters and ground personnel. Helicopters must be in contact with Nellis Tower, remain below 500 feet AGL (or as directed by tower) and within 1.5 miles of the LZ. Due to the close proximity of the MSA, users are responsible for notifying 99th Security Forces Base Defense Operations Center (BDOC) with the times of intended use prior to operating on the LZ. Users will ensure LZ surveys are on file and current prior to use.

Figure A7.1. GASS PEAK Departure/Arrival.



Attachment 8**A-10 SPECIFICS**

A8.1. Mission Planning and Ground Operations. Pilots will carry a completed A-10 Mission Data Card and 57 WG IFG on all flights. After landing, aircraft will not be taxied single engine, with only right hydraulic system operation or a pulled landing gear circuit breaker. Pilots may taxi clear of the runway with an operable left hydraulic system if the landing gear circuit breaker was not pulled.

A8.2. Fuel Requirements. The flight lead or instructor pilot will ensure Bingo fuel allows recovery to initial or the instrument final approach fix at least: 1,800 pounds for dual runway operations with traffic congestion. Appropriate fuel to divert is at least 1,500 pounds at the alternate field's FAF or initial.

A8.3. Low Altitude Tactical Navigation. A-10 pilots may fly LATN throughout the local flying area to their LOWAT category minimum.

A8.4. Weapons Employment. AFMAN 13-212V1, ACC Sup, NTTR Addendum A outlines range, target, ordnance and employment restrictions. Use video tape recorder (VTR) film, if available, on all air-to-air and air-to-surface missions. LATN areas ([Chapter 2](#)), minimum altitude is 100 feet AGL.

A8.5. Approved Alternate Missions. Instruments, LATN and Advanced Handling missions are approved alternate missions for 57 WG A-10 aircraft. Additionally, any mission in the 66 WPS USAFWS syllabus is an approved alternate mission provided it is less complex than the primary mission.

A8.6. Divert Instructions, Jettison Procedures/Parameters, Approved Alternate Missions and Cross-Country/Servicing Procedures. Are all located in the A-10 Supplement to the 57 WG IFG.

A8.7. A-10 VFR Departures. All opposite direction RWY 03 A-10 VFR Departures will execute the FLEX turnout regardless of inbound traffic.

Attachment 9**F-15/F-15E SPECIFICS**

A9.1. Fuel Requirements. Recommended VFR/IFR Bingo fuels are listed in the F-15 and F-15E supplements to the 57 WG IFG.

A9.2. Divert Instructions. Detailed divert procedures are located in the 57 WG IFG Guide and F-15/F-15E supplement.

A9.3. Radar Trail Recovery Procedures. Flight leads will brief procedures for establishing/maintaining trail, configuration and airspeed changes through landing. Aircrew will comply with procedures listed in **paragraph 4.15** of this instruction, AFI 11-2F-15 Volume 3, F-15—Operations Procedures, and AFI 11-2F-15E Volume 3, F-15E—Operations Procedures, and the following:

A9.3.1. After receiving clearance from ATC, flight leads will direct all flight members to execute the briefed procedures to establish trail. Desired spacing between successive aircraft in a flight is 1.5 - 2 NM (2 NM maximum).

A9.3.2. During any recovery profile (penetration, vectors, visual straight-in, etc.), each aircraft will fly the published ground track, comply with altitude restrictions, slow so as to arrive at the FAF (or 4.1 NM/5.6 DME final for RWY 03) configured to land and stabilized at 180 KIAS. Flight leads will direct this “decel” by radio. Each aircraft will report the FAF and gear down. Flight leads will notify the flight and slow to final approach speed at 3 NM final (4.5 DME for RWY 03).

A9.4. Abnormal Procedures. A departure from controlled flight will be reported to the squadron commander/operations officer.

A9.5. Approved Alternate Missions. Instruments and Advanced Handling missions are approved alternate missions for all 57 WG F-15s and F-15Es. Additionally, for USAFWS, any mission flown in the unit’s respective syllabus is an approved alternate mission provided it is less complex than the primary mission.

A9.6. Cross-Country Procedures. Aircraft specific guidance is located in the F-15/F-15E supplement to the 57 WG IFG.

Attachment 10**F-16 SPECIFICS**

A10.1. Fuel Requirements. Recommended VFR/IFR Bingo fuels are listed in the F-16 supplement to the 57 WG IFG.

A10.2. Divert Instructions. Detailed divert procedures are located in the 57 WG IFG and the F-16 supplement.

A10.3. Radar Trail Recovery Procedures. Flight leads will brief procedures for establishing/maintaining trail, configurations, and airspeed changes through landing. Pilots will comply with all procedures listed in **paragraph 4.15** of this instruction, AFI 11-2F-16V3 and the following:

A10.3.1. After receiving clearance from ATC, flight leads will direct all flight members to execute the briefed procedures to establish trail. Desired spacing between successive aircraft in a flight is 1.5 to 2 NM (2 NM maximum).

A10.3.2. During any recovery profile (penetration, vectors, visual straight-in, etc.), each aircraft will fly the published ground track, comply with altitude restrictions, slow so as to arrive at the FAF (or 4.1 NM/5.6 DME final for RWY 03) configured to land and stabilized at 180 KIAS. Flight leads will direct this “decel” by radio. Each aircraft will report the FAF and gear down. Flight leads will notify the flight and slow to final approach speed at 3 NM final (4.5 DME for RWY 03).

A10.4. Approved Alternate Missions. Instruments and advanced handling missions are approved alternate missions for all 57 WG F-16 units. Additionally, for USAFWS and 64 AGRS, any mission flown in the unit’s respective syllabus is an approved alternate mission provided it is less complex than the primary mission. 549 CTS F-16 pilots will comply with approved alternate mission guidance provided by the squadron(s) with which they fly. USAFADS will specify approved alternate missions in unit operating procedures/standards.

A10.5. Cross-Country Procedures. F-16 specific guidance is located in the F-16 supplement to the 57 WG IFG.

A10.6. F-16 FCF Profiles. Profiles must be performed to enable a glide to a suitable airfield (i.e. Nellis AFB or Creech AFB) in the event of engine failure during engine checks. Departure will be via DREAM Departure; all profiles will be cleared for maximum climb, using Runway 3 if winds permit. Scheduling of the X-Ray extension and Sally Corridor is required to ensure F-16 FCF pilots can complete the engine checks and still be within gliding distance to Nellis or Creech.

Attachment 11**F-22A SPECIFICS**

A11.1. Fuel Requirements. Recommended VFR/IFR Bingo fuels are listed in the F-22A supplement to 57 WG IFG.

A11.2. Divert Instructions. Detailed divert procedures are located in the 57 WG IFG and F-22A Supplement.

A11.3. Radar Trail Recovery Procedures. Flight leads will brief procedures for establishing/maintaining trail, configuration and airspeed changes through landing. Pilots will comply with procedures listed in **paragraph 4.15** of this instruction, AFI 11-2FA-22 Volume 3, F-22A—Operations Procedures, and the following:

A11.3.1. After receiving clearance from ATC, flight leads will direct all flight members to execute the briefed procedures to establish trail. Desired spacing between successive aircraft in a flight is 1.5 - 2.0 NM (2 NM maximum).

A11.3.2. During any recovery profile (penetration, vectors, visual straight-in, etc), each aircraft will fly the published ground track, comply with altitude restrictions and slow so as to arrive at the FAF (or 4.1 NM/5.6 DME final for RWY 03) configured to land and stabilized at 180 KIAS. Flight leads will direct “decel” by radio. Each aircraft will report the FAF and gear down. Flight leads will notify the flight and slow to final approach speed at 3 NM final (4.5 DME for RWY 03).

A11.4. Approved Alternate Missions. Instruments and advanced handling missions are approved alternate missions for all 57 Wing F-22As. Additionally, any mission flown in the USAFWS syllabus is an approved alternate mission provided it is less complex than the primary mission.

A11.5. Cross-Country Procedures. Aircraft-specific guidance is located in the F-22A supplement to the 57 WG IFG.

Attachment 12**F-35 SPECIFICS**

A12.1. WX Requirements. Until IMC limitations are rescinded, minimum weather required for F-35A operations is 3,000 feet AGL and 3 SM.

A12.2. Fuel Requirements. Recommended VFR/IFR Bingo fuels are listed in the F-35A supplement to 57 WG IFG.

A12.3. Divert Instructions. Detailed divert procedures are located in the 57 WG IFG and F-35A Supplement.

A12.4. Radar Trail Recovery Procedures. Flight leads will brief procedures for establishing/maintaining trail, configuration and airspeed changes through landing. Pilots will comply with procedures listed in **paragraph 4.15** of this instruction, AFI 11-2F-35A Volume 3, F-35A—Operations Procedures, and the following:

A12.4.1. After receiving clearance from ATC, flight leads will direct all flight members to execute the briefed procedures to establish trail. Desired spacing between successive aircraft in a flight is 1.5 - 2.0 NM (2 NM maximum).

A12.4.2. During any recovery profile (penetration, vectors, visual straight-in, etc.), each aircraft will fly the published ground track, comply with altitude restrictions and slow so as to arrive at the FAF (or 4.1 NM/5.6 DME final for RWY 03) configured to land and stabilized at 200 KIAS. Flight leads will direct “decel” by radio. Each aircraft will report the FAF and gear down. Flight leads will notify the flight and slow to final approach speed at 3 NM final (4.5 DME for RWY 03).

A12.5. Cross-Country Procedures. F-35A specific guidance is located in the F-35A supplement to the 57 WG IFG.

A12.6. Approved Alternate Missions. Instruments and advanced handling missions are approved alternate missions for all 57/53 Wing F-35As.

A12.7. Revetment Refueling. Due to the location of the aircraft refueling receptacle, the F-35A must face point toward the runways (West) in order to properly conduct refueling in the revetments. Aircraft must not be loaded with forward firing munitions during this process.

Attachment 13**AVOIDANCE AREAS, NOISE SENSITIVE AREAS AND IFF OFF/LIGHTS OUT AIRSPACE**

A13.1. Low Level Avoidance/Noise Sensitive Areas. The following are low level avoidance and noise sensitive areas for Nellis AFB's local operations area. Altitudes are AGL unless otherwise indicated in WGS 84 (HH-MM-SS).

A13.1.1. NELLIS TACTICAL RANGES INDICATED BY RESPECTIVE IDENTIFIER.**Table A13.1. Low Level (LL) Avoidance and Noise Sensitive Areas (NS).**

Location Name	Coordinates	LL	NS	NM	ALT	Area	Remarks
Device Assembly Facility	36 53'54"N 116 02'53"W	X	X	1.25	14,000' MSL	08	
Corn Creek Station	36 26'00"N 115 22'00"W	X	X	2	8,000'	63	
Range 63C	As depicted on the Nellis range map					63	No overflight below 4,500' MSL when Range 63C is cold. No overflight below 18,000' MSL when Range 63C is hot
City of Indian Springs, NV	36 34'50"N 115 40'30"W	X	X	1	500'	64	
Goldfield, NV	37 42'30"N 117 14'00"W	X	X	3	1,000'	71N	
Tonopah, NV	38 04'20"N 117 14'00"W	X	X	1	1,000'	71N	Not extended into R-4807
Caliente, NV	37 36'50"N 114 31'20"W	X	X	5	10,000' MSL	CAL-C	
Lincoln County Airport	37 47'15"N 114 25'18"W	X	X	3	1,500'	CAL-C	
Pioche, NV	37 56'00"N 114 27'10"W	X	X	1	1,000'	CAL-C	
Alamo, NV	37 22'00"N 115 10'00"W	X	X	1.5	1,500'	COY-B	
Key Pitman Wildlife Management Area	37 32'00"N 115 14'00"W 37 36'00"N 115 13'00"W	X	X		2,000'		1 NM either side of line between coordinates
Pahranagat Wildlife Area	37 12'00"N 115 03'00"W 37 19'00"N 115 08'00"W	X	X		2,000'		1 NM either side of line between coordinates
RWMC (Desert Nat'l Wildlife Refuge Area)	36 51'32"N 115 57'17"W	X	X	1	2,500'		
RF emitter EC West	37 41'06"N 116 25'10"W	X		0.5	2,000'	ECW	
Mesquite, NV Airport	A 6NM arc between the points 36 51'10"N, 114 09'55"W and 36 45'45"N, 114 07'40"W Extend lines eastward from 36 51'10"N, 114 09'55"W and 36 45'45"N, 114 07'40"W to the outer perimeter of the Mesquite Airport (36 49'59"N, 114 03'18"W)	X	X	1	1,500'	LE	Avoid the approach corridor by 3,000' AGL
Moapa, NV	36 40'30"N 114 37'30"W	X	X	1	1,000'	LE	
Overton, NV	36 32'30"N 114 27'00"W	X		1	1,000'	LE	
Amargosa Valley (Death Valley)	36 18'20"N 116 25'00"W	X	X	3	1,500'	LW	

Beatty Ranches (Boundary Limits)	36 52'00"N 116 45'30"W 37 01'00"N 116 46'30"W	X	X		2,000'	LW	
Beatty, NV Airport	36 52'00"N 116 48'00"W	X		3	3,000'	LW	
Bell Residence, NV	36 52'20"N 116 48'00"W	X		3	1,000'	LW	
Calvada Meadows Airport	36 16'00"N 116 00'00"W	X		1.5	1,500'	LW	
Springdale, NV	37 01'23"N 116 43'42"W	X	X	5	1,500'	LW	

Table A13.2. Area Abbreviations (for LL/NS airspace table). NELLIS TACTICAL RANGES INDICATED BY RESPECTIVE IDENTIFIER

AREA NAME	ABBREVIATION
ALAMO ALPHA	AL-A
ALAMO BRAVO	AL-B
ALAMO CHARLIE	AL-C
CALIENTE EAST	CAL-E
CALIENTE WEST	CAL-W
CALIENTE ALPHA	CAL-A
CALIENTE BRAVO	CAL-B
CALIENTE CHARLIE	CAL-C
COYOTE BRAVO	CY-B
COYOTE CHARLIE	CY-C
ELGIN	ELG
LATN CENTRAL	LC
LATN EAST	LE
LATN WEST	LW
REVEILLE MOA	REV
SALLY CORRIDOR	SAL

A13.2. IFF Off/Lights Out Airspace. IFF off/lights out operations will be conducted IAW AFMAN 13-212V1, ACC Sup, NTTR Addendum A.

