

MIDAIR AVOIDANCE CHECKLIST

CHECK YOURSELF: Make sure you are physically and mentally up to flying. If you need glasses, wear them.

PLAN AHEAD: Study your entire route to include weather. Know your destination. By planning ahead, your head will be out of the cockpit scanning for other aircraft instead of studying a map or airport overlay.

CLEAN WINDSCREEN: Part of your preflight should include checking the windscreen for possible obstructions. That bug you hit yesterday might get his revenge today.

OBEY THE RULES: Adhere to all local and federal regulations. Maintain your assigned altitude and route. If you're not able to do so, advise the proper authority and get an amended clearance. Study the local area you are flying in and the area you are going to. Enter traffic as specified. Many a midair has been caused by a pilot entering a traffic pattern incorrectly. In most midair collisions, one of the aircraft was in the wrong place.

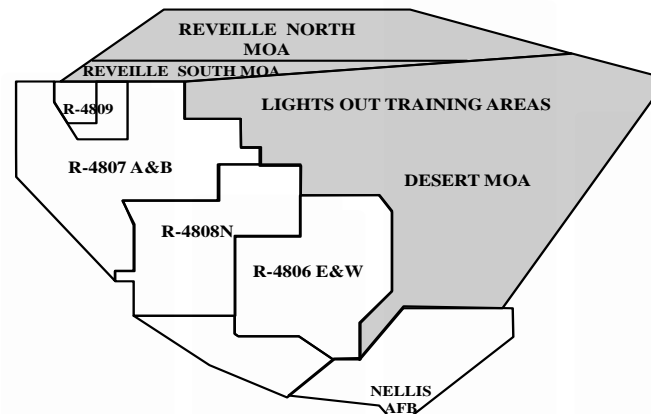
BRIEF THE CREW: Brief the entire crew and passengers on proper crew scanning procedures and how to report other aircraft that should be considered possible midair threats. When identifying other aircraft, make sure you are talking about the same aircraft. Many near miss and mid-air have been caused by a crewmember identifying one aircraft while the pilot was identifying another.

AVOID CROWDED AIRSPACE: If at all possible, avoid areas of heavy aircraft concentration. If you must enter these areas, be well prepared by planning ahead. When navigating VFR don't cross directly over a VORTAC. Pass slightly to the left or right of it. Cross over airports at a safe altitude or, if possible, fly to the left or right of them.

COMPLETE CHECKLISTS EARLY: On descents and letdowns, get checklists out of the way as high as practical, i.e., before reaching crowded lower altitudes. For departure and arrival, try interspersing checklist items with deliberate outside looks.

KNOW YOUR AIRCRAFT: All aircraft have blind spots. Know the aircraft's flight limitations. If the aircraft is a low-wing type, it will be hard to detect traffic during descents.

TALK AND LISTEN: Use your radio equipment and monitor it continuously. When approaching an airport make a radio call from a distance far enough away to receive the local traffic situation. If the airport has radar service, call and take advantage of it. Remember, FSS will give you traffic advisories at uncontrolled airports. Once you have detected a radar target, don't forget it; yet, don't over concentrate on it. There are many more aircraft in the area.



AIRCRAFT CHARACTERISTICS SILHOUETTES/AIRCRAFT COMMONLY SEEN AT NELLIS AFB

WHAT A FIGHTER LOOKS LIKE

You might think it is easy to spot a military aircraft because they are usually larger than an airplane you might own or use. Certainly, large military transport, bomber, or air refueling aircraft are "airliner" sized, but what about a fighter? Take a look at the figure below—it might give you an idea of relative fighter size.

AT 1000 FEET A FIGHTER LOOKS LIKE:



AT 2000 FEET A FIGHTER LOOKS LIKE:



AT 3000 FEET A FIGHTER LOOKS LIKE:



AT 6000 FEET A FIGHTER LOOKS LIKE:



To put things in perspective, if you are flying at 120 knots and are approaching an F-16 head-on traveling at 500 knots (a typical fighter speed flown on low-level routes) you will close at about 1000 feet per second. If your initial separation was 6000 feet, you would have about 6 seconds to react prior to impact. That is if you were able to recognize the "dot on the horizon" as a conflict. Not much time! It takes approximately 3-5 seconds for a pilot to recognize a threat, make a decision, and initiate action. Also keep in mind the F-16 pilot will have an even tougher time seeing you if your aircraft is smaller than his.



