

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