Attachment 14**SPILL OUT PROCEDURES**

A14.1. Definition. A spill out is an unauthorized exit from the NTTR into an adjacent ATC facility's airspace. Spill outs are documented in IAW DAFMAN 13-201.

A14.2. Procedures. The following procedures apply when a spill out is observed by Blackjack, Nellis Control or other control agency. All facts such as date, time, location, call sign and unit are recorded by Blackjack and Nellis Control.

A14.2.1. Blackjack and Nellis Control spill out information is verified and processed through the 57 OSS/OSOP. 57 OSS/OSOP will forward preliminary information to the unit responsible for the spill out, 57 OSS/DO, 57 OG/CC, and the FAA ATREP. The 57 OSS/DO will forward official reports to the affected unit's squadron commander.

A14.2.2. The responsible unit will investigate the circumstances surrounding the spill out and forward a copy of their findings and corrective actions to the 57 OSS/OSOP who will, as appropriate, forward them to the FAA ATREP. The unit will retain the original copy of their findings and corrective actions for a minimum of 18 months as it may be required by the FAA for the adjudication of a formal airspace violation. Reference DAFMAN 13-201 for documentation procedures.

A14.2.3. 57 OSS/OSOP will maintain a log of all reported spill outs, retain statistical data to determine trends and apply appropriate management emphasis.

A14.2.4. Immediate remedial actions will be taken following deviations of Range 4808 airspace. For any deviation of Range 4808B/D/E airspace, a minimum 24 hour grounding will occur. Deviations of Range 4808A or 4808C airspace will result in debrief and return to home unit.

Attachment 15**BLACKED OUT LANDINGS**

A15.1. General. Fixed wing Blacked Out landings at Nellis airfield will be authorized on a non-interference basis only. Helicopters may conduct blacked out landings, upon approval from tower and in compliance with AFI 11-MDSV3 illumination requirements for landing areas and aircraft lighting. Blacked out operations will be on a case by case basis and will not use the normal scheduling procedures or have NOTAMs/ATIS information published. They will be approved real-time based on tower traffic.

A15.2. Pilot Responsibilities.

A15.2.1. Ensure the requested procedure is IAW all higher headquarters (AFIs, MAJCOM supplements, etc.) guidance specifically relating to the aircraft's performance of Blacked Out landings including weather limitations. If the MDS is approved for IMC operations, that must be explicitly expressed to the tower controllers.

A15.2.2. Coordinate and clarify intentions with the SOF and/or Tower WS prior to departure.

A15.3. ATC Procedures.

A15.3.1. Approval by the Tower will be based on existing traffic and controller workload. The WS is the safety observer and as such, can terminate operations at any time for emergencies, existing traffic, controller workload, etc.

A15.3.2. Unless otherwise directed by Tower personnel, when the pilot requests the airfield lights off, the Tower will turn off the approach lights, HIRLs, runway edge lights and taxiway lights. Taxiway lights will remain on if ground operations are in progress. Tower cab lights will remain at standard night lighting levels.

A15.3.3. Aircraft will not be cleared for an NVG procedure; however, Tower will approve requests for NVG operations and issue a "CHECK WHEELS DOWN" and remind pilots that they are to "PROCEED AT THEIR OWN RISK." Note: Pilots can make their gear down call on final (with overt landing light on). Tower will respond "GOOD LANDING LIGHT" when visually confirmed. Pilots will then turn off the overt landing light and proceed with covert taxi light.

A15.3.4. Controllers are not authorized to wear any night vision devices.

A15.4. Box and One Procedures.

A15.4.1. Box and One configuration:

A15.4.1.1. The Box and One is for runway identification only, and the box length will be 500 feet. See [Figure A15.1](#) and [Figure A15.2](#) below.

Figure A15.1. Airfield Marking Pattern- 3 (Day) Amp-3 Cerise Panels To Be 500 Feet.

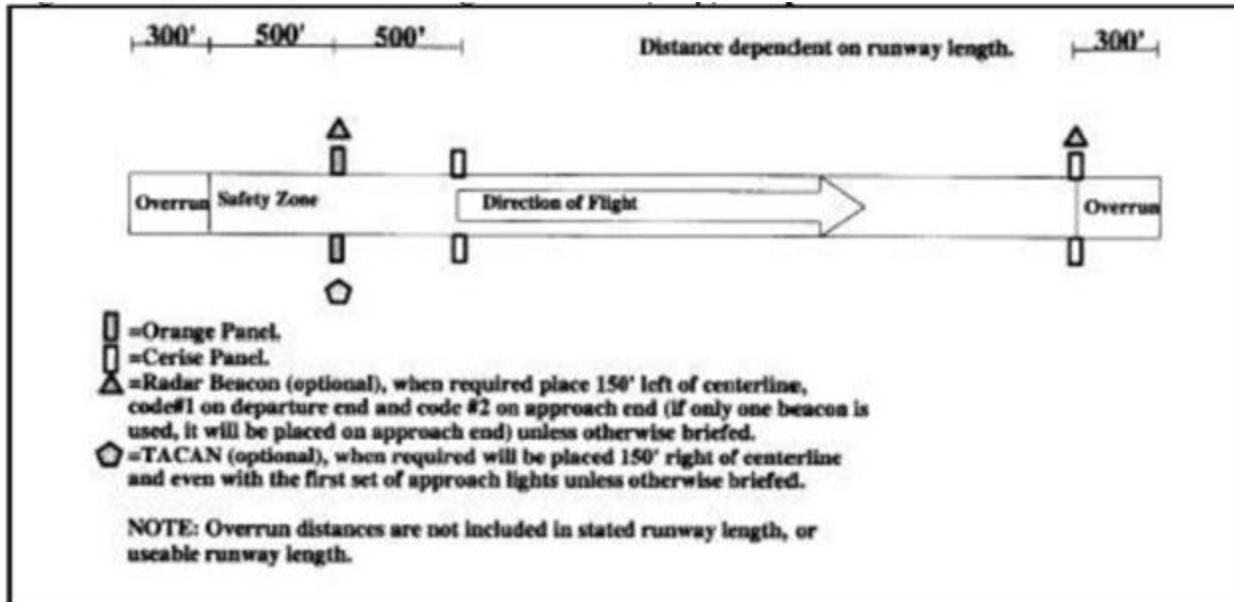
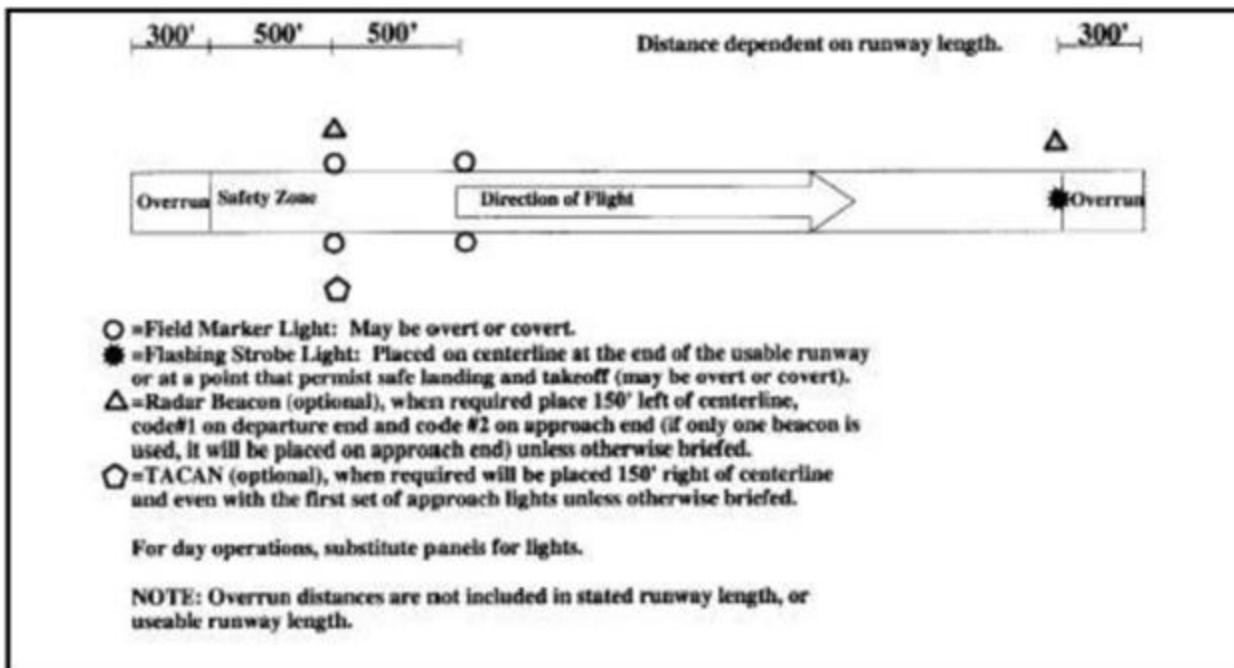


Figure A15.2. Airfield Marking Pattern- 3 (Night) Amp-3 Field Markers Lights To Be 500 Feet.



A15.4.1.2. Only qualified combat controllers will place IR lights in Box and One configuration. These personnel must have a local airfield driver's license.

A15.4.1.3. Combat controllers will monitor IR lights and advise Tower when lights are on/off or any malfunctions experienced.

A15.4.1.4. Tower will relay to the aircraft when lights are on/off or any malfunctions experienced.

A15.4.1.5. Combat controllers will report off the runway before Tower advises aircraft that can “proceed at their own risk” to land or takeoff.

A15.5. Traffic Pattern/Flow Restriction.

A15.5.1. Operations will only be scheduled when all wing flying has terminated for the day or minimal impact on flying windows will occur. Wing flying will not be delayed for NVG operations.

A15.5.2. Only base-assigned aircraft are authorized to conduct NVG operations. Non-participating aircraft will not mix with participating NVG aircraft in any traffic pattern or on any controlled movement area. Normal taxi routes and traffic patterns apply.

A15.5.3. If non-participating aircraft are inbound for arrival, they will hold outside of Nellis Tower’s airspace as directed by NATCF or Tower controllers until NVG operations are terminated.

A15.5.4. Vehicles operating lights-out during periods of reduced airfield lighting should mount an IR strobe on the vehicle’s roof so aircrew can see the vehicle on the airfield. Vehicles are still required to meet AFI 13-213 and local airfield requirements to maintain radio communication with the Tower while operating within the movement area. Vehicle operations will not be commingled with nonparticipating vehicles and apron operations will be kept to a minimum during periods of reduced airfield lighting.

A15.6. Knock It Off (KIO) Procedures.

A15.6.1. The Tower Watch Supervisor, pilot or IR monitor can terminate operations in the interest of flying safety. Phraseology will be: “KNOCK IT OFF, KNOCK IT OFF” (and reason, if time). KIOs will be acknowledged by all players and airfield lighting will immediately be restored to normal operations. “CONTINUE TESTING” will be used to restore covert lighting operations and can only be issued by the player who initiated the KIO. Note: If lost communications ever occur, it’s an automatic KIO and all lights will be immediately returned to normal operation. All pilots will remove NVGs, terminate test operations and recover the aircraft IAW lost communication procedures.

A15.7. Transition between Airfield Lighting Configuration.

A15.7.1. Lights will be returned to normal setting when NVG operations have terminated or for non-participating inbound aircraft coordinated by NATCF.

A15.7.2. Tower will make a blanket-broadcast to all aircraft before turning the lights off during NVG operations and before returning the lights to normal settings after NVG operations.

A15.7.3. Lights will be operated IAW **paragraph A15.3** of this instruction.

A15.7.4. Jolly Pad lighting will be set in accordance with aircrew and AFI 11-2MDSV3 requirements. Unlighted use of Jolly Pad while airfield lights are configured IAW guidance in this attachment is authorized.

A15.8. Combat Controllers Responsibility. Combat controllers will provide one qualified person in the Tower and one qualified person on the airfield during lights out operations.

Attachment 16**NELLIS AFB BARRIER CERTIFICATION PROCEDURES**

A16.1. Purpose. To outline procedures for barrier maintenance and to request barrier certification from the 57 OSS/OSOS.

A16.2. Responsibilities. Barrier maintenance will:

A16.2.1. Review barrier certification and maintenance records and coordinate with 57 OSS/OSOS for scheduling of barrier certification.

A16.2.2. Control all certifications from the barrier maintenance vehicle. Note: The pilot will communicate with the Tower and the Tower will relay that information to barrier maintenance and AMOPS.

A16.2.3. 57 OSS/OSOS will notify AMOPS of the date, aircraft type and call sign prior to each scheduled engagement. AMOPS will notify the agencies in **Table A16.1**.

Table A16.1. Barrier Engagement Notification.

Flight Safety (57 WG/SEF)	Tower (57 OSS/OSAT)
Fire Protection (99 CES/CEF)	Sweeper (99 CES/CEOHP)
Barrier Maintenance (99 CES/CEOFP)	BULLSEYE SOF (57 WG/WGV)
Crash Recovery (57 MXG/MXMTR)	

A16.3. Procedures.

A16.3.1. Aircraft returning from a flight will dearm and then follow Tower's directions. Aircraft scheduled for a taxi only barrier certification may proceed directly to the runway with Tower's permission.

A16.3.2. Prior to the engagement, barrier maintenance will confirm the aircraft's gross weight with the aircraft commander via the Tower, then compute engagement speed according to AFMAN 32-1040. The aircrew will target the engagement for the minimum airspeed in the target airspeed window.

A16.3.3. The aircraft will be in flyable condition, with the canopy(s) closed and tail hook shear pin installed (F-16 only). Aircraft will be cleared into position and specifically cleared to engage the cable by the Tower. Unless otherwise briefed, conduct certification on pre-coordinated frequency.

A16.3.4. The aircraft will stabilize engines at normal run-up parameters (i.e. 80% RPM), release brakes, then track down the runway and attempt to engage within 5 feet of runway centerline.

A16.3.5. When crash recovery notifies the aircrew to disengage from the barrier, add power to roll forward then throttle to idle to allow aircraft to roll back. Add power without braking to stop roll back.

A16.3.6. Retract hook on signal from barrier crew. Notify the Tower of actual airspeed, gross weight, call sign and tail number, then taxi to parking on signal from barrier crew. If taxiing the aircraft after a barrier certification is not possible, the aircraft will be shut down and towed off the runway.

Attachment 17

PRIMARY CRASH ALARM SYSTEM (PCAS) AND SECONDARY CRASH NET PROCEDURES

A17.1. Primary Crash Alarm System (PCAS). When an in-flight or ground emergency is declared, Nellis Tower will activate the PCAS. Situations that warrant activation of the primary crash net are contained in **Table A17.1**. Tower will pass at a minimum the information contained in **Table A17.2**. Activation of the PCAS will not be delayed for incomplete information. Tower will pass additional information as it becomes available. If the PCAS is inoperative, Nellis Tower will notify all agencies on the PCAS by the most expeditious means available. Listed below are the agencies on the PCAS.

- A17.1.1. Airfield Management Operations—AMOPS (57 OSS/OSAA).
- A17.1.2. Fire Department (99 CES/CEF).
- A17.1.3. Hospital -- Flight Medicine (99 MDG/SGPF) during duty hours; Emergency Room (99 MDG/SGOME) after normal duty hours.

Table A17.1. Primary Crash Net Activation Criteria.

Declared airborne emergencies
Anticipated or actual barrier engagements
Aircraft mishaps or crashes
Ground emergencies
Exercises
Single-Ship No Radio (NORDO) aircraft
Unauthorized landing
Anytime 99 ABW/CP directs

Table A17.2. Primary Crash Net Information.

Call sign
Type of aircraft
Nature of emergency
Ordnance
Fuel on board (minutes/hours preferred)
Souls on board
Landing runway
Estimated time of arrival (ETA)
Pilot's intentions
Radio frequency
Wind speed and direction

A17.2. Secondary Crash Net. AMOPS activates the Secondary Crash Net (SCN) whenever the primary crash net is activated or upon direction from 99 ABW/CP. If AMOPS receives emergency information from a source other than the Control Tower, they will immediately activate the SCN and then pass the information to the Control Tower. If the SCN is inoperative, AMOPS will call

each agency by using the Alternate SCN Conference call. **Table A17.3** lists the agencies on the SCN.

A17.2.1. Any agency requesting to move SCN phone must coordinate this with Airfield Management prior to the move. All agencies on the SCN must use a noise reduction feature such as push-to-talk handsets or Confidencor (Trademark of National Communications Inc.) that filters out background noise. Any agency violating the above could be removed from the SCN or made listen capability only.

Table A17.3. Secondary Crash Net Agencies.

Fire Department (99 CES/CEF)	NTTR Operations Center (Blackjack)
Emergency Room (99 MDG/SGOE)	Emergency Management (99 CES/CEX)
Command Post (99 ABW/CP) or Alt CP	Weather Flight (57 OSS/OSW)
Base Defense Ops Center (99 SFS/BDOC)	57 MOC (57 MXG/MOC)
Ce Unit Control Center (99 CES/CEOER)	99 ABW Safety (99 ABW/SE)
Explosive Ordnance Disposal (99 CES/CED)	Rescue MOC
Crash Recovery (57 MXG/MXMTR)	57 WG Safety (57 WG/SEF)

Attachment 18**DISTINGUISHED VISITORS (DV) AND SPECIAL HANDLING PROCEDURES**

A18.1. Distinguished Visitors. A DV is any individual holding the rank of colonel or above, a civilian equivalent or any other individual identified by HQ USAFWC/CC. DVs are parked on DV 1 or DV 2 immediately in front of AMOPS unless prior coordination for parking has been approved by USAFWC Protocol, 99 ABW Public Affairs or AMOPS. AMOPS will notify NATCF as soon as they are aware of the estimated time of arrival of aircraft requiring DV handling. Consistent with operational priorities, NATCF will notify AMOPS when the DV aircraft is inbound to Nellis AFB. In turn, AMOPS will notify the 99 ABW/CP. During large force exercises, DV aircraft with a wingspan of 130 feet or larger will be parked on DV-2 unless the arriving/departing DV is DV Code 4 or higher (or unless otherwise directed by leadership). Refer to General Planning for explanation of DV Codes.

A18.2. Special Handling Procedures. Special handling procedures will be used for distinguished military visitors above the rank of major general, civilian equivalent visitors and any other persons identified by HQ USAFWC/CC. Aircraft requiring special handling will be given priority to land, taxi, and takeoff. These procedures supplement the DV handling procedures outlined above.

A18.2.1. The Airfield Manager or their representative shall inform Tower when special handling procedures begin and end.

A18.2.2. Taxi operations will continue on Taxiways Delta, Echo and Foxtrot leading to the runways; however, no aircraft movement, engine starts or runs will take place on the transient parking ramp and all areas north of row 45 (TA Building).

A18.2.3. Locally assigned helicopters may start engines and run at low power during DV special handling while remaining in their parking spot.

Attachment 19**AIRFIELD OPERATIONS BOARD MEMBERSHIP AND ANNUAL AGENDA ITEMS**

A19.1. The Nellis Airfield Operations Board (AOB). IAW AFMAN 13-204V1, the AOB provides a forum for discussing, updating and tracking various activities in support of the wing flying mission. The board will convene at least once per quarter, and is chaired at a minimum by the 57 OG/CC, as delegated by the 57 WG/CV.

A19.2. Membership. The 57 OG/CC has appointed the following members of the board:

- A19.2.1. 57th Wing Safety (57 WG/SEF/SEG/SEW)
- A19.2.2. 99th Air Base Wing Command Post (99 ABW/CP)
- A19.2.3. 57th Wing Standardization and Evaluation (57 WG/WGV)
- A19.2.4. 57th Operations Support Squadron (57 OSS/CC)
 - A19.2.4.1. 57 OSS Airfield Operations Flight (57 OSS/OSA, OSAD, OSAR, OSAA, OSAM, & OSAT)
 - A19.2.4.2. 57 OSS Weather Flight (57 OSS/OSW)
 - A19.2.4.3. 57 OSS Airspace Management (57 OSS/OSOP)
- A19.2.5. 99th Mission Support Group (99 MSG/CC)
- A19.2.6. 99th Civil Engineer Squadron (99 CES/CC & 99 CES/CEN)
- A19.2.7. FAA Air Traffic Representative (ATREP)
- A19.2.8. Invited but not required:
 - A19.2.8.1. NTTR Director of Operations (NTTR/DO)
 - A19.2.8.2. 66th Rescue Squadron (66 RQS)
 - A19.2.8.3. 414th Combat Training Squadron (414 CTS)
 - A19.2.8.4. 422nd Test and Evaluation Squadron (422 TES)
 - A19.2.8.5. 549th Combat Training Squadron (549 CTS)
 - A19.2.8.6. USAF Air Demonstration Squadron “Thunderbirds” (USAFADS)
 - A19.2.8.7. 64th Aggressor Squadron (64 AGRS)
 - A19.2.8.8. USAF Weapons School (USAFWS)
 - A19.2.8.9. 57th Maintenance Group (57 MXG)

A19.3. Airfield Operations AOB Agenda Items. The following requirements are IAW AFMAN 13-204V1.

- A19.3.1. ATC/Flying Procedures
- A19.3.2. Airspace (terminal, enroute and SUA)
- A19.3.3. Military/FAA Concerns
- A19.3.4. Airfield Operations Flight (AOF Staff, AM, and ATC) Staffing

A19.3.5. RAWS

A19.3.6. Airfield Environment

A19.3.7. Airfield waivers approved by HQ ACC for violations of airfield planning and design criteria, deviations of visual air navigation (airfield lighting & signs) systems criteria, deviations of airfield (pavement & obstruction) markings, and temporary waivers for construction activities, air shows, and temporary installation of aircraft arresting systems.

A19.3.8. AF Management Internal Control Toolset (MICT) Open Items

A19.3.9. Status of Airfield Driving Training Program

A19.3.10. Runway Incursions/Controlled Movement Area Violations

A19.3.11. Safety Items: HATRs/BASH

A19.4. Airfield AOB Annual Agenda Items. The following requirements are IAW AFMAN 13-204V1.

A19.4.1. Terminal Instrument Procedures.

A19.4.2. Air Installation Compatible Use Zone (AICUZ).

A19.4.3. Results of Annual Self Inspection.

A19.4.4. Special Interest Items (SII).

A19.4.5. Aircraft Parking Plan.

A19.4.6. Results of the Annual Airfield Certification/Safety Inspection.

A19.4.7. Status of Existing Airfield Waivers (including lighting waivers)—Provide number and status of permanent and temporary airfield waivers and associated correction plans IAW UFC 3-260-1.

A19.4.8. In accordance with AFMAN 13-204V1, the 57 OSS Airfield Operations Flight Commander (AOF/CC) shall implement and maintain operational LOPs (**Table A19.1**). LOPs will be reviewed annually by the designated Office of Primary Responsibility (OPR) in collaboration with the AOF/CC during its assigned quarter. As needed, the OPR will coordinate with organizations outside the OSS to finalize review. The final results will be reported to the AOF/CC NLT one week prior to the corresponding AOB where the LOP will be discussed and documented.

Table A19.1. LOP Index.

Title	Review Quarter	OPR (57 OSS)
ATC LOAs 1-8	1st Quarter	OSAR
ATC LOAs 9, 11-16, 19, 19a, 21, 27, 32, 35	1st Quarter	OSOP
AMOPS LOAs 1-3	1st Quarter	OSAA
OIs 1, 2, 4	1st Quarter	OSAR
OIs 3, 6	1st Quarter	OSAA
OIs I 5 / 7	1st Quarter	OSAT / OSA
ATC LOAs 10, 17, 18, 20	2d Quarter	OSAR

AMOPS LOA 4-6	2d Quarter	OSAA
OIs 8 / 9 / 11	2d Quarter	OSAG / OSAA / OSAD
OIs 12, 13, 14	2d Quarter	OSAM
ATC LOAs 22-26, 28-30	3d Quarter	OSAR
AMOPS LOAs 7-9	3d Quarter	OSAA
OL 1, 6 / 3	3d Quarter	OSAR / OSAR & OSAA
OL 2, 7	3d Quarter	OSAT
OPLAN 1, 5, 6	3d Quarter	OSA
ATC LOAs 31, 33, 34, 36-40	4th Quarter	OSAR
AMOPS LOAs 10-12	4th Quarter	OSAA
Remaining OPLANs	4th Quarter	OSAA & OSA

Attachment 20
FREQUENCIES

A20.1. UHF and VHF Radio Frequencies. All Nellis AFB based aircraft equipped with UHF and VHF radios except the USAFADS are channelized as outlined below. Air traffic controllers may assign channel numbers to locally based aircraft. RED FLAG and GREEN FLAG participants should refer to their respective IFG.

A20.2. Frequencies and Channelization.

A20.2.1. Local Standard Channelization.

Table A20.1. Local Standard Channelization.