57th Wing Safety
Chief of Flight Safety
(702) 652-7465

Nellis AFB, Creech AFB, & NTTR
Airspace Management Office
(702) 652-3309/7891

Nellis Air Force Base
Creech Air Force Base
Nevada Test and Training Range



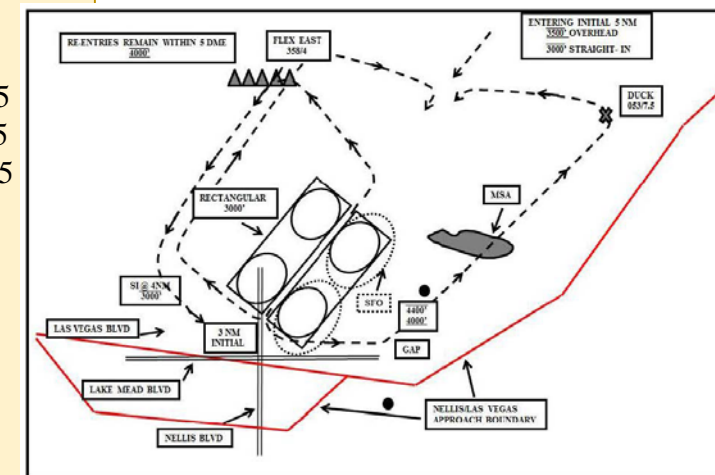
MACA PILOT AID



Nellis Control
S/W Restricted: 119.35
S Desert MOA: 126.65
N Desert MOA: 124.45

Nellis Approach
West: 135.1
East/North: 124.95

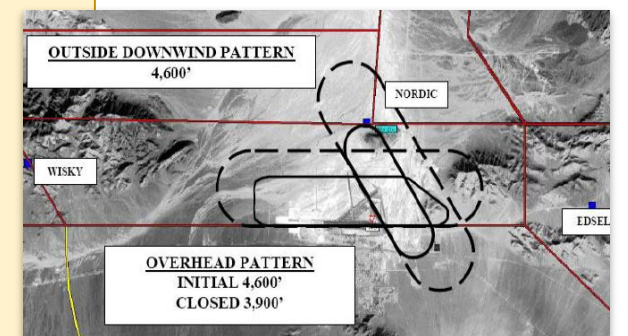
Nellis AFB
Tower: 132.55



Nellis AFB Traffic Pattern

**Indian Springs/
Creech AFB**
Tower: 118.3

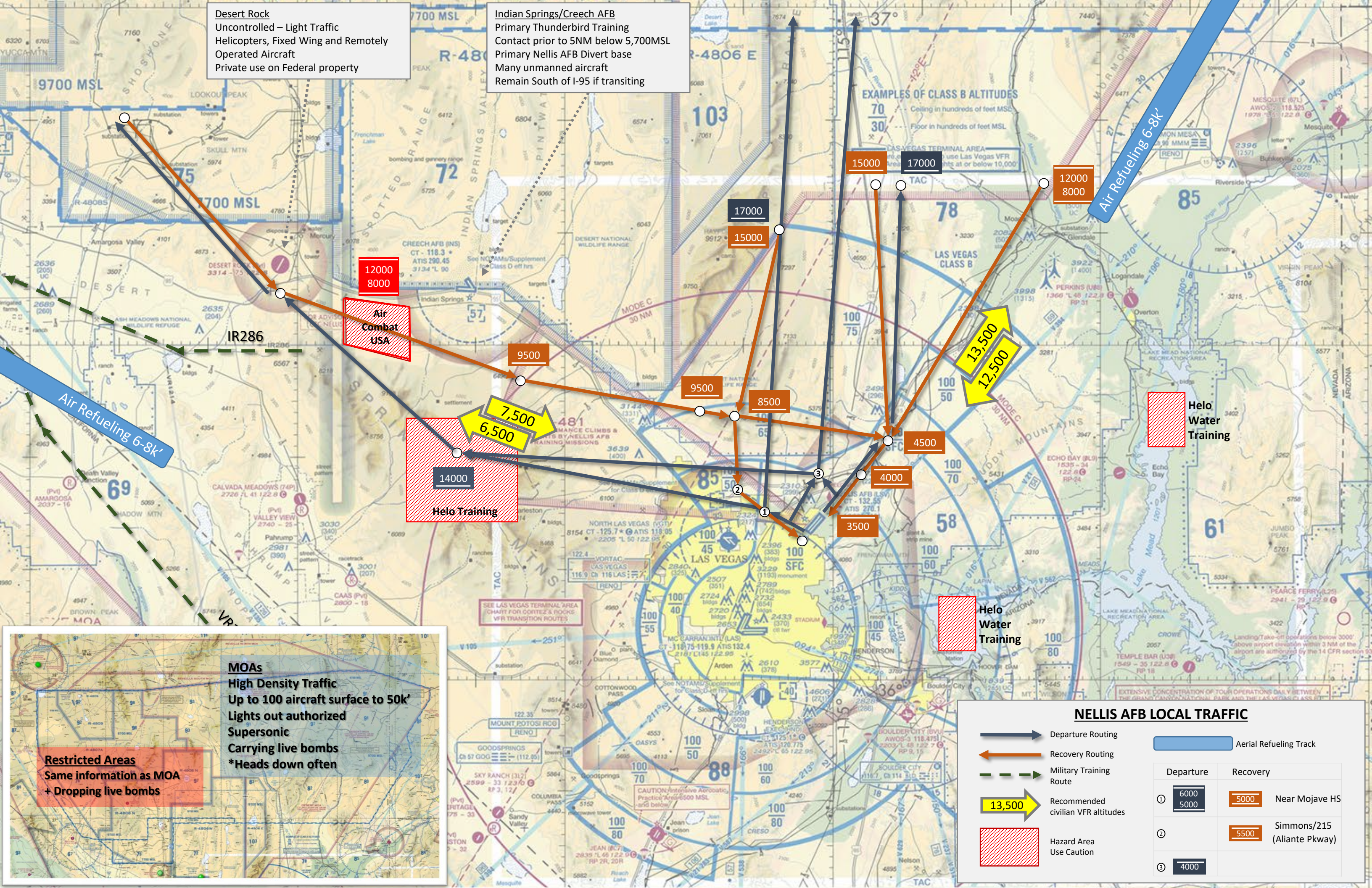
FSS: 122.4



Creech AFB Traffic Pattern

Desert Rock
 Uncontrolled – Light Traffic
 Helicopters, Fixed Wing and Remotely Operated Aircraft
 Private use on Federal property

Indian Springs/Creech AFB
 Primary Thunderbird Training
 Contact prior to 5NM below 5,700MSL
 Primary Nellis AFB Divert base
 Many unmanned aircraft
 Remain South of I-95 if transiting



12000
8000

**Air
Combat
USA**

9500

7,500
6,500

14000
Helo Training

17000

15000

9500

8500

15000

17000

12000
8000

4500

4000

3500

**Helo
Water
Training**

MOAs
 High Density Traffic
 Up to 100 aircraft surface to 50k'
 Lights out authorized
 Supersonic
 Carrying live bombs
 *Heads down often

Restricted Areas
 Same information as MOA
 + Dropping live bombs

NELLIS AFB LOCAL TRAFFIC

Departure Routing
 Recovery Routing
 Military Training Route
 Recommended civilian VFR altitudes
 Hazard Area Use Caution
 Aerial Refueling Track

	Departure	Recovery	
①	6000 5000	5000	Near Mojave HS
②		5500	Simmons/215 (Aliante Pkwy)
③	4000		