UNITED STATES MARINE CORPS
Marine Corps Air Station Yuma

RANGE AND TRAINING AREAS STANDARD OPERATING PROCEDURES (StaO 3710.6J)

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In Reply Refer To

StaO 3710.6J
YRMD

30 JAN 2013

STATION ORDER 3710.6J

From: Commanding Officer, Marine Corps Air Station Yuma
To: Distribution List

Subj: MCAS YUMA RANGE AND TRAINING AREAS STANDARD OPERATING PROCEDURES (SHORT TITLE: SOP FOR MCAS YUMA RTA)

Ref: (a) MCO 3570.1C (Range Safety)
(b) DA PAM 385-63 (Department of the Army Pamphlet on Range Safety)
(c) MCO 3574.2K (Entry Level and Sustainment Level Marksmanship Training with Ml6A2 Service Rifle and M9 Service Pistol)
(d) BUMEDINST 6470.19A (Laser Safety at Military Facilities and Research Laboratories)
(e) MIL-HDBK-828B w/CHl (Department of Defense Handbook, Laser Safety on Ranges and in Other Outdoor Areas)
(f) MCO 5104.1C (Navy Laser Hazards Control Program)
(g) MCO 3500.27B (Operational Risk Management)
(h) MCO P3550.10 w/CHl [Policies and Procedures for Range and Training Areas (RTA) Management]
(i) FAA 7930.2J [Notices to Airmen (NOTAMs)]
(j) FAA JO 7400.8 Series (Special Use Airspace)
(k) OPNAVINST 3770.2K (Airspace Procedures and Planning Manual)
(1) FM 6-2 (Tactics, Techniques, and Procedures for Field Artillery Survey)
(m) FM 6-50 (Tactics, Techniques, and Procedures for Field Artillery Cannon Battery)
(n) FM 23-30 (Grenades and Pyrotechnic Signals)
(o) MCO 3500.20B (Marine Corps Parachuting and Diving Policy and Program Administration)
(p) MCWP 3-15.7 (Static Line Parachuting Techniques and Training)
(q) 8020.10B (Marine Corps Ammunition and Explosives Safety Program)
(r) Stao 5532 (Use of Force)

1. Situation. The Commanding Officer (CO) is responsible for information, instructions, and procedures governing the use of

all ranges, training areas, and airspace operated and controlled by Marine Corps Air Station (MCAS) Yuma, Arizona.

2. Cancellation. Station Order 3710.61 Ch 1.

3. Mission. To ensure all agencies and units operating within MCAS Yuma ranges and training areas (RTA), under the control of CO, MCAS Yuma adhere to these regulations.

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. Personnel operating within MCAS Yuma's RTA will operate in a safe manner, preserving life, equipment, and natural resources, and MCAS Yuma's RTA will be managed in a way that maximizes safe, effective training opportunities for MCAS Yuma's diverse customer base.

(2) Concept of Operations. This order will be distributed as directed and all agencies will review and incorporate procedures from the current version.

b. Coordinating Instructions

(1) This order contains substantial revisions and should be read in its entirety.

(2) In the event these instructions conflict with those issued by higher authority, the orders of the higher authority shall take precedence. Notify the Commanding Officer (Attn: MCAS Yuma Range Management Department) of any conflict or questions of interpretation.

(3) Review of the laser special instructions contained in the current MCAS Yuma Laser Range Certification Report, applicable aviation special instructions, and all specific ground range special instructions shall be accomplished by commanders and all personnel in a supervisory role prior to conducting training within MCAS Yuma RTA. Designated Range OICs and RSOs shall physically possess a copy of applicable range special instructions when training on certified ground ranges.

(4) Commanders of organizations utilizing MCAS Yuma range documents are encouraged to submit recommendations concerning improvements or changes to the Commanding Officer (Attn: MCAS Yuma Range Management Department).

5. Administration and Logistics. This order can be viewed by usmc.mil users at the following web address:

https://intr3net.mciwest.usmc.mil/yuma;rng/roc;default.aspx

If you have trouble viewing this site, contact Range Scheduling, and the appropriate computer settings for viewing this page can be provided. Hard copies are available upon request from the Range Scheduling Office. Distribution Statement B directives issued by the Commanding Officer are distributed via e-mail upon request.

6. Command and Signal

a. Command. This order applies to all commands, organizations, units, and activities authorized use of the ranges, training areas, and airspace controlled by the Commanding Officer, MCAS Yuma.

b. Signal. This order is effective the date signed.

ROBERT C. KUCKUK

DISTRIBUTION: B

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SOP FOR MCAS YUMA RTA

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporating Change

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CHAPTER 1

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CHAPTER 1

GENERAL

1000. PURPOSE AND SCOPE

1. Purpose. The purpose of this order is to provide a detailed source document governing Commands using the Range and Training Areas (RTA) associated with Marine Corps Air Station, Yuma. It specifies responsibilities, gives descriptions of available training ranges, provides instructions on how to schedule the RTA, and defines safety regulations for all live fire, maneuver, and air operations within the RTA. MCAS Yuma's RTAs are located within the Bob Stump Training Range Complex (BSTRC). The BSTRC includes the Barry M. Goldwater Range (BMGR), the Chocolate Mountain Aerial Gunnery Range (CMAGR), the U.S. Army Yuma Proving Ground (YPG), and the Naval Air Facility (NAF) El Centro ranges. MCAS Yuma is the custodian for the BMGR West and the CMAGR only, but also provides scheduling services for NAF El Centro's airspace areas (see Figure 4-1).

2. Cancellation. Station Order 3710.6I Ch 1.

3. Scope. MCAS Yuma schedules all or portions of seven restricted areas: R-2301W, R-2507N, R-2507S, R-2507E, R-2510A, R-2510B, R-2512, and twelve Military Operations Areas (MOAs) and/or Air Traffic Control Assigned Airspaces (ATCAAs): Abel North/South/Bravo/East, Dome, Quail, Turtle, Imperial North/South (ATCAAs), and Kane East/West/South (see Figures 1-1 and 1-2). Included within these Special Use Airspace (SUA) areas are special weapons targets, close air support range complexes, air-to-air ranges, ground ranges, and areas supported by Tactical Aircrew Combat Training Systems (TACTS). The CO, MCAS Yuma, is charged with the air and ground safety of all operations in the ranges, targets, and restricted areas for which he is designated as the using agency (this excludes those restricted areas falling under the command authority of NAF EL Centro and Army Yuma Proving Ground - YPG). Therefore, where there is a conflict with the provisions of any other Instruction/Order, the provisions established by this order or the appropriate using agency for the specified area will prevail.

4. Applicability. All personnel wishing to gain access to any MCAS Yuma RTA (to include public access areas) will comply with the provisions set forth in this order and its references.

5. Warning. Failure to comply with these regulations may subject the offender to administrative action or disciplinary action under the Uniform Code of Military Justice (UCMJ).