CHANNEL	UHF	VHF	AGENCY
1			Squadron common
2	289.4	120.9	Nellis Clearance Delivery
3	275.8	121.8	Nellis Ground
4	327.0	132.55	Nellis Tower
5	385.4	135.1	Nellis Approach/Departure West
6	273.55	124.95	Nellis Approach/Departure East
7	317.525	126.65	Nellis Control -- Sally
8	254.4	119.35	Nellis Control -- Lee
9	305.6	142.75	SOF (Bullseye SOF)
10	343.725		Emergency Single Frequency Approach
11	270.1		ATIS
12	360.625	118.3	Creech AFB Tower
13			Not Used
14			Unit Option
15-19			HAVE QUICK or Unit Option
20	300.050		HAVE QUICK

A20.2.2. Squadron Common Frequencies.

Table A20.2. Squadron Common Frequencies.

UNIT	COMMON/MX/SUPPORT UNIT FREQUENCIES
WS Duty Desk	361.5
Adversary Support	328.5
66 WPS	VHF-AM: 138.375, 140.275, 139.400, 143.375 UHF: 225.500 Support Units: 326.8, 255.300, 140.975, 148.850
16 WPS (F-16, F-35)	VHF-AM: 138.250, 139.125, 141.625, 131.875, 139.550, 140.150 OPS/MX Freq: 229.000 Support Units: 349.1, 360.25, 376.15
433 WPS (F-15C, F-22)	UHF: 260.100, 322.250, 266.6, 262.65 OPS/MX Freq: 323.85 Support Units: 140.175, 140.400, 140.700

17 WPS (F-15E)	UHF: 326.775, 292.100 Command/Control: 257.100 Support Units: 140.325
34 WPS (HH-60)	VHF-AM: 141.775 VHF-FM: 32.35 UHF: 233.600, 239.700
26 WPS (MQ-9)	VHF-AM: 138.95 UHF: 230.025, 258.675 Support Units: 355.100, 149.875
422 Ops Desk	379.0
422 A-10	VHF-AM: 143.600, 138.0125, 149.125 VHF-FM: 40.15, 41.45, 41.95 UHF: 324.850 Support Units: 342.200
422 F-16	VHF-AM: 139.6, 140.950 OPS/MX Freq: 369.4 Support Units: 371.05, 373.55
422 F-15C	UHF: 315.800 OPS/MX Freq: 318.0 Support Units: 141.650
422 F-15E	UHF: 278.400, 323.35 Support Units: 140.450, 141.925
422 F-22A	VHF-AM: 141.025 UHF: 305.650, 266.600 MX Freq: 140.825, 141.95, 150.5 Support Units: 262.650
422 F-35	UHF: 326.125
64 AGRS (F-16)	OPS/MX Freq: 252.1 VHF-AM: 123.475, 139.750, 139.850, 141.675, 143.825, 149.525 UHF: 283.8, 262.75, 284.55
GREEN FLAG - West	VHF-AM: 139.575, 139.95, 140.1, 140.225, 141.05, 141.400 VHF-FM: 46.85, 46.775 UHF: 251.200, 395.150, 395.850, 397.250, 399.500, 399.850, 366.150 Ops Freq: 251.200, 138.100 Support Units/Fort Irwin Freq: (see GFW IFG Supplement)
RED FLAG	OPS Freq: 234.9 (Contact RF Freq Monitor for all frequencies)
66 RQS (HH-60)	VHF-AM: 140.375, 142.55, 150.675 VHF-FM: 32.15, 34.05 UHF: 245.650, 318.9 OPS/MX Freq: 259.0, 251.9, 236.0
USAFADS (Thunderbirds)	VHF-AM: 139.8, 148.175 UHF: 322.950 OPS Freq: 235.250, 141.175

A20.2.3. Controlling Agencies.

Table A20.3. Controlling Agency Frequencies.

AGENCY	UHF	VHF
Blackjack	377.8	123.55
LA Center West	377.1	124.625
LA Center East	343.6	124.2
Las Vegas Approach	353.7 307.25 282.2	133.95 118.4 125.9
Las Vegas Tower	257.8	119.9
FSS Radio	255.4	122.4
Dreamland Approach Control	261.1	126.15
Tonopah Test Site Tower	257.95	124.75
Creech AFB SOF		148.175
Creech AFB Single Freq Approach (SFA)	285.525	
Nellis Pilot to Metro	323.9	
Nellis Pilot to Dispatch	372.2	139.3
Nellis AFB CP (Raymond 22)	381.3	
<hr/>		
REFUELING TRACKS	UHF	VHF
AR-624 (LA Center)	306.2 323.2	
AR-625 (Nellis Control)	324.05	126.95
AR-625 (Oakland) HI	319.8	
AR-625 (Oakland) LO	319.8	
AR-635 (Salt Lake)	360.8	
AR-230 (LA Center) V	343.6	124.2
AR-231 (LA Center) V	343.6	124.2

Attachment 21**PARACHUTE OPERATIONS**

A21.1. Authorization. Nellis AFB assigned units are authorized to conduct parachute operations at Nellis on a recurring basis. Other units desiring to conduct parachute operations at Nellis require 57 OSS coordination and 57 WG/CC approval. All units conducting parachute operations at Nellis AFB will comply with this instruction.

A21.2. General. Gunfighter DZ is located approximately 2,670 yards east of Runway 21L, approach end threshold (**Figure A21.1**); center point is located at N3614.70 / W11459.70 (MGRS Coordinates: 11S PA 80163 12990) with a 570 yard radius. The 563 RQG will ensure 57 OSS/OSA has current DZ surveys on file. Using units are responsible for ensuring DZ survey is current and for reporting any significant changes to the DZ.

A21.2.1. Parachute operations at Gunfighter DZ shall be conducted outside the fixed wing flying window. Static line jumps may be scheduled within normal fly window when there are scheduled periods of greater than two hours with no Nellis aircraft planned airborne. Due to the complexity of sequencing parachute operations within Class B airspace, parachute operations at Gunfighter DZ, such as Military Freefall (MFF) and static line jumps shall not be scheduled within the normal fly window. Wing scheduling (57 OSS/OSOS) shall coordinate MMF jumps with Airfield Operations Flight Commander (AOF/CC) prior to requesting 57 OG/CC approval.

A21.2.1.1. Users are responsible for confirming with AMOPS of parachute operations 24 hours prior to activity. Confirm/notify planned operation, block times and duration of activity.

A21.2.1.2. Users are responsible for notifying the Base Defense Operations Center (BDOC) the day of parachute operations. Pass date, time and location of the jumps.

A21.2.2. Parachute operations at Gunfighter DZ are normally conducted between 7,000 and 14,000 feet MSL for MFF operations and below 1,500 feet AGL for Static Line (S/L) operations, but may vary due to mission set, training objectives or weather. Jump operations deviating from the altitude standard will be briefed to AMOPS and Tower. Aircraft are not authorized to arrive or depart Nellis AFB while jumpers are airborne. Tower will terminate normal operations NLT the drop aircraft being established on final. Normal operations will commence no sooner than the last jumper landing. The Drop Zone Controller (DZC) will notify the drop aircraft once all jumpers are on the ground. The drop aircraft will relay this call to Tower to allow normal operations to continue.

A21.2.3. Fixed wing flying has priority over parachute operations at Gunfighter DZ. Scheduled parachute operations may experience significant delays due to conflicts with arriving/departing aircraft. Arriving/departing aircraft will take priority unless jumpers have already exited the aircraft. Tower WS has the authority to deviate from prescribed procedures as needed in the interest of flight safety.

A21.3. Drop Scheduling. The 57 OSS/OSOS is the POC for scheduling and deconflicting parachute operations between the using unit and 57th Wing flying operations. Requesting units will coordinate with 57 OSS/OSOS, normally via email, to schedule MFF and/or S/L operations. Coordination for operations is accomplished NLT the Wednesday prior to the week of intended

use of the DZ and is scheduled through 57 OSS/OSOS. 57 OSS/OSOS will notify the using unit via email of approval/disapproval/modification of the requested parachute operations. In addition, Gunfighter DZ users requiring TA or parking support will coordinate with 57 OSS/OSOS or 57 OSS/DO for ramp parking NLT the Wednesday prior to the week of execution.

A21.3.1. Using units will include the following information when coordinating for use of Gunfighter DZ:

A21.3.1.1. Type Aircraft

A21.3.1.2. Call Sign

A21.3.1.3. Date

A21.3.1.4. Start and end time of operations (Zulu and Local time)

A21.3.1.5. Number of Passes

A21.3.1.6. Number of Jumpers and/or Number of Jumpers per Pass

A21.3.1.7. Type of Jump

A21.3.1.8. Altitude at which operations will take place

A21.3.2. 57 OSS/OSOS will coordinate approved drop times with AMOPS via email NLT 72 hours prior to the proposed parachute operation for safety and local NOTAM actions. A NOTAM must be in effect prior to parachute operations. Parachute operations must begin and jumpers must be secure within the time limits listed in the NOTAM. AMOPS will call NATCF and Tower to advise them of the scheduled drop and contact the BDOC and pass date, time and location of the jumps.

A21.3.3. Any changes to approved DZ use requires coordination/deconfliction with 57 OSS/OSOS. Changes may cancel or delay DZ use.

A21.4. Static Line Operations. Static Line (S/L) operations are normally conducted to a controlled time over target (TOT). Self-contained navigation to the DZ is highly desired to maximize training. Drop aircraft run-in for TOT drops will be straight to the DZ, at or below 4,200 feet MSL. The descent to drop altitude must be within confines of the Las Vegas Class B airspace (avoid built-up areas). When a situation requires Tower to cancel the drop, Tower will transmit: "NO DROP," state the reason (time permitting) and issue appropriate instructions.

A21.5. Military Freefall Operations. During Military Freefall (MFF) operations, drop aircraft will remain in communication with NATCF and Tower. Aircraft run-in is straight to the DZ at the designated drop altitude. When a situation requires Tower to cancel the drop, Tower will transmit: "NO DROP," state the reason (time permitting) and issue appropriate instructions.

A21.6. Radio Procedures. The drop aircraft will contact NATCF prior to entering the Class B with call sign, position, and intentions (example: "KING 91, 20 NM EAST, VFR, INBOUND FOR NELLIS PARACHUTE OPERATION"). When transferred to Tower, the aircraft will call inbound for parachute operation and coordinate the post drop maneuver (example: "KING 91 INBOUND FOR PARACHUTE OPERATION REQUEST VFR STRAIGHT-OUT DEPARTURE"). Once jumpers have exited the aircraft, the aircraft will notify Nellis Tower "JUMPERS AWAY" and then execute the approved post drop maneuver. During MFF parachute operations, notify NATCF when two minutes prior to jumpers away.

A21.6.1. The DZC will notify the aircraft when all the jumpers are on the ground and the aircraft will, in turn, notify Tower. The using unit is responsible for recovery of jumpers and associated equipment.

A21.7. Post Drop Maneuver. The pilot of the drop aircraft will coordinate with Tower and get approval for the post drop maneuver prior to the drop. Post drop maneuvers shall be limited to rectangular traffic, re-enter, re-run or straight-out VFR/IFR departure.

A21.8. Drop Zone Communications. The DZC will maintain radio contact with the drop aircraft and with Tower during operations. The DZC will notify Tower “JUMPERS SECURE” when all parachute operations are completed and “DZ IS CLOSED” when all jumpers are accounted for and departing the DZ.

A21.9. Emergency Procedures. Emergency procedures of primary concern for parachute operations include Towed Jumper (S/L) or Cutaway (MFF). Emergency procedures for malfunctions will be IAW current procedures. The drop aircraft will notify Tower of intentions and when emergency is resolved.

A21.9.1. For an injured jumper, the DZC notify the drop aircraft and Tower of injury. Once extent of injury is determined, DZC will inform drop aircraft and Tower of the situation, and follow-on actions.

A21.10. Drop Zone Controller Requirements.

A21.10.1. The Drop Zone Controller (DZC) represents the appropriate commander as provided in the mission request.

A21.10.2. The DZC ensures that adequate medical and evacuation coverage is available prior to personnel airdrops.

A21.10.3. The DZC observes and evaluates:

A21.10.3.1. All factors that may adversely affect the safety of the operation and ensures transmission of weather information when required.

A21.10.3.2. Condition of the DZ prior to the airdrop.

A21.10.3.3. Placement of personnel and equipment on the DZ. Only designated vehicles and personnel will remain on the DZ. Recovery and medical personnel and equipment must be positioned so that constant contact is maintained with the DZC. Note: If the ceiling is less than 600 feet, direct all personnel and equipment off the DZ to ensure safety.

A21.10.3.4. The operation of other aircraft that could endanger the drop aircraft, equipment load, or parachutists.

A21.10.4. The DZC should have immediate access to ground-to-air communications equipment or sufficient signaling aids to operate the DZ. Ground-to-air communication is required for IMC airdrops.

A21.10.5. The DZC insures non-DZC personnel are aware of the “NO DROP” signal in order to prevent an inadvertent signal to the aircraft.

A21.10.6. In the event conditions are unsafe for airdrop operations, the DZC ensures that:

A21.10.6.1. “NO DROP” signals are displayed on the DZ.

A21.10.6.2. “NO DROP” or drop cancellation information is transmitted to the aircraft.

A21.10.6.3. “NO DROP” advisories are transmitted early enough to allow time for authentication; specifically, not later than 1 minute prior to actual TOT, unless an emergency arises.

A21.10.6.4. If last minute conditions preclude a safe drop and time for proper authentication is not available, the DZC will immediately and repetitively transmit cancellation of drop clearance, “NO-DROP, NO-DROP, NO-DROP.”

A21.10.7. The DZC will contact AMOPS a minimum of two hours prior to DZ operations beginning. All DZ times will be verified prior to the start of operations.

A21.10.8. Coordinate with the Tower prior to conducting DZ operations. In the event jumpers land in an area other than the designated DZ, to include on the airfield, the DZC will notify Tower and will not enter any controlled movement area without Tower’s approval. The DZC is responsible for ensuring all personnel supporting the DZ operations are under their control at all times.

A21.10.9. DZC will ensure all jumpers and DZ support personnel have accounted for all gear and equipment.

A21.10.10. Inform AMOPS when operations are complete.

Figure A21.1. Gunfighter Drop Zone.



Attachment 22**FLIGHT LINE PHOTOGRAPHY**

A22.1. General. Photography or videography on Nellis AFB flight area (including the runways, taxiways, and aircraft parking ramps, as well as related hangar areas) is restricted.

A22.2. Exception.

A22.2.1. Officially authorized flight line photographers/videographers include 57 WG Safety Staff, 99 ABW Public Affairs, USAFADS/PA, 57 MXG/QA and USAFWC/CCP. For flight line photograph/videography, they must have in their possession a Photo/Video Clearance form, and an AF Form 1199, USAF Restricted Area Badge.

A22.2.2. The 57 WG/CC, CV, or DS may authorize public photography for special events (i.e., change of command; Open House, etc.) without an approved Photo/Video Clearance form.

A22.2.3. 57 OSS/OSAA, Airfield Management, is authorized to request and gain approval from the 57 WG/DS for unrestricted access to flight line areas to document (photograph/video) and report airfield discrepancies. This blanket approval is valid for up to one year and will be in the form of a memorandum identifying authorized individuals, in lieu of a Photo/Video Clearance form. 57 OSS/OSAA is responsible to update the letter as needed. Photographs and video will not be released to the media, and will adhere to the restrictions in A22.2.5 of this instruction.

A22.2.4. All others must be escorted by a person who has a valid AF Form 1199 and an approved Photo/Video Clearance form in their possession prior to escorting visitors on the flight line.

A22.2.5. Specific photograph/videography restrictions include no close up images of weapons or weapon bays, no cockpit photos, and no photos of open panels.

A22.3. Requirements for Flight line Photography Approval.

A22.3.1. To initiate a request, photographer/videographer or authorized representative must contact the MOC at 652-6422. Obtain the Photo/Video Clearance form—completely fill out—and either email/fax or hand carry to the MOC for approval.

A22.3.2. The approved Photo/Video Clearance form must be in the escort's possession prior to escorting visitors to the flight line for pictures.

A22.3.3. PA or CCP must brief all flight line photograph/videography policies and restrictions to their visitors.

A22.4. 99th Security Forces Squadron. 57 MXG/MOC will notify BDOC when/where the photograph/ videography shoot will occur.

A22.5. 57th Wing Director of Staff. Acts as the 57th Wing's point of contact for security issues associated with photographic media. Ensure training is provided to USAFWC/CCP and 99 ABW/PA staff on proper flight line photography/videography authorization procedures.

A22.6. Unit Commanders. Those units with resources located on the flight line in a controlled/restricted area will ensure personnel under their control understand their responsibility to identify and report unauthorized photography.

A22.7. 99th Air Base Wing (99 ABW) Public Affairs. Act as the Nellis AFB point of contact for review and approval of photography/videography regarding Nellis activities and programs cleared for public release.

A22.8. USAF Warfare Center Protocol (USAFWC/CCP). Obtain prior approval from 57 MXG/MOC and the specific controlled/restricted area commander before escorting distinguished visitors into their area to ensure classified programs and resources are not compromised. USAFWC/CCP protocol personnel will be primarily responsible for maintaining the DV lounge located in the AMOPS building (i.e. cleanliness/reporting repairs, stocking, etc..) and the DV marquee located on the flight line side of the building. Airfield Management will maintain the cipher lock door code for immediate access to the DV lounge in the event of unscheduled DV arrivals, or to grant access to USAFWC/CCP personnel and/or janitorial crews.

A22.9. Improper Photography/Videography. In the event of inadvertent or willful violation of the restrictions listed above, the photographer/videographer/escort is susceptible to inspection of recorded images by any aircraft maintenance unit, squadron, group and/or wing supervision/leadership. If the images are deemed potentially unauthorized, those will be surrendered to an aircraft maintenance unit, squadron, group, and/or wing supervisor or leadership who in turn will provide the images in question to the 57 WG/DS and 99 ABW/PA for review. In limited cases, the film/recording media may not be returned.

Attachment 23**AIRSPACE CONTROL PLAN OVERVIEW/OPTIONS**

A23.1. General. ACP source guidance contained within this attachment is the Nellis LFE Airspace Control Plan (OPR: 57 OSS/DO) “and” DoD/DoT Letters of Agreement. This attachment focuses on providing supporting agency guidance/procedures (i.e., ATC, Blackjack, GCI, etc.) and is derived primarily from the most recent ACP; future ACP changes that impact this attachment or any other section of the NAFBI 11-250 will include an FCIF in advance of the change to accommodate training (i.e., ATC training, etc.).

A23.2. Theater of Operations Additional Guidance.

A23.2.1. X-Ray Extension. Altitude limitations: As released by NATCF (typically released FL240 and above). This airspace must be coordinated NLT 24 hours in advance for release.

A23.2.1.1. Alert aircraft will not enter X-ray airspace, unless approved by NATCF.

A23.2.1.2. Aircraft attempting to recover from X-ray airspace should expect flow north to Mormon Peak while coordinating with Nellis control for sequencing.

A23.2.2. Elgin Corridor. Altitude limitations: As released by Los Angeles Air Route Traffic Control Center (ARTCC). Must be coordinated NLT 24 hours in advance for release from the NAS. 13000 feet MSL to FL230.

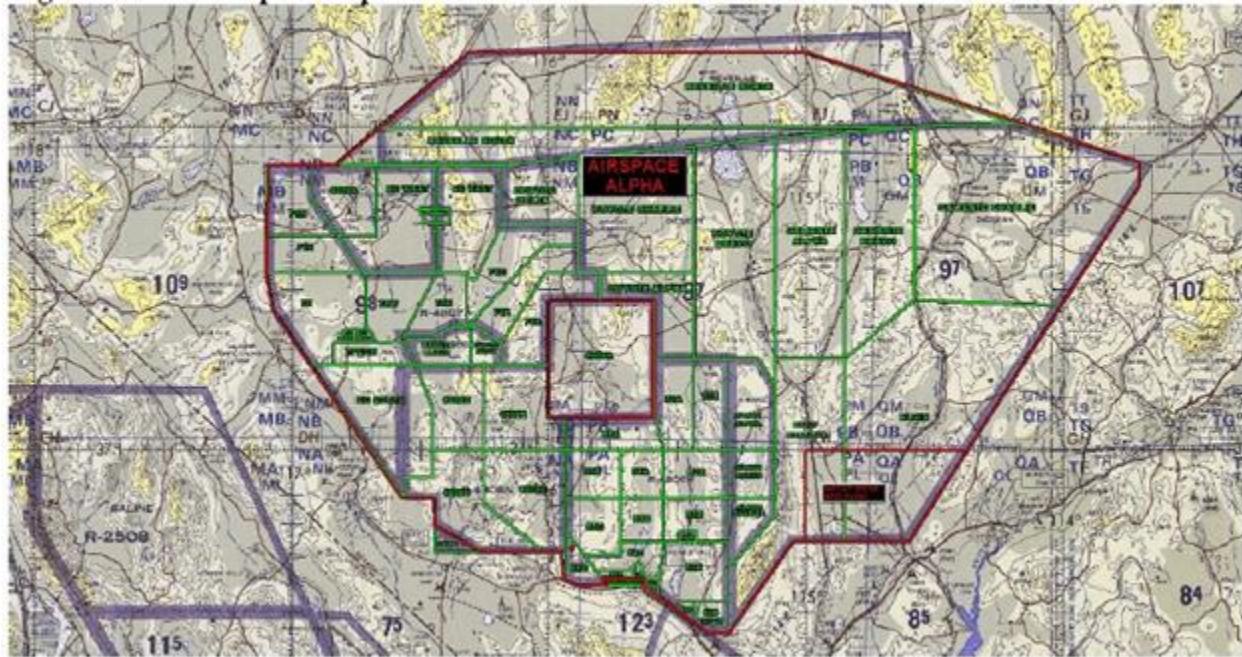
A23.2.3. Sally Corridor. Altitude limitations: Owned by NATCF typically all altitudes, but TAC C2 can request 12k MSL and below and FL240 and above. Utilized for ingress/egress from the NTTR. Note: Sally airspace can be released to GCI for major exercises or when requested and coordinated in advance.

A23.2.4. NTTR Non-Participating IFR Aircraft Transitions. When IFR aircraft are transiting the NTTR and airspace is active (i.e., MEDEVAC, Lifeguard, emergency, etc.), the NATCF shall coordinate with Blackjack/GCI to reserve an altitude or block flight level in affected airspace; for example IFR aircraft requesting transition at FL200 “Request FL180-220 in Sally and CAL A” Blackjack/GCI response “FL180 to FL220 in Sally and CAL A released to you.” NATCF will return the airspace to Blackjack/GCI when no longer needed “Sally and CAL A back to you”. If not available due to the type of mission on range the IFR aircraft may have to circumnavigate.

A23.3. ACP Airspace Options. The following airspace options are intended to give an overall depiction of the working airspace for missions on the NTTR. Aircrew should use this as a guide and are responsible for following the restrictions set forth in the NTTR Graphical Range Reference (GRR) prior to executing the mission. Aircrew should pay special attention to the availability of 08B-D, and the airspace surrounding Creech AFB [65D, 63B/63B High, and the Remote Piloted Aircraft (RPA)] corridors). Altitude, chaff, flare and geographic restrictions will be listed in the GRR and restrict the following options. These airspace options will enable all units to speak the same language regarding which airspaces are scheduled.

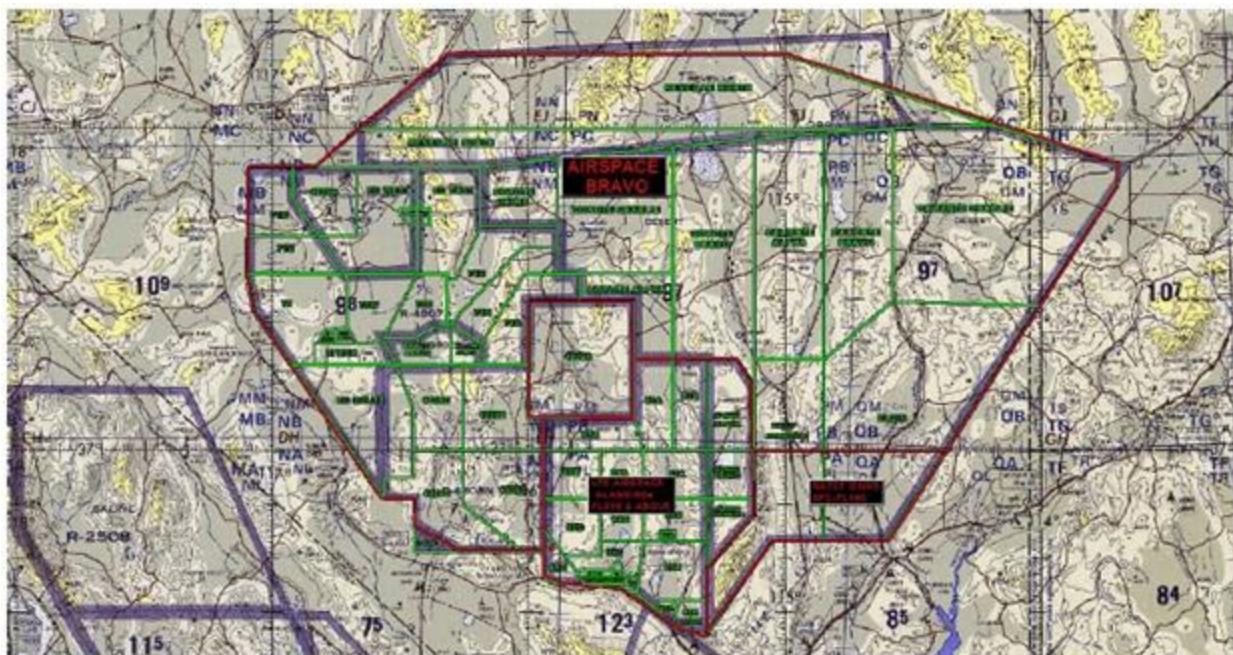
A23.3.1. Airspace Alpha—Airspace Alpha includes all MOAs and Restricted areas in the NTTR with the exception of R4808A, R4808S and NATCF airspace south of the N3700 line and East of the W11500 line SFC to FL190.

Figure A23.1. Airspace Alpha.

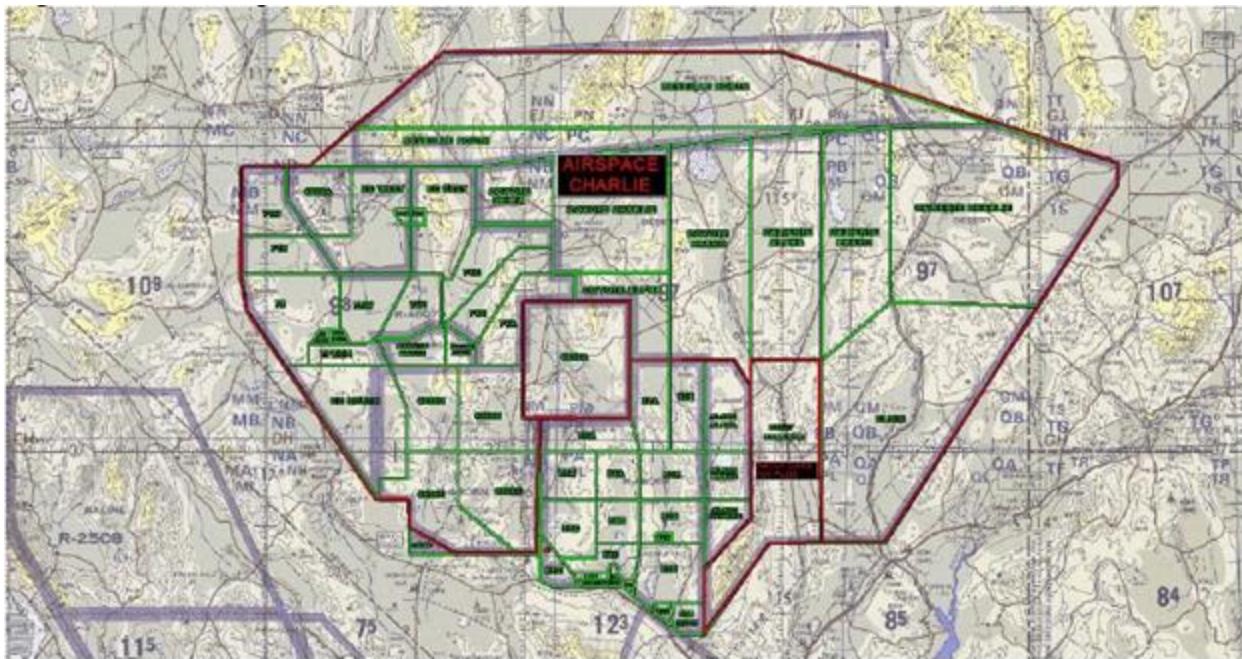


A23.3.2. Airspace Bravo—Airspace Bravo includes all MOAs and Restricted areas in the NTTR with the exception of the Alamo/60s below 21k MSL, R4808A, R4808S and NATCF airspace which is Sally Corridor and Elgin south of the N3700 line, SFC to FL190.

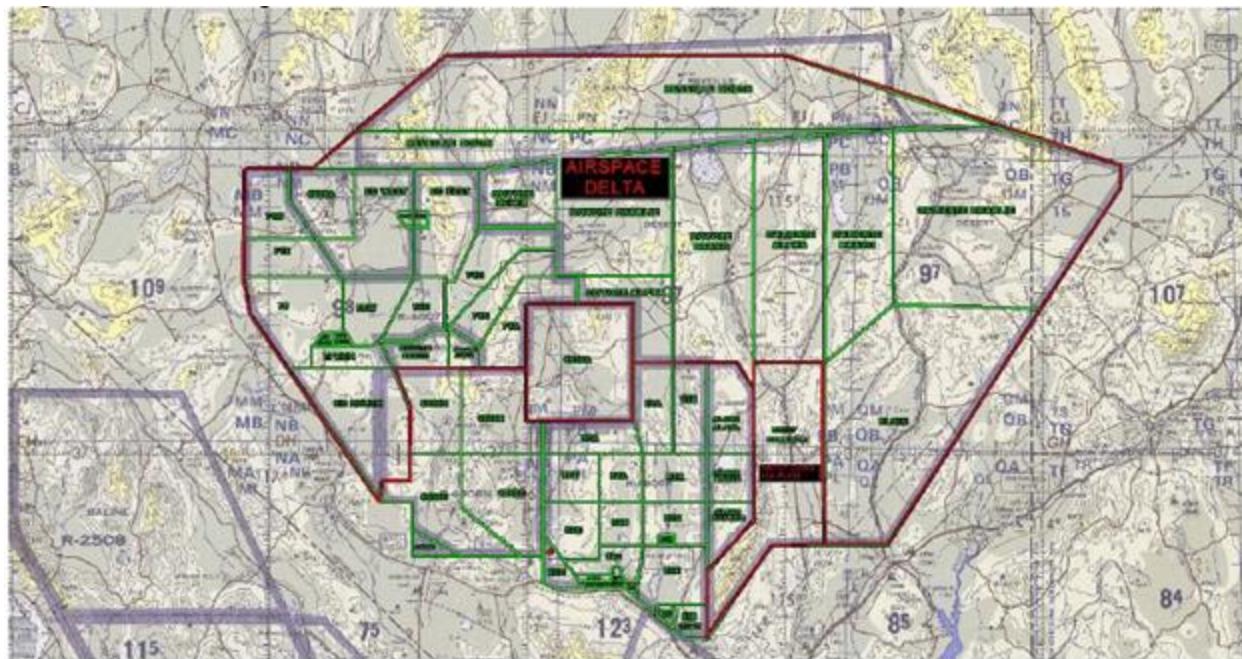
Figure A23.2. Airspace Bravo.



A23.3.3. Airspace Charlie—Airspace Charlie includes the entire NTTR minus R4808A, R4808S, the 60's and Alamos. NATCF will own the Sally Corridor at/above 12k MSL and at/below FL230.

Figure A23.3. Airspace Charlie.

A23.3.4. Airspace Delta—Airspace Delta includes the NTTR minus the exceptions from R4808A, R4808S, R4808B, R4808C, R4808D, R4808E, the 60's and Alamos. NATCF will own the Sally Corridor at/above 12k MSL and at/below FL230.

Figure A23.4. Airspace Delta.

A23.3.5. Airspace Echo and Foxtrot (Alamo Corridor Procedures)

A23.3.5.1. General. The Alamo Corridor and associated entry and exit procedures shall be used when Alamo Corridor procedures are in effect IAW this attachment and the most current Airspace Control Plan (ACP). NATCF will provide ATC services while in the Alamo Corridor and may use the entire width of the corridor to ensure ATC separation.

A23.3.5.2. Requests to schedule Alamo Corridor will follow the normal NTTR scheduling process up until 24 hours prior; same day requests for the Alamo Corridor are not authorized.

A23.3.5.3. Aircraft departing or recovering during Alamo Corridor operations (FL190-210) must comply with the guidance below when using the Alamo Corridor departure/recovery routings.

A23.3.5.4. When both Airspace Echo and Foxtrot are utilized simultaneously, aircrew participating in Airspace Echo can mission plan to use the Alamo Corridor. Aircrew shall file the LSV135 and expect routing via the ALAMO Departure (**Figure A23.8**). Aircrew will be “cleared tactical” once they are in the confines of Alamo Corridor. Aircraft recovering from Airspace Echo should expect to transit the Alamo Corridor via ALAMO Recovery (**Figure A23.9**). Due to the ground track of the ALAMO Departure, aircrews may experience additional IFR departure/departure delays.

A23.3.5.5. When Airspace Echo is solely used (ACP Airspace Foxtrot not in use), aircrew should file the appropriate stereo route for routing to the NTTR via DREAM and FYTTR Departures. Northern departures can expect to use the Sally Corridor for routing to the NTTR.

A23.3.5.6. When Airspace Foxtrot is solely used, aircrew should file the DREAM Departure and may request radar vectors into Elgin. See ACP for additional Sally Corridor flight restrictions.

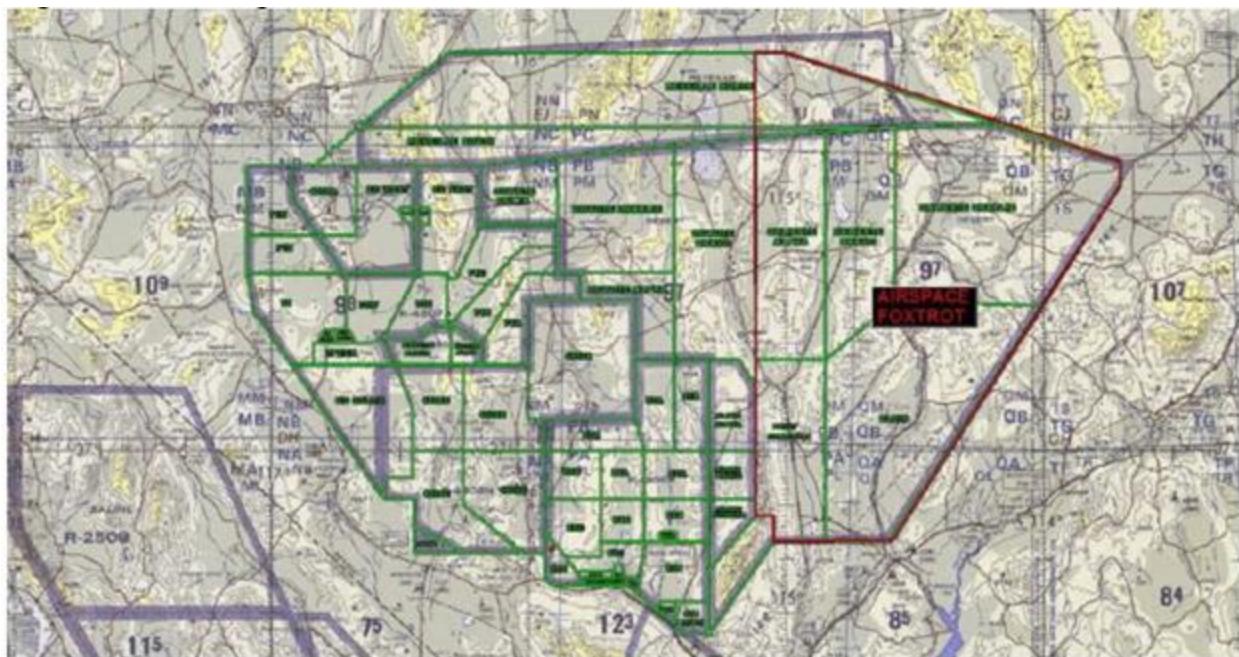
A23.3.5.7. When both Airspace Echo and Foxtrot are going to be utilized simultaneously, the Sally Corridor will be available all altitudes east of the W11507 line and north of the N3648 line to aircraft working in Airspace Foxtrot. A low corridor in Sally Corridor will always be established to facilitate helicopter traffic entering and exiting the NTTR. This corridor will be west of the W11500 line in Sally Corridor and will be 500' AGL and below. The owners of Airspace Foxtrot will maintain 1500' AGL and above if west of the W11500 line in Sally Corridor. If helicopters own Elgin 500' AGL and below (per the GRR), Sally Corridor will be restricted above 500' AGL to allow helicopters to transit from the Alamos to Elgin 500' AGL and below.

A23.3.5.8. Expect other players to be utilizing Alamo/60s at/below FL180 and at/above FL220. Unless early airspace entry is coordinated prior to takeoff IAW MARSA procedures in **paragraph 4.9** Players utilizing the Alamo/60s for other missions shall maintain FL180 and below in the Alamo airspace when the Alamo Corridor is active.

A23.3.5.9. Airspace Echo. Airspace Echo includes the Reveilles and MOAs/Ranges west of Caliente Alpha not to include the Alamos, 60's, R4808A, R4808B, R4808C, R4808D, R4808E and R4808S. Aircraft working in Airspace Echo will remain west of the W11507 line at all times and will not fly into the Calientes, Elgin or Sally Corridor unless approved by TAC C2 and/or NATCF.

Figure A23.5. Airspace Echo.

A23.3.5.10. Airspace Foxtrot. Airspace Foxtrot includes Elgin, the Calientes and Sally Corridor east of the W11507 line and north of the N3648 line. Aircraft working in Airspace Foxtrot will remain East of the W11507 line at all times unless approved by TAC C2 and/or NATCF.

Figure A23.6. Airspace Foxtrot.

A23.3.5.11. Airspace Golf. Airspace Golf includes all MOAs and Restricted areas in the NTTR with the exception of R4808A, R4808S and NATCF airspace (SFC to FL190) south

of the N3700 line which extends 10 miles from the East border of Elgin (N3700/W11435) to the southern border of Elgin (N3643/W11449). Aircraft using Airspace Golf will file a DREAM Departure and may request radar vectors into Elgin.

Figure A23.7. Airspace Golf.

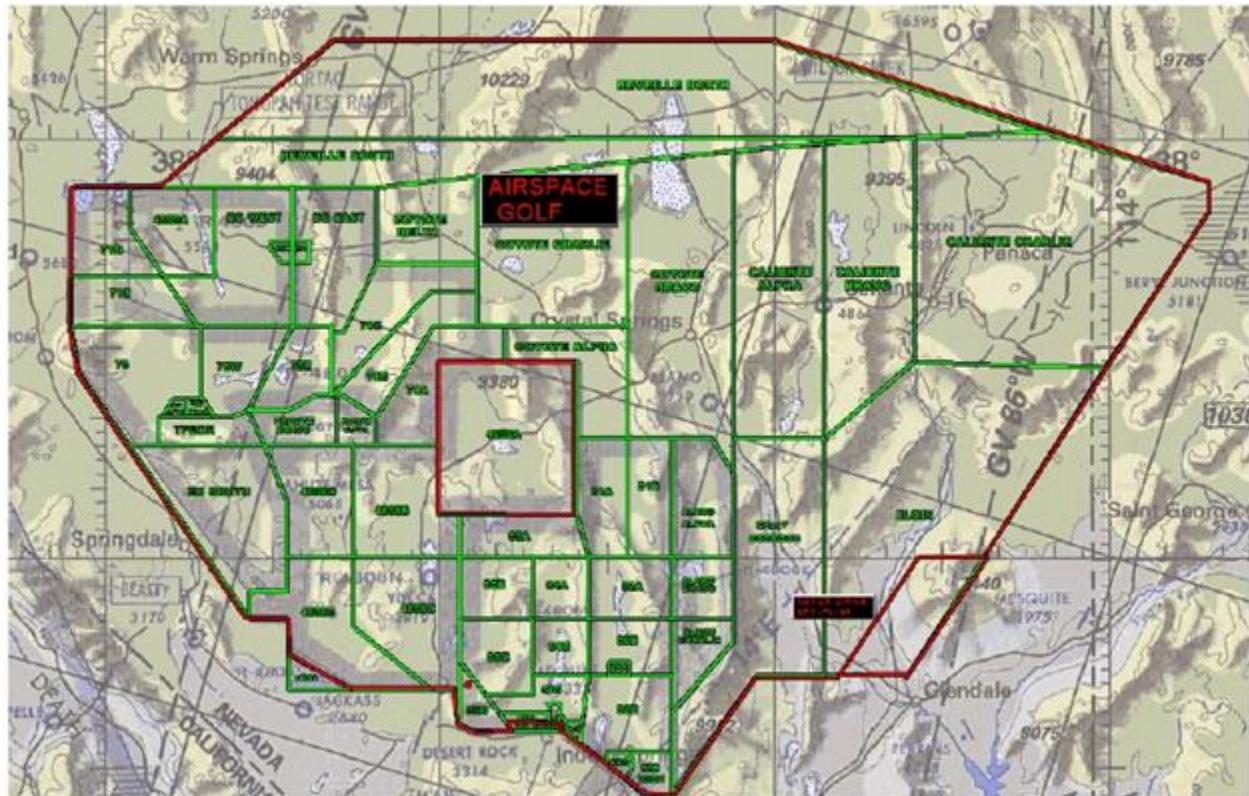


Figure A23.8. ALAMO Departure.

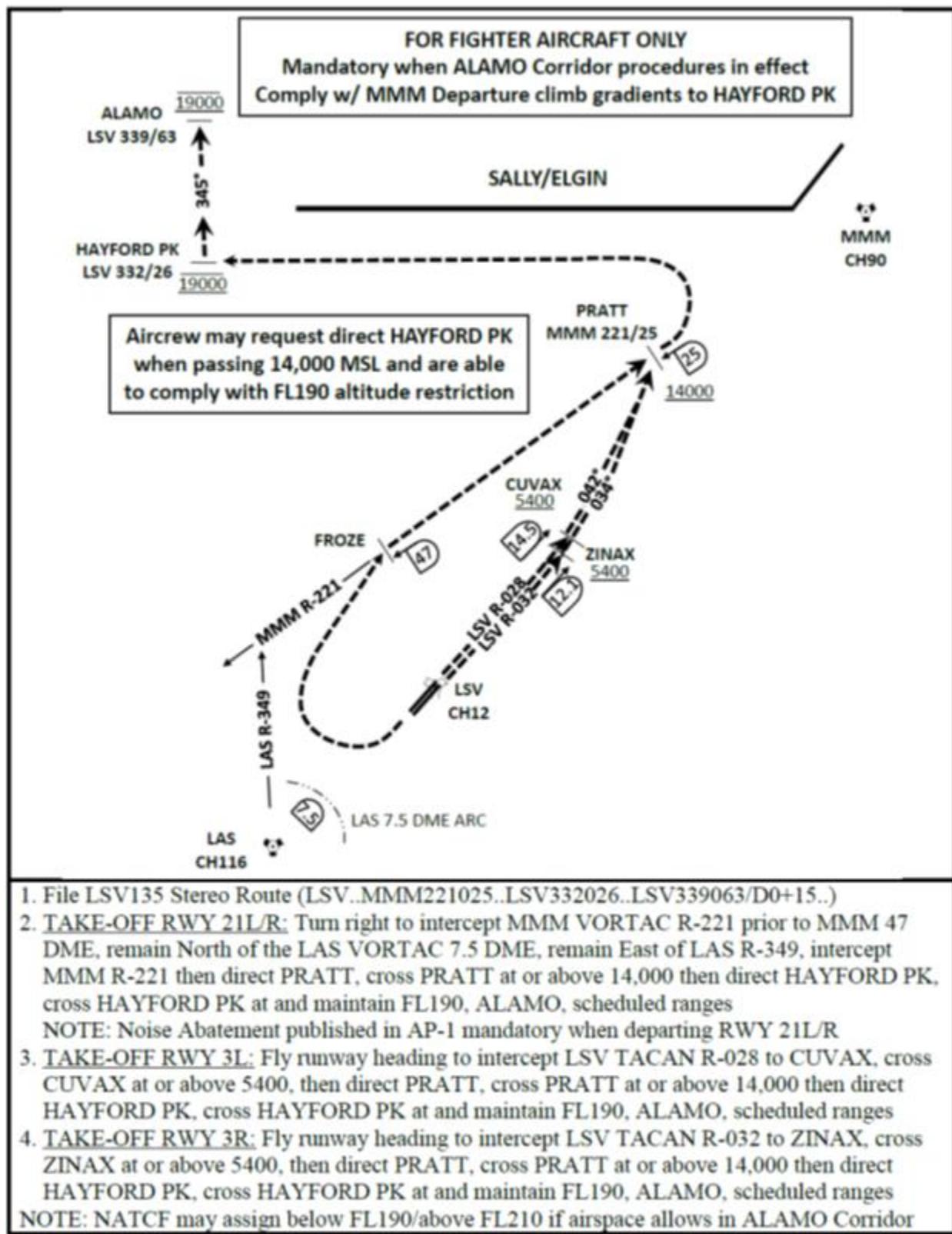
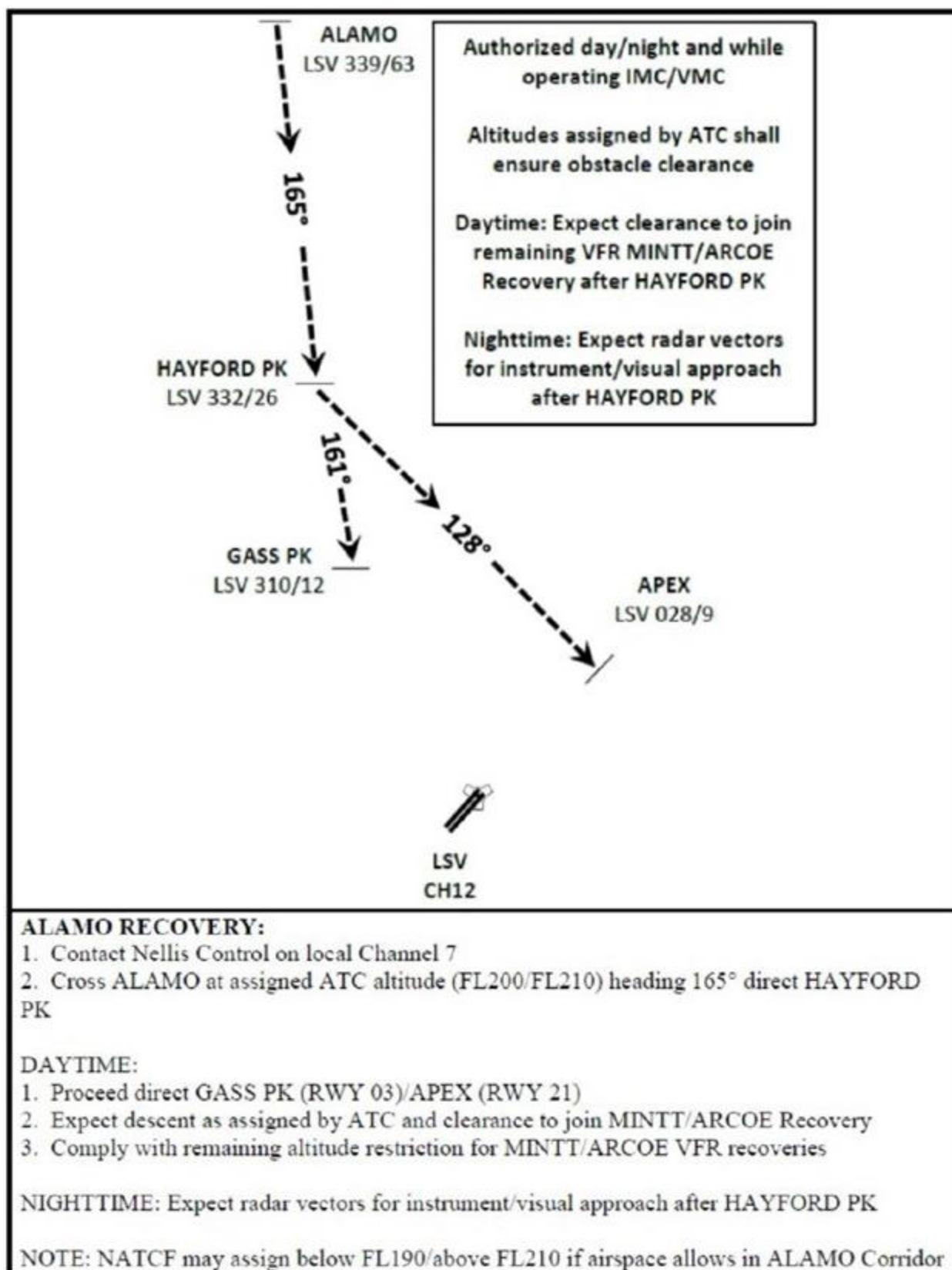


Figure A23.9. ALAMO Recovery.



A23.4. Transit Corridors.

A23.4.1. When the Sally Corridor is utilized as tactical airspace, the Sally Corridor will be available all altitudes east of the W11507 line and north of the N3648 line to aircraft working in the Sally Corridor. Aircraft going to other ranges in the NTTR will use the ALAMO corridor or execute MARSA procedures in [paragraph 4.9](#). During Alamo Corridor procedures, NATCF will own the southern portion of Sally Corridor West of the W11503 line and south of the N3648 line for transiting aircraft to Alamo Corridor via MINTT.

A23.4.2. LFE NORDO Departure Procedures w/ Sally Corridor Operative. LFE aircraft only—DO NOT FLY THE ENTIRE DREAM DEPARTURE. Once at FL190, turn right direct to ARCOE and climb to FL200 for holding. Do not enter the NTTR west of the W115 line (fight airspace). Hold inbound on the LSV R-358 (ARCOE) between DME 30-39, left hand turns. Reattempt communications for 15 minutes. If still NORDO after 15 minutes, commence recovery via the 57th WG IFG.

A23.4.3. Sally Corridor Recall Procedures. During Airspace A and B, there exists the possibility that NATCF may need to recall parts or all of Sally Corridor during heavy traffic flows. Expect that notification will take place no later than five minutes prior to the recall. NATCF will coordinate with TAC C2 and the Airboss to recall parts of Sally Corridor, the timeframe associated, and for relay to aircraft in the airspace.

A23.4.3.1. Sally Recall A. If required, NATCF will own Sally Corridor and Elgin South of the N 37 00 line, sfc-FL190. If higher altitudes are required due to weather, NATCF will coordinate with TAC C2 and the Airboss.

A23.4.3.2. Sally Recall B. If required, NATCF will own all of Sally Corridor and Elgin South of the N 37 00 line, sfc-FL190. If higher altitudes are required due to weather, NATCF will coordinate with TAC C2 and the Airboss.

A23.4.4. Alamo Corridor. The Alamo Corridor can be used any time Sally (all altitudes) is utilized as fight airspace in order to transit aircraft to the Northern Ranges for missions. The corridor consists of the lateral confines of Alamo Alpha, Alamo Bravo, and Alamo Charlie. The corridor will normally be FL190 to FL600. If the GRR states that the corridor is FL190-600, THIS AIRSPACE WILL ONLY BE USED FOR TRANSIT AND NOT FOR ADDITIONAL FIGHT AIRSPACE. With prior coordination by a unit, the Alamos can be used for fight airspace above the corridor starting at FL240. This must be annotated in the GRR.

A23.4.4.1. NTTR will schedule the Alamo Corridor on the GRR. This will provide sufficient notice to both Blackjack and NATCF, prior to execution. All aircraft assigned the Alamo/60s ranges for normal missions in the GRR will own the Alamo airspace below FL180.

A23.4.4.2. Transit through the Alamo Corridor will be controlled by NATCF and IAW this ACP and [Figure A23.8](#) (ALAMO Departure) and [Figure A23.9](#) (ALAMO Recovery). NATCF will own the southern portion of Sally Corridor West of the W 115 03 line and south of the N 36 48 line for transiting aircraft to Alamo Corridor via MINTT.

A23.4.4.3. LFE NORDO Departure Procedures w/Alamo Corridor Active. LFE aircraft only—DO NOT FLY THE ENTIRE DREAM DEPARTURE. Squawk 7600, and continue

climb to FL230. Once at MINTT, enter holding to the southeast of MINTT from 5 to 15 DME, right hand turns, outbound on the 090° heading, and maintain FL230. Continue holding until contact is established with NATCF. If contact is not established prior to recovery fuel, recover IAW 57 WG IFG.

A23.5. NATCF/TAC C2 Airspace Control and Coordination Procedures. The purpose is to provide NATCF and TAC C2 units a single point of reference for control and coordination procedures between each other to include pre, mid, and post-mission operations.

A23.5.1. Communications. TAC C2 will establish and maintain communications with NATCF on discrete frequency 392.15. NATCF/TAC C2 will utilize this frequency to coordinate Airspace Transfer, abnormal operations (i.e. early returns, non-standard recovery plan, necessary amendments to spacing requirements), emergency information, etc.

A23.5.1.1. TAC C2 shall attempt to establish communications with NATCF as soon as possible after takeoff for each mission.

A23.5.1.2. NATCF/TAC C2 shall continuously monitor this frequency and promptly respond to each other's inquiries/instructions.

A23.5.1.3. TAC C2 shall notify NATCF prior to leaving frequency and/or shutting down equipment post-mission. Note: If communications with NATCF cannot be established and/or maintained at any point during the mission, TAC C2 shall immediately notify the Air Boss. Air Boss will, in turn, contact NATCF Watch Supervisor at 2-4222 and coordinate alternate procedures.

A23.5.2. Airspace Transfer. TAC C2 will coordinate with NATCF for airspace control pre and post-mission.

A23.5.2.1. Pre-mission: As soon as possible after establishing communications on 392.15, TAC C2 will provide NATCF with an estimated time for TAC C2 to assume control of the airspace. TAC C2 will again notify NATCF when they are on station and ready to take control of the airspace. Upon request from TAC C2, NATCF will transfer coordinated airspace to TAC C2 and will subsequently transfer all aircraft established in the airspace to tactical/check-in frequency.

A23.5.2.2. Post-mission: TAC C2 will advise NATCF when ready to release control of the airspace and any aircraft remaining on range. TAC C2 can expect to receive an instruction to have all remaining mission aircraft MONITOR Local **Ch. 7** and await NATCF instructions. TAC C2 will advise each aircrew individually and receive a verbal response from each prior to TAC C2 leaving the frequency. NATCF will establish communications with each aircrew as soon as practical.

A23.5.3. Control Procedures. While TAC C2 controls assigned airspace, NATCF/TAC C2 will adhere to the following procedures:

A23.5.3.1. Departure Procedures. NATCF will have all departures routed via JUNNO or MORMON PEAK, climbing to FL 190, or lower if requested by the aircrew. TAC C2 has approval to climb departures assigned FL 190 by NATCF on initial contact; departures assigned a lower altitude by NATCF must remain at that altitude until North of N37-00. When routed via MORMON PEAK, TAC C2 has approval for turns once North of N37-00; when routed via JUNNO, TAC C2 has approval for Westbound turns only on initial

contact. TAC C2 may not reroute JUNNO departures to MORMON PEAK without prior coordination with NATCF.

A23.5.3.2. Recovery Procedures: TAC C2 shall have all recovering aircraft descending to an altitude at or below FL180 and at or above 16,000, direct MORMON PEAK. TAC C2 will ensure proper number in flight (RWY 21–4-ship max; RWY 03- 2-ship max, for night and/or IMC recoveries) and 10 miles lateral spacing (15 miles preferred during night and/or IMC recovery) between all flights prior to transfer to NATCF. (TAC C2 should have aircrews utilize established hold points to obtain appropriate spacing). TAC C2 shall have aircraft contact NATCF on Local **Ch. 7** as soon as possible, but not later than 10 NM from MORMON PEAK. NATCF has approval authority for turns and descent on initial contact. For RWY 21, TAC C2 can expect NATCF to coordinate for SALLY RECALL ALPHA. For RWY 03, C2 can expect NATCF to coordinate for SALLY RECALL ALPHA or BRAVO, depending on the recovery flow. Note: If TAC C2 fails to provide adequate spacing and/or if flights are transferred to NATCF restricted to an altitude above FL 200, NATCF may instruct aircraft to remain on range and contact TAC C2 for de-confliction.

A23.6. Airspace Recall Procedures. Salt Lake Center and Los Angeles Center may recall airspace based on severe weather impacting FAA traffic corridors. This recall may be through the established corridors Coyote N, Caliente A B, Caliente C W, Caliente C, Elgin, XRAY and/or Sally S (see **Figure 4.6** and **paragraph 4.13**) or via known airspace borders (i.e. Reveille N/S recalled above FL250). Airspace recall will be initiated by one or both Centers via communication with NATCF no later than 45 minutes before the airspace recall. This does not mean NTTR users may utilize the recalled airspace for an additional 45 minutes. At notification, NATCF will begin coordinating for an orderly transition of the recalled airspace to Center control. NATCF will coordinate with Black Jack or TAC C2 (if available) to determine mission impacts and coordinate with the appropriate Center to minimize mission impacts wherever possible.

A23.6.1. NATCF Responsibilities. NATCF will communicate with Salt Lake Center, LA Center, Black Jack and TAC C2 (if available) to work an orderly transition of recalled airspace. Once recalled airspace is clear of NTTR traffic, NATCF will release control of the airspace to Salt Lake Center or LA Center.

A23.6.2. Black Jack Responsibilities. Black Jack will inform current users (if no TAC C2) and upcoming NTTR users of weather recall. Black Jack will communicate to NATCF when all NTTR traffic is clear of recalled airspace.

A23.6.3. TAC C2 Responsibilities. TAC C2 will notify aircraft under its control of the impending airspace recall. TAC C2 will coordinate with Instructor of Record (IOR)/Airboss (if applicable) to either direct RTB of aircraft in recalled airspace or restructure holding/ push altitude plan to ensure deconfliction of forces in the remaining airspace. TAC C2 will inform Black Jack when all aircraft are clear of the recalled airspace.

Attachment 24**DEPARTMENT OF ENERGY WATER DROP TRAINING OPERATIONS**

A24.1. Purpose. This attachment defines responsibilities and coordination requirements and standardizes operating procedures to be utilized while operating U.S. Department of Energy (DOE) helicopters in the Las Vegas Class Bravo Airspace in support of DOE helicopter water drop operations on the property of Nellis Air Force Base (AFB).

A24.2. Benefits. The procedures and authorizations to practice water drop operations on the property of Nellis AFB will greatly reduce the time and cost of water drop training for DOE helicopter crews. Due to the close proximity of the approved training area on Nellis AFB, DOE air crews will be able to do the same amount of training in much less time compared to their other option of training at the Nevada National Security Site (NNSS).

A24.3. Responsibilities. Upon request by the DOE, 57 OG/CC may authorize helicopter water drop operations within the LSV designated airspace. The DOE must ensure all pilots are familiar and comply with the procedures in this attachment. 57 OG/CC retains the authority to withdraw the provisions of the agreement at any time.

A24.4. Procedures.

A24.4.1. Coordination and Scheduling.

A24.4.1.1. 57 OSS/OSOS will coordinate drop times with AMOPS via email NLT 72 hours prior to the proposed DOE water drop training operation for safety and local NOTAM action. AMOPS will call the NATCF and Tower to advise them of the scheduled DOE water drop training operation and issue the following advisory NOTAM. "DEPARTMENT OF ENERGY (DOE) WATER DROP OPERATIONS IN PROGRESS BETWEEN THE DOE RAMP AND SUNRISE MOUNTAIN AT OR BELOW 2,500' MSL. DD MMM ##:## 20## UNTIL DD MMM ##:## 20##".

A24.4.1.2. NOTAM may be issued up to three days in advance but no later than four hours from the date/time of the requested water drop operations. NOTAM must be in effect prior to the water drop operation.

A24.4.1.3. DOE user is responsible for confirming with AMOPS, water drop training operations 24 hours prior to activity. Confirm/notify planned operation, block times and duration of activity.

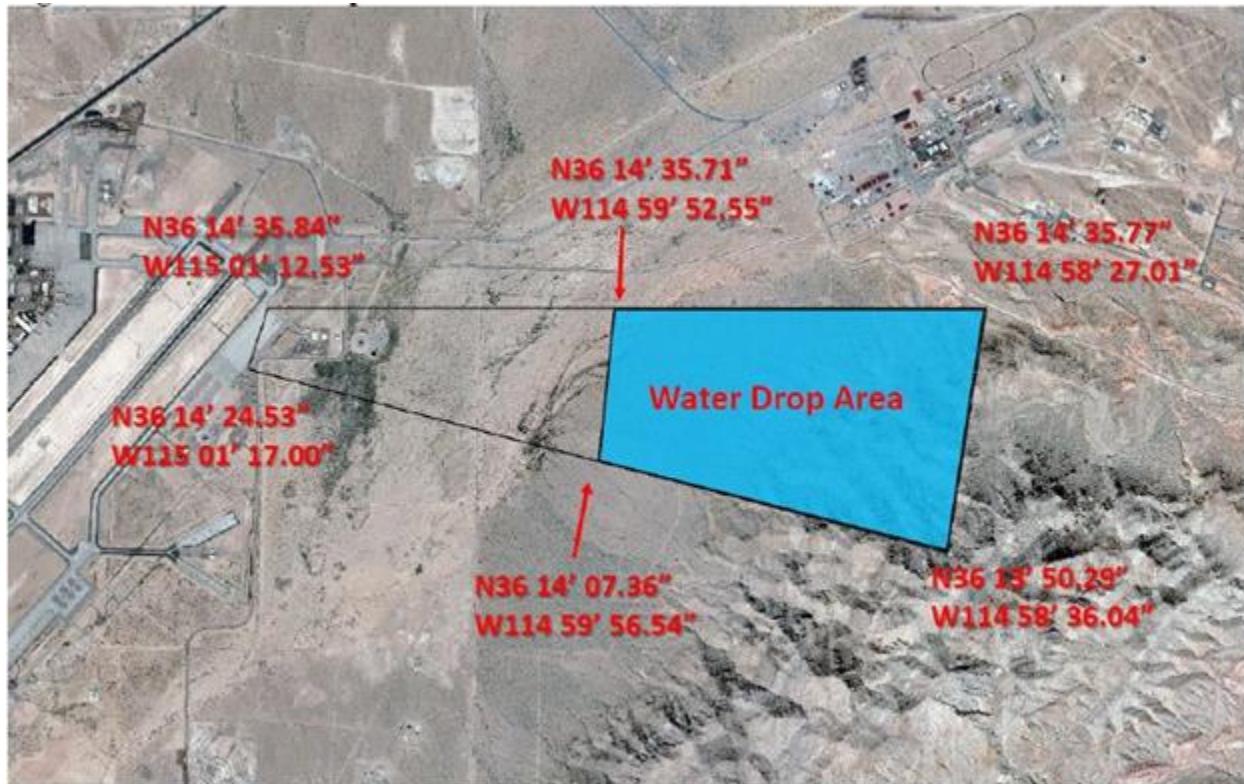
A24.4.1.4. DOE shall file a Visual Flight Rules (VFR) flight plan prior to conducting helicopter water drop training operations.

A24.4.1.5. Nellis Tower will assign a beacon code and issue a Las Vegas Class Bravo clearance to operate within the designated airspace for multiple water drops at Sunrise Mountain. Nellis Tower will issue departure/landing "at your own risk" for operations conducted from the DOE ramp, an uncontrolled movement area. A departure release is not required for VFR helicopter water drop operations.

A24.4.2. Water Drop Operations. The DOE helicopter conducting water drop operations will depart from the DOE ramp, fill the attached water bucket from the pumpkin located on the DOE ramp, fly a direct route at 300 feet Above Ground Level (AGL) or below to the approved

water drop area depicted on **Figure A24.1**, drop the water as required and fly a direct route at 300 feet AGL or below back to the DOE ramp. Any altitude or route deviations must be requested by the aircrew and approved by Nellis Tower. At no point with the height of the helicopter performing the water drop operation exceed 2,500' MSL unless approved higher by ATC.

Figure A24.1. Water Drop Route.



A24.4.3. **Restrictions.** DOE helicopter water drop operations shall be conducted only during daytime/Visual Meteorological Conditions (VMC). Drop operations are not authorized when the Nellis aerodrome is closed. Under normal conditions, drop operations shall not be conducted on any portion of the airfield to include, but not limited to: the DOE ramp, runways or taxiways. In the event of a malfunction, the helicopter pilot will coordinate with Nellis Tower to jettison the bucket and remaining water as appropriate. The helicopter conducting drop operations shall not overfly the runways, taxiways, personnel, vehicles, or aircraft in the event the helicopter is required to jettison the bucket without notice.

A24.5. Priority of Use. This DOE mission is for training purposes; therefore, the same priority afforded real-world DOE missions do not apply. Controllers shall use their best judgment when prioritizing DOE helicopter water drop operations with existing traffic. Water drop operations may be denied or suspended during emergency response operations or large force exercises.