6. Information

a. Range. A range is a designated land or water area that is set aside, managed, and used for range activities of the Department of Defense (DOD), and includes airspace areas designated for military use by the Administrator of the Federal Aviation Administration (FAA).

b. Range Activities. Range activities include research, development, testing and evaluation of military munitions, other ordnance, weapon systems and the training of members of the armed forces in the use and handling of military munitions, other ordnance and weapon systems. The term RTA incorporates ranges and any associated airspace that is used for such activities.

7. Range Containment. Range containment is the pilot's responsibility and will be enforced by the MCAS Yuma Air Traffic Control (ATC) Combined Center Radar Approach Control Facility (CERAP) (call sign "YUMA RANGE"). SUA users will remain within both the horizontal and lateral limits of MCAS Yuma scheduled and controlled SUA at all times. Any intentional spill-out could constitute a flight violation and could be pursued as such by the FAA. YUMA RANGE documents all airspace spill-outs.

1001. RANGE MANAGEMENT

1. The Range Management Department is responsible to the Commanding Officer (CO), MCAS Yuma, for management of all activities conducted in the MCAS Yuma RTA.

2. The Range Control Officer (RCO) is responsible for the control, scheduling, safety, and maintenance of the RTA. The RCO provides overall supervision of the range organization and is directly responsible for the safe operation of the RTA. As such, the RCO will establish range control facility operating procedures that support the contents of this order. Elements of the Range Management Department are described below.

a. Range Operations Division – Range Control Facility (RCF)

(1) "LEG IRON". LEG IRON is the range control function of the Range Management Department. LEG IRON provides RTA control, coordinates with MCAS Yuma ATC when transitioning aircraft in

and out of restricted airspace, controls training and administrative access to all of MCAS Yuma's ground range areas, coordinates medical evacuations (MEDEVACs), and serves as a means of passing and receiving essential information to all commands engaged in training aboard MCAS Yuma's RTA.

(2) Range Scheduling. Provides a single scheduling authority for all training aboard MCAS Yuma's RTA. It coordinates airspace usage with the FAA and maintains actual RTA utilization data.

(3) Range Safety. The Installation Range Safety Officer and range inspectors serve as the direct representatives of the RCO for the enforcement of this order and safety standards throughout the RTA, to include range briefs, laser briefs, and Range Officer-in-Charge (OIC)/RSO certifications for training units and other agencies.

(4) Plans/Operations. Provides project management and direct supervision for new range facilities, design, and improvements. Coordinates new range requirements and manages contractual agreements and/or funding programs for the purpose of sustained current Range Operations and anticipated future range training activities. Identifies training necessities and generates requirements in support of current Tactical Training Plans (TTP's). The Plans Officer is responsible for coordinating daily, quarterly, and annual enhancement, maintenance, and sustainment of all MCAS Yuma RTA and is responsible for tasking YRMD Range Maintenance.

b. Range Maintenance. Maintains all MCAS Yuma RTA to include range signage as well as target construction, emplacement, and operation in support of unit training.

c. Natural Resources Section.

(1) Natural Resource Conservationists. Provide archaeological, biological, cultural, and natural resource management and conservation oversight for all MCAS Yuma RTA. Recommend specific operational requirements necessary for environmental compliance and regulatory management of the diverse range areas under the cognizance of the Range Management Department, and CO, MCAS Yuma.

(2) Range Wardens. Investigate, apprehend, or detain individuals suspected of committing offenses of the criminal laws and regulations of the United States that relate to MCAS Yuma and areas of the Barry M. Goldwater Range (BMGR) and the

Chocolate Mountain Aerial Gunnery Range (CMAGR), with an emphasis on protecting natural resources found on both. Range Wardens are uniformed Law Enforcement Officers with fully delegated law enforcement authority with additional authority as a United States Fish and Wildlife Service Deputy Game Warden. Range Wardens support real-time enforcement of this order and ensure military and civilian access to the range areas are conducted in accordance with standing policies.

d. Explosives Ordnance Disposal (EOD). The EOD mission is to provide the capability to neutralize hazards from EOD incidents which, because of unusual circumstances, present a threat to operations, installations, personnel, or materiel. EOD provides a 24-hour first response capability for MCAS Yuma and civil authorities. Support range maintenance personnel with Unexploded Ordnance (UXO) clearance for target emplacement in support of unit training. Provide UXO briefs to personnel training on MCAS Yuma RTA. Escort personnel entering MCAS Yuma RTA. Support U.S. Secret Service (USSS) and Joint Prisoner of War Missing in Action Accounting Command (JPAC).

1002. SCHEDULING

1. For the areas in which the CO, MCAS Yuma is designated the Using Agency, MCAS Yuma Range Management is responsible for scheduling the activities contained within. In cases where Letters of Agreement have been written, MCAS Yuma provides scheduling services for non-USMC range areas and defers to their local SOP for specific range guidance and restrictions. See Chapter 4, Adjacent Areas for details.

2. Specific scheduling procedures, deadlines, and priorities are provided in Chapter 3 of this order.

1003. UNIT COMMANDER

1. General. The unit commander ensures compliance with this order, directives in the Marine Corps Order (MCO) 3570 series [references (a), (b), and (c)], OPNAVINST 3700 series, applicable Technical Manuals (TM), Field Manuals (FMs), and Marine Corps Warfighting Publications (MCWPs), installation range guidance, and applicable Standard Operating Procedures (SOP) for safe training and firing for each weapon system within the command.

2. Briefing. Ensure all personnel within the command are briefed on installation range procedures and safety requirements

including required Personal Protective Equipment (PPE) where applicable.

3. Range OIC and Range RSO

a. Designation. The CO, MCAS Yuma, is charged with the air and ground safety of all operations in the ranges, targets, and restricted areas falling under MCAS Yuma's authority (see Figure 4-1). For ground training activities at MCAS Yuma, both a designated Range OIC and RSO are required. Information provided in this order regarding adjacent military agencies is strictly informational only. Therefore, when there is a conflict with the provisions of any other Instruction/Order, the provisions established by the applicable authoritative agency (for the specified area of concern) will prevail.

b. Requirements. The unit commander ensures range OICs and RSOs meet the requirements listed in the directives in MCO 3570.1 series, which are highlighted below. Range OICs/RSOs:

(1) Must be competent and properly instructed in the performance of their duties. They must also have satisfactorily completed the MCAS Yuma Range Safety Certification Program.

(2) Must be certified/qualified in the weapon/LASER systems for which they are held responsible, as well as safe ammunition handling and use procedures IAW MCO 3570.1C/DA PAM 385-63.

(3) Must be designated by unit commander in a "Unit Commander Range OIC/RSO Designation Letter" for all weapon/LASER systems for which they are certified/qualified to supervise.

(4) Must have satisfactorily completed the level one range safety course on MarineNet and the MCAS Yuma Range Safety Class.

(5) Detailed Range OIC and Range RSO requirements and duties can be found in Chapter 6 of this order. Information on Range OIC/RSO certification training is provided in Paragraph 1004 and Figure 6-4.

4. LASER Operations

a. LASER operations shall be conducted in accordance with AR 385-40, TB MED 524, BUMEDINST 6470.19A, MIL-HDBK 828B w/CH1, MCO 5104.1C, MCO 3570.1C/DA PAM 385-63 [see references (d), (e), and (f)] and this order. All LASER activity requested in MCAS Yuma's RTA shall be conducted in accordance with parameters

prescribed in the MCAS Yuma LASER Range Certification Report. LASER training outside of these parameters is strictly prohibited. Requests for LASER training outside of these parameters require no less than thirty (30) days advance notice. All LASER systems shall be approved by LASER Safety Review Board (LSRB) before requests for their use will be considered. The LASER Range Certification Report can be accessed by usmc.mil users by clicking on the link below. If you have trouble viewing this site, contact Range Scheduling, and the appropriate computer settings for viewing this page can be provided. Other users can request LASER Training Area (LTA) parameters by contacting Range Scheduling or Range Safety directly.

https://intranet.mciwest.usmc.mil/yuma/rng/roc/default.aspx

b. LASER Range Safety Officer (LRSO). All LRSOs will complete the MCAS Yuma LRSO brief prior to supervising the conduct of LASER operations. LRSO briefs are scheduled through the Range Safety Office. Qualified LRSOs must possess copies of and strictly adhere to the parameters of currently approved MCAS Yuma LTAs when conducting laser operations in the RTA. LASER training is not authorized unless the RTA has been surveyed, documented, and specifically approved by the MCAS Yuma RCO. Detailed LASER training information can be found in Chapter 8 of this order.

1004. RANGE SAFETY CERTIFICATION TRAINING

1. See Figure 6-4 for a detailed description of the three-step process summarized below.

a. All personnel requiring MCAS Yuma OIC/RSO Range Safety Certification shall have successfully completed the Range Safety (Basic) Distance Learning Course as required per [reference (a)]. A copy of the completion certificate shall be provided to the MCAS Yuma Range Safety Office and is valid for 3 years.

b. Personnel assigned the duties of OIC or RSO must attend and successfully complete the local Range Safety Certification Course (commonly referred to as the MCAS Yuma Range Specifics Class). Contact the Range Safety Office via DSN 269-5574 or Commercial (928)269-5574 to request the local training.

2. Marine Corps unique special weapons and ammunition information not covered in the MCO 3570.1_ series will be addressed by TECOM Safety of Use Memorandums (SOUMs). It is the training unit’s responsibility to ensure the appropriate

documentation has been provided to Range Safety for training requested beyond the scope of current MCAS Yuma Range SOPs (see Figure 1-3 for deadlines).

3. Steel Reactive Target (SRT) and Special Effects Small Arms Marking System (SESAMS) RSO training will be part of the Range Safety Certification Course provided by the Range Safety Office. The use of SRTs shall be conducted as outlined in TECOM SOUM 2-02. The use of SESAMS shall be conducted as outlined in [reference (a)]. The use of SRTs and SESAMS outside of established combat towns or shooting houses requires an approved brief from the RCO.

1005. RANGE VIOLATIONS AND REPORTING

1. Ground Violations. Infractions will cause a range violation to be issued. Range Operations personnel, primarily Range Safety Inspectors are the issuing agents for these violations. In the event of a violation, all training may be halted until corrective action has been taken. Range OIC/RSO privileges may be revoked by RCO based on the severity of the infraction(s). Qualifying infractions include, but are not limited to

a. Accessing MCAS Yuma RTA without LEG IRON approval.

b. Conducting live fire operations without LEG IRON approval.

c. Deviating from RTA SOPs without written approval from the RCO.

2. Air Violations. Aircraft operating in MCAS Yuma SUA/RTA are required to remain within the confines of the airspace for which they have been scheduled/approved.

a. Air violation is defined as:

(1) Unauthorized penetration of a SUA/RTA and/or sub-range.

(2) Spill-out of SUA and/or sub-range.

(3) Penetrate a noise sensitive area.

(4) Failure to establish and maintain communications with Range Control.

b. Should a unit violate the range regulations two times within a 30 day period, an ODR shall be submitted recommending up to a 30 day suspension and attendance at a SUA brief. If

suspended, a no-flight restriction will remain in effect until the SUA brief is completed. The following applies:

(1) Units may request a waiver of the suspension from the CO, MCAS Yuma. This request shall be in writing and contain verification of a completed SUA brief.

(2) Units may not attend more than one SUA brief within a 60 day period.

c. Any flight/unit may be required to vacate SUA/RTA if actions are deemed to be flagrant and/or compromising to safety.

1006. SAFETY AND OPERATIONAL RISK MANAGEMENT (ORM)

1. Safety

a. Safety is the responsibility of every individual, at all times, and is a key factor in successful training. Concerns for safety, however, should never be limited to the training event itself, but should always include associated activities as well; including convoy movement to and from training, maintenance activities, bivouac operations, etc. All mishaps and incidents will be reported to LEG IRON by the OIC immediately, regardless of severity. Failure to do so will result in a range violation.

b. Any individual who observes an unsafe condition will report this immediately to the chain of command. A training event or any other activity may be halted until the unsafe condition has been corrected. The greatest danger to life and limb is associated with live-fire; therefore, range restrictions for various weapons/ammunition are listed below. These are in addition to other safety requirements listed in this order.

c. All MCAS Yuma scheduled RTA, which include airspace and ground areas, will not be entered unless clearance has been received from the MCAS Yuma CERAP (for airspace areas) and/or LEG IRON (for all ground areas).

d. All restrictions, pertaining to individual RTA as set forth in this order must be observed.

e. LEG IRON personnel have authority to refuse the use of the target to any flight or aircraft violating the provisions of this order.

f. It is emphasized that proper caution will be exercised at all times when firing on towed targets. All firing will be

conducted to ensure the projectiles, ejected links and cases fall within designated impact areas.

g. RTA access from LEG IRON is granted with expressed permission. Range access procedures are provided in Appendix E. Land within the restricted areas is predominantly desert conditions and is without water, roads, and habitation. It is therefore suggested that these precautionary procedures be followed:

(1) Have a minimum of two people in your party.

(2) Utilize a four-wheel drive vehicle.

(3) Possess a two-day supply of food and water in excess of the period for which clearance is granted.

(4) Leave an expected time of return with LEG IRON and your command.

h. UXO is scattered throughout the restricted areas resulting in ground access restrictions. These munitions can still explode even though they have lain in the desert for decades. In fact, age may have rendered them more unstable and more prone to detonation by disturbance than when they were actually dropped or fired. For your own safety, keep away from all ordnance. Note or mark the area in which the object is found and report its location to LEG IRON immediately. LEG IRON will make the necessary coordination with EOD-qualified personnel to have the area cleared for safe access.

2. Operational Risk Management (ORM). The unit commander shall apply ORM as identified in [reference (g)] by identifying and assessing hazards and implementing controls for all phases of training events. Additionally, the unit commander will review risk assessments for all training events. An ORM Worksheet is provided in Appendix E.

1007. RANGE RESTRICTIONS

1. General

a. Firing or bombing will be conducted on authorized ranges and target areas only. This does not prohibit the controlled use of blank ammunition or noisemakers (small, controlled demolition charges of 1/4 pound of TNT or equivalent) in accordance with this order.

b. Personnel not specifically scheduled to be in RTA are not authorized.

c. Units desiring access to OPs, LZs, and/or AFAs/MPs, within the R-2507 will schedule an EOD range sweep and/or UXO Brief no later than ten days prior to the scheduled event. If a sweep is required by EOD-qualified personnel, the area shall be swept immediately in advance of the training and scheduled in such a way as to prevent possible ordnance contamination prior to ground access.

d. Within the R-2507, bivouacking will not be allowed anywhere other than designated areas specifically approved for this type of activity. Refer to Appendix B “Other Range Areas” for a comprehensive list of designated bivouac areas.

e. Within the R-2507, repositioning between OPs and AFAs/MPs will not be authorized until routes have been cleared by EOD-qualified technicians and a UXO Brief provided to the training unit. Proposed routes will be submitted to MCAS Yuma Range Safety at least ten days prior to exercise commencement.

2. Privately Owned Vehicles (POV) and Privately Owned Weapons

a. POVs are prohibited from all impact areas in the Chocolate Mountain Aerial Gunnery Range (CMAGR). POV’s operating in other range areas will be at the discretion of the OIC. Range access procedures remain applicable to all personnel and vehicles accessing any of the ground ranges associated with MCAS Yuma (refer to Chapter 6 of this order).

b. The speed limit is 25 mph for all areas, unless otherwise posted.

c. All vehicular travel is restricted to designated roads ONLY and 25 feet (ft.) on either side of designated roads (for the purpose of giving right of way).

d. DoD does not bear responsibility for any damages to POVs while within the RTA.

e. Privately owned weapons are not authorized on ranges or training areas without special permission. Submit requests to the RCO two weeks in advance.

f. Transporting military weapons to and from any range in POVs is not authorized without unit commander’s approval.

g. Military personnel not specifically scheduled to be on the ranges or in the training areas are not authorized to be there.

h. Civilians are not permitted at live-fire training events without specific authorization. Unit-sponsored functions, which include civilian participation, must be approved by the CO, MCAS Yuma via the Range Management Department.

3. Alcohol. Alcohol is not allowed on ranges or in training areas unless approved by the CO, MCAS Yuma.

1008. DEVIATIONS/WAIVERS

1. General. A deviation is a departure from the regulatory standards contained in MCO 3570.1C [reference (a)] and DA PAM 385-63 [reference (b)]. A waiver is a departure from the regulatory standards contained in this order.

a. Requests for deviations to [references (a) and (b)] with respect to activities not currently approved on MCAS Yuma ranges shall be submitted to the CO, MCAS Yuma via the RCO (Attn: Director of Yuma Range Management Department) no less than thirty days prior to the planned event. Deviation requests must be coordinated with the RCO prior to submission. Approved deviations will be effective for one year or less at the discretion of the CO, MCAS Yuma. Approval authority for deviations shall not be sub-delegated below the CO, MCAS Yuma. See [reference (b)] and Figure 1-3 for guidelines and information requirements for submitting a deviation. Deviations are limited to:

(1) Reducing SDZ dimensions when terrain, artificial barriers, or other compensating factors make smaller SDZs safe.

(2) Modifying prescribed firing procedures to increase training realism (such as accepting increased risk when the risks have been incorporated into an approved SDZ) as appropriate for the proficiency of participants.

(3) Allowing personnel not authorized within a SDZ unless prohibited by [references (a) and (b)].

b. Requests for waivers to the provisions contained in this order shall be submitted to the CO, MCAS Yuma via the RCO (Attn: Director of Yuma Range Management Department) no less than thirty days prior to the planned event. Waiver requests must be coordinated with the RCO prior to submission. Approved waivers will be effective for one year or less at the discretion of the CO, MCAS Yuma. Approval authority for waivers may be delegated

by the CO, MCAS Yuma. A sample Waiver Request is contained in Appendix E.

1009. ACCIDENT REPORTING

1. General. When a training accident occurs (regardless of severity) in a training area, a report will immediately be made to LEG IRON by telephone or radio.

2. Mishaps. Mishaps occurring in airspace or ground under the cognizance of MCAS Yuma, AZ will be reported to MCAS Yuma Range Management and Station Safety via message. LEG IRON, upon notification of an aviation mishap occurring within MCAS Yuma's RTA shall assist in coordinating procedures outlined in Station Order P3750.2G "Station Aviation Premishap Plan" dated 4 April 2012.

1010. MEDICAL EVACUATION (MEDEVAC)/SEARCH AND RESCUE (SAR) PROCEDURES

1. General. Base Operations and Emergency Dispatch have ultimate MEDEVAC initiation responsibilities for all accidents occurring in the BMGR, CMAGR, and associated training facilities. It is critical in order to ensure a timely response to training accidents, that the incident details, victim injuries, and assets necessary to best address victim injuries are clearly relayed to Base Operations or Fire Station Dispatch. The following information pertains to MEDEVAC/SAR responses.

a. The MCAS Yuma Branch Medical Clinic (BMC) is not trauma-capable.

b. SAR will transport the victim from the specified site located within the BMGR or CMAGR to Yuma Regional Medical Center (YRMC).

c. MCAS Yuma SAR response time is as follows:

(1) Week Days
0700-1700 (10 Min Strip Alert)
1701-0659 (30 Min Strip Alert)

(2) Weekends
0000-2400 (30 Min Strip Alert)

Note:

Strip alert is the time pilots/crewmembers get from the initial call to manning the aircraft.

d. Military aircraft should not transport injured personnel to YRMC unless authorized by CO, MCAS Yuma.

e. Competent medical personnel or the Senior Marine on location will determine the extent of a medical emergency.

2. Precedence. In order to help the SAR assets determine the severity of a MEDEVAC, the following priorities should be assigned and passed to the cognizant authority when requesting a MEDEVAC.

a. URGENT. Evacuation of critically wounded or injured that requires early hospitalization is an urgent precedence and is a matter of life or death. Examples requiring urgent MEDEVAC include:

(1) Chest pain that doesn’t go away when sitting for a few minutes

(2) Intense and uncontrollable pain

(3) Head injury with loss of consciousness

(4) Deep lacerations with uncontrollable bleeding

(5) Chemicals splashed in the eyes

(6) Severe asthma attacks with shortness of breath that prevents talking

(7) Possible poisoning or overdose

(8) Sudden weakness on one side of the body

(9) Serious fractures

(10) Snake bites

b. PRIORITY. Evacuation of seriously wounded or injured personnel and require early hospitalization, but whose evacuation is **not** a matter of life or death is a prioritized event. Examples requiring priority MEDEVAC include:

(1) Nausea and vomiting that won’t stop

(2) Asthma

(3) Minor reactions to medications

(4) Headaches

(5) Minor cuts that need to be sutured, but the bleeding is controllable

(6) Possible fractures of wrist or ankles but no deformity, numbness or bluish discoloration

c. ROUTINE. Evacuation of a deceased serviceman, a patient with minor illness, or a patient requiring transfer between medical facilities for further treatment is a routine event. Examples requiring routine MEDEVAC include:

(1) Colds, flu, sore throats

(2) Skin rashes

(3) Minor cuts and scrapes

3. MEDEVAC. Urgent MEDEVAC can be accomplished by performing the following:

a. Dialing LEG IRON at (928)269-7080

b. Dialing the Yuma Emergency Dispatch at (928)269-2333/2285/2385

c. Radio: UHF 337.9 (Monitored 24hrs by “Yuma Command Post” and Fire Station Dispatch)

Note:

See Appendix E for a MEDEVAC Checklist.

4. Medical Personnel. Units training in MCAS Yuma’s RTA shall ensure that designated medical/corpsman support personnel are familiar with emergency response procedures. In most cases, ground transportation will be the most expeditious and appropriate response to “Routine” and “Priority” medical emergencies. Ultimate determination shall be made by the competent medical personnel or the senior Marine on location.

1011. PRIOR COORDINATION REQUIREMENTS FOR RTA ACCESS

1. Prior Coordination. Depending on the unit/entity wishing to gain entry to MCAS Yuma RTA, prior coordination is required.

The level of coordination and range training is based on the entity's knowledge and previous exposure to MCAS Yuma RTA. There are typically six categories of unit/entry access:

a. U.S. Military. Non-DON military services require coordination with MCAS Yuma Community Plans & Liaison (CP&L) prior to accessing MCAS Yuma ranges (see MCAS Yuma Station Order 4000.1) if reimbursable support is involved. All services shall comply with this order as it pertains to the conduct of training aboard MCAS Yuma's RTA.

b. Foreign Military. These units are also required to coordinate with CP&L prior to receiving services from any MCAS Yuma department. Likewise, range access will not be granted until this coordination has taken place (see MCAS Yuma Station Order 4000.1).

c. MCAS Yuma Internal Agencies. These agencies include those non-military entities located aboard MCAS Yuma (i.e. Station Environmental, Yuma TACTS support, NCIS, etc.). Range Safety briefs and prior coordination with Range Scheduling are required beforehand.

d. MCAS Yuma External Agencies. External agencies include those non-military entities NOT located aboard MCAS Yuma (i.e. FBI, U.S. Federal Marshals, etc.). These agencies shall coordinate with CP&L prior to requesting access to MCAS Yuma RTA (see MCAS Yuma Station Order 4000.1).

e. Commercial Access. Commercial access includes those individuals/entities (i.e. APS) entering MCAS Yuma ranges for the purpose of power line maintenance or other commercial requirements. Prior coordination with Range Scheduling combined with real-time access requests with LEG IRON typically satisfies this type of range access.

1012. DEPLOYING TO MCAS YUMA

1. General. MCAS Yuma has established a process for units/detachments requesting to train aboard the air station. The policy is applicable to all active and reserve components, as well as joint and foreign military units.

2. Due to the amount of training and transient unit occupation aboard MCAS Yuma, it is imperative that non-tenant training requests be submitted in a timely manner in order to allow for proper routing to applicable MCAS Yuma supporting stakeholders

(Base Operations, Range Management, Billeting, Station Ordnance, etc).

3. Specific instructions for deploying to MCAS Yuma are contained in Station Order 4000.1, Support Agreements Program. USMC units desiring to deploy to MCAS Yuma can access the applicable reference via the MCAS Yuma SharePoint at:

https://intranet.mciwest.usmc.mil/yuma/rng/roc/default.aspx

If you have trouble viewing this site, contact Range Scheduling, and they will provide you with that appropriate computer settings for viewing this page. Non-USMC, Foreign, and Joint units can be provided the appropriate documents upon request. Specific Foreign military guidance can be obtained from Paragraph 1016. Current non-tenant deployment schedules are available and can be accessed at the site listed above. Units are encouraged to reference this schedule prior to initiating requests.

4. The requesting unit is required to submit by official correspondence a Feasibility of Support (FOS) to MCAS Yuma via Marine Corps Bases Pacific (MARCORPAC), and Marine Corps Installations West (MCI-W) at least 150 days prior to deployment. **Once a FOS has been submitted, the requesting unit must contact MCAS Yuma Fleet Liaison to begin follow-on coordination.** After receiving an Estimate of Supportability (EOS) reply from MCAS Yuma (within 15 days of the FOS submission), the requesting unit is then required to submit a Logistics Support Request (LSR) to MCAS Yuma via MCI-W. The LSR must be submitted no less than 90 days prior to the scheduled deployment.

5. It is imperative that lines of communication are maintained during all phases (pre-deployment, execution, and post deployment) of the training evolution. It is strongly recommended that the requesting unit designate a representative to facilitate the coordination and logistics of the deployment. For Range Operations activities, a designated Event Coordinator is required for the coordination of range safety training, range scheduling, and other range-related support.

1013. RECREATIONAL ACCESS

1. General. The entire BMGR (R-2301) West is an active military training area; however, civilian recreational access is authorized for portions of the range. Military and Civilian personnel desiring entry into the R-2301W for recreational purposes will obtain a Range Permit by contacting the Range

Management Department at (928)269-7150. Prior to entry into any restricted area, a Hold Harmless Agreement will be submitted to (and retained by) Yuma Range Management (see Appendix E for a copy of this form).

a. A Range Permit, to include an authorization number, will be completed and retained on hand by all parties utilizing the recreational areas.

b. Phone communication with Yuma Range Management must be made by all personnel prior to entry and immediately after exiting restricted areas. After working hours and during weekends, an answering machine will take all calls. Range permit and authorization number must be clearly stated.

c. Only areas of approved access will be authorized. Areas closed to the public represent military training areas and present a hazard to non-authorized personnel. Individuals possessing Range Permits will strictly adhere to permit regulations.

1014. FOULED RANGES

1. Fouled Range. Unauthorized personnel and vehicles routinely trespass onto government property and foul restricted area target complexes. Fouled ranges not only hamper mission readiness, but also pose a significant hazard to the trespassers themselves. This is a growing problem and cause for concern. In order for Yuma Range Management Department (YRMD) to determine the magnitude of this dilemma and apply appropriate corrective measures, documentation is necessary. Any mission interrupted or aborted due to a fouled range will be immediately reported to LEG IRON 310.0/141.85/32.05 or (928) 269-7080.

2. Ground Units

a. The surface areas beneath the restricted areas that make up MCAS Yuma RTA are not primarily intended for the training of ground forces. These areas are intended primarily for the training of aviation forces of the United States. All ground access will be approved by LEG IRON **BEFORE** being performed. Unauthorized access can result in loss of training for aviation assets.

b. The use of MCAS Yuma’s RTA for the specific purpose of training ground units (not in direct support of aviation) will not be approved when conflicting with aviation training. The

use of the RTA by ground units in support of aviation training will be approved on a case-by-case basis.

3. Scrappers. Scrappers are civilians who illegally access MCAS Yuma RTA in the R-2507 areas (CMAGR), removing salvageable materials (aluminum, brass, copper, etc.). **SCRAPPERS HAVE BEEN KNOWN TO BE ARMED AND CAN PRESENT A DANGER TO ANYONE WHO APPROACHES THEM.** Do not approach Scrappers. Other trespassers in both the CMAGR and BMGR also have the potential of interfering with training activities. Refer to Station Order 5532 for standing rules on the Use of Force within these RTA pertaining to non-law enforcement personnel when coming into contact with range trespassers. Units who refuse to adhere to the requirements of MCAS Yuma Station Order 5532 shall not be authorized to have non-law enforcement personnel armed in the CMAGR/BMGR. If someone is seen or suspected of scrapping/trespassing in the RTA, the following procedures should be followed:

a. Notification Procedures:

(1) Notify LEG IRON immediately of your location and a brief description of the suspect’s vehicle.

(2) Attempt to gather as much information as possible to include:

(a) Vehicle model, color, license number

(b) Time/location/activity

(c) Number of passengers

(d) Description of suspect(s) to include: height, weight, race, age, and sex

(e) If moving, the direction of travel

(3) The individual/unit should be prepared to provide detailed statements to military law enforcement personnel reflecting their observations and actions concerning this incident.

4. Trespassers

a. Unauthorized personnel and vehicles found within range boundaries, spotted by either an airborne crew or authorized ground personnel, is cause to abort all ordnance operations. If the trespassers are visually seen departing the range and

scheduled range time remains, ordnance operations may resume. However, if trespassers remain in the restricted area, the departing aircrew will pass to LEG IRON the trespassers' exact location, direction of travel, and description. LEG IRON will pass this information on to the next aircrew utilizing the restricted area. The follow-on aircrew will over fly the range to determine if the trespassers have either departed or remain within the range boundaries. If the trespassers remain on the range, ordnance operations must again be delayed or cancelled until the trespassers are off the range; however, if the trespassers are not found, ordnance operations may resume. At all times, ordnance operations are the responsibility of the Pilot-in-Command (PIC) or the Forward Air Controller (FAC). All air-to-ground targets require a cold pass prior to ordnance operations.

b. Since not all scenarios can be planned or foreseen, any unit may close the restricted area by contacting LEG IRON, when in their minds, an unsafe condition to either aircrew or ground personnel (authorized or unauthorized) exists. The range will not be re-opened until LEG IRON determines the hazard no longer exists.

1015. MISSING, LOST, STOLEN, OR RECOVERED (MLSR) REPORTING

1. Report. Report MLSR government property to LEG IRON immediately. Property losses frequently occur because regulations relating to proper safeguarding and handling are not followed. LEG IRON will record the information and determine what, if any, follow-up action is required. LEG IRON will obtain the following information:

a. Location of incident (grid coordinates preferred)

b. Date and time of incident reported

c. Name and contact information of individual reporting the incident

d. Material description to include quantity and types

e. Stock number (NSN) and lot number (where applicable)

f. Where ammunition and explosives are involved, LEG IRON will advise individual **NOT** to remove item(s) for safety reasons and initiate possible follow-on investigatory requirements.

2. LEG IRON Response. If the reported MLSR meets certain criteria, LEG IRON will provide the information immediately to MCAS Yuma Installation & Logistics (I&L) by contacting (928)269-2722/2071 and to MCAS Yuma Station Ordnance (where applicable) by contacting (928)269-2004. If determined to be a qualifying incident, I&L will submit a MLSR Message via official correspondence within 48 hours of the initial report to LEG IRON.

1016. SPECIAL MILITARY/CIVILIAN TRAINING

1. Foreign Military

a. The term “FMS Exercise” is used to describe any unilateral foreign exercise involving USMC installations, facilities, or personnel where the costs are funded via the FMS process. Without an FMS agreement, foreign military training can only be conducted if a U.S. military unit sponsors the foreign military training and assumes any costs associated with that training.

b. There are specific procedures and timelines associated with requests from foreign military units desiring to train on USMC facilities. No later than 180 days prior to the start of the exercise, the initiating organization must notify the regional MARFOR for exercise validation, MARCORSYSCOM International Programs (IP) for future customer planning, and DC PPO PL (PLU) for further validation.

c. The hosting USMC facility will be notified by its higher chain of command of foreign military training requests. The International Programs Office (IPO) at Headquarters Marine Corps (HQMC) is the agency responsible for notifying Marine Corps Bases and Air Stations of Foreign Military Sales (FMS) requests. **Direct contact with Marine installations is not authorized by foreign military users/requestors until HQMC has given approval and coordination with the respective installation liaison offices has occurred.** The MCAS Yuma Community Plans & Liaison (CP&L) Office can be contacted at (928)269-3637/3624/2047. CP&L will coordinate with MCAS Yuma stakeholders based on FMS requests provided to their office from HQMC. The process can take six months to complete. Early and proper coordination can prevent delays in processing and confusion with other known FMS requests.

d. Foreign military training in MCAS Yuma RTA will comply with the provisions contained in this order. Furthermore, requests for training at other regional facilities (NAF El Centro, Army Yuma Proving Ground, or Luke AFB) must be

specifically stated in Foreign Military Sales agreements before any training can be pursued in those areas. Alternately, FMS approvals at regional facilities do not authorize foreign military training at MCAS Yuma. MCAS Yuma shall be specifically approved as a host installation via the FMS process **BEFORE** any training can be authorized at MCAS Yuma.

e. Throughout the FMS process, requests to visit the host installation shall be approved on a case-by-case basis after a Foreign Visit Request (FVR) has been submitted. To submit a FVR to MCAS Yuma, requesting foreign military units shall coordinate via their embassy at least two weeks in advance to allow the host installation time to process the request. Delays by embassies in contacting MCAS Yuma should also be factored into FVR requests submissions.

f. U.S. military units may sponsor foreign military training without the need for a foreign military sales agreement. In these cases, the sponsoring unit shall coordinate all installation/range access and assume responsibility for the Range OIC and RSO supervision during applicable training evolutions. At no time shall a sponsoring unit allow foreign military personnel to train independently on the ranges. Sponsored foreign military units shall train only under the cognizance of a sponsoring unit qualified Range OIC and RSO.

2. Civilian Training/Official Range Access

a. Civilian and non-military law enforcement agencies are required to coordinate with CP&L when requesting to train on MCAS Yuma RTAs. Applicable Inter-service Support Agreements (ISAs) and/or Memorandums of Agreement (MOAs) will be established prior to any approved training. Initial contact for training support should be made to the MCAS Yuma Fleet Liaison Office. A minimum of 90 days notice is required in order to begin the formal processing of these agreements. Station Order 4000.1 “Support Agreements Program” provides detailed information on such activities. Figure 1-4 summarizes the support agreement process.

b. Units desiring to host “Jane Wayne”, “Family Day”, or any civilian (sponsored by military) activities aboard MCAS Yuma’s RTA shall comply with ALMAR 010/01 and MARADMIN 436/01. Once approved by HQMC, a detailed Letter of Instruction (LOI) and Hold Harmless Agreements shall be submitted to the RCO for review and processing. In order to meet Range Scheduling deadlines and Range Safety processing, Jane Wayne activities

shall be coordinated no less than 30 days in advance of the planned event.

c. Contractors wishing to train or conduct operations in MCAS Yuma RTA are not authorized to make initial requests for range access or coordination. Military or government civilian personnel are required to request initial coordination on behalf of contracted personnel supporting government projects. It is imperative that authorized personnel properly coordinate with MCAS Yuma Range Management if they desire to see projects requiring Range support to be accomplished. Typical examples of contracted personnel requesting access without proper coordination include aerial mapping agencies, environmental agencies wishing to conduct surveys, etc. These agencies must have MCAS Yuma approval before Range Management can allow access.

d. Civilian contractors may act as RSOs only when approved by the Installation Commander per [reference (a)].

3. Non-Department of Navy Military Training

a. U.S. Air Force, Army, and other non-DoN military organizations desiring to train in MCAS Yuma RTA will not be charged for use of Marine Corps ranges per MCO 3550.10. However, Range Management will be reimbursed for providing services including (and not limited to) range scheduling support, range clean up of ordnance debris, range safety training, etc.

b. In cases where aviation ordnance is being expended, a complete list of ordnance to be dropped in MCAS Yuma RTA will be required. The MCAS Yuma Range Operations Division will also need to know where the ordnance was employed and the amount of ordnance employed. Where applicable, an Inter-service Support Agreement may be required. Coordination (90 days advance notice) with MCAS Yuma’s CP&L will be necessary.

1017. CUSTOMER FEEDBACK

The MCAS Yuma Range Operations Division works hard to provide the best support possible to all requesting agencies. With over 40,000 range requests per year, the division strives to support the successful completion of every exercise and event that is requested. If you have feedback or desire to recognize someone from the Range Operations Division staff, use the following link to do so.

http://ice.disa.mil/index.cfm?fa=card&s=250&sp=81550&dep=*DoD

1018. COORDINATES

All coordinates used in this order are referenced in latitude/longitude and Military Grid Reference System (MGRS), in accordance with World Geodetic System (WGS)-84 Reference Datum.

1019. MAGNETIC HEADINGS/DIRECTIONS

Unless otherwise stated, all headings/directions used in this order are magnetic.

1020. POINTS OF CONTACT

The following telephone numbers are provided for reference. All phone numbers are DSN 269-XXXX or Commercial (928) 269-XXXX unless otherwise stated.

Director, Range Management Department.....3401

Range Management OIC.....6489

Range Management SNCOIC.....2403

Range Permit Office.....7150

Director, Range Operations.....2405

OPFOR/Future Plans/Projects Officer.....6488

Range Safety Officer (RSO) for MCAS Yuma.....5574

Range Operations Officer.....5573

Range Control (LEG IRON).....7080

Range Warden.....6097

NAF El Centro Base Operations DSN 658-2601 or COMM (760)339-2616

Range Scheduling.....2214/2215/2690/5575 FAX x2216

Explosive Ordnance Disposal (EOD) Unit.....2303/2560/2788

Range Maintenance.....2403/3340

Marksmanship Training Unit (MTU).....2244/2260/6045/3443

MCAS Yuma CERAP (Air Traffic Control).....9231

MCAS Yuma Laser System Safety Officer (LSSO)..3611/2921

MCAS Yuma Emergency Dispatch.....2333/2285/2385

MCAS Yuma Environmental Dept.....3201

MCAS Yuma Fleet Liaison Office.....3515

MCAS Yuma Installation & Logistics Dept.....2722/2071

MCAS Yuma Community Planning & Liaison.....3637/2047/3624

MCAS Yuma Station Ordnance.....2004/2003

MCAS Yuma Frequency Manager.....3533/2218

MCAS Yuma Provost Marshal’s Office (PMO).....2204/2205

Yuma Proving Ground (YPG) Range Scheduling....DSN 899 or COMM (928)328-6094

MCAS Yuma TACTS.....2905

MCAS Yuma WISS..... 2025

NAF El Centro WISS.....DSN 658 or COMM (760)339-2238

NAF El Centro Fleet Liaison.....DSN 658 or COMM (760)339-2265

Luke AFB Range Scheduling.....DSN 896 or COMM (623)856-7654/3330

MCAS Miramar TACTS.....DSN 267 or COMM (858)577-6116

NAVAL SURFACE WARFARE COMMAND RANGE SCHEDULING.....(619)537-3458

CAMP BILLY MACHEN QUARTERDECK.....(928)269-7326

WESTERN RANGES
INCLUSIVE OF THE CHOCOLATE MOUNTAIN AERIAL GUNNERY RANGE
(CMAGR – R-2507 AREAS)

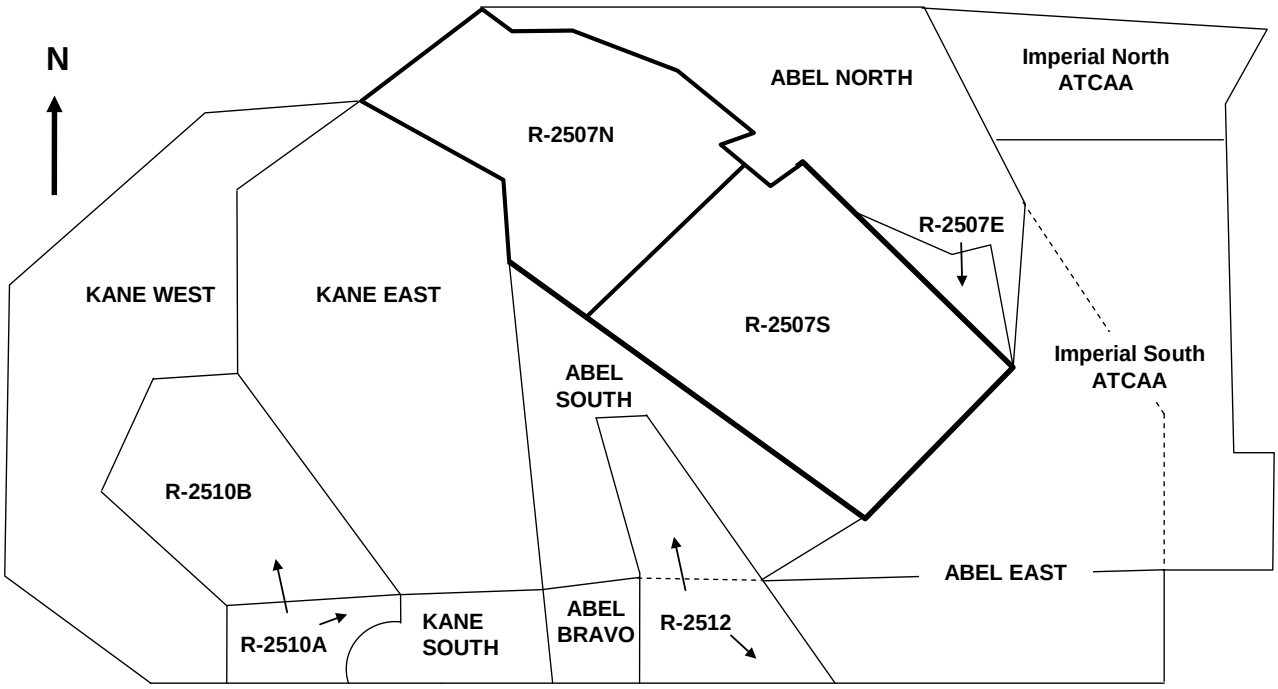

FIGURE 1-1 AIRSPACE DIAGRAM – WESTERN RANGES - CMAGR

EASTERN RANGES
INCLUSIVE OF THE BARRY M. GOLDWATER AERIAL GUNNERY RANGE (BMGR – R-2301W)

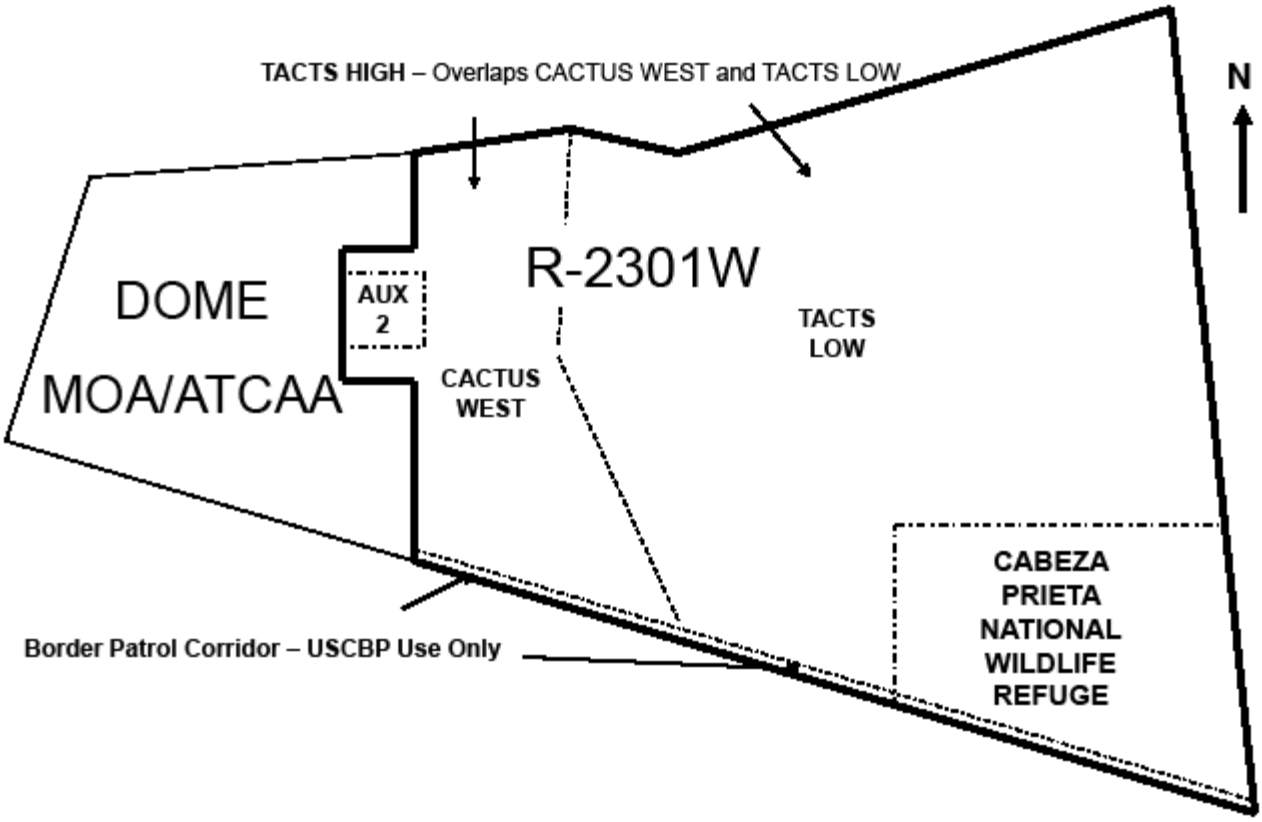

FIGURE 1-2 AIRSPACE DIAGRAM – EASTERN RANGES - BMGR

RTA REQUESTS, DEVIATIONS/WAIVERS, BRIEFS, SDZ/WDZ DIAGRAMS, AND AIRSPACE REQUIREMENTS

RTA REQUEST(S) DEADLINES	
AIRSPACE RTA	Comply with scheduling procedures established in Chapter 3 of this order (to include Prior Permission Requirements (PPR) for after hours support). Airspace RTAs are reserved NLT fourteen (14) days in advance (priority events are reserved earlier). Requests received less than fourteen (14) days before a planned event will be processed based on RTA availability and the requesting unit's utilization history. Priority reservations have different deadlines (see Figure 3-1). After hours ordnance/laser training requests shall be submitted no less than thirty (30) days in advance.
GROUND RTA	**Fourteen (14) days advance submission** is required for all ground RTA requests. Requests for after hours training require no less than thirty (30) days advanced notice (PPR) to ensure appropriate LEG IRON manning. Real-time ground RTA requests to LEG IRON will be accommodated on a case-by-case basis and approval will be dependent upon operational tempo and whether live or non-live fire training is being requested. After hours training requests shall be submitted no less than thirty (30) days in advance.
DEVIATIONS/WAIVERS	
Required a **minimum of thirty (30) days advance notice**, prior to event with all endorsements. Requests for deviations/waivers shall be made through official correspondence and in coordination with the Installation Range Safety Officer. All requests shall be submitted along with SDZ/WDZ 1:50,000 scale, ORM Worksheet, and other maps or charts as needed.	
BRIEFS/COORDINATION	
CO-USE	For **ground** activity, required a minimum of **two (2) business days prior** to the training evolution. Both unit RSOs will give this brief to the Range Safety Office prior to the event for validation. For **airspace**, all participating units will provide proof of coordination to the Range Scheduling Office NLT 1500 Yuma local (Monday thru Thursday) for training occurring on Tuesday thru Friday. For weekend and/or holiday training, the deadline is 1400 Friday (or 1400 the business day prior to the holiday).
LIVE-FIRE IN RTA	For **non-standard** ground operations, required a minimum of **thirty (30) days prior** to the training evolution with ground concept of operations (CONOPS). WDZs/SDZs and ORM shall be submitted no later than **fourteen days (14)** to the Range Safety Office.
WDZs/SDZs/LASERS	
1. Required for all indirect fire weapons. 2. Required for all **non-standard** ground live-fire operations in the RTA when not covered in current SPINS for those ranges. Requesting unit must submit a completed CONOPs and SPINS for requested operation. SDZs shall be submitted no later than **fourteen (14) days in advance**. 3. For aviation-delivered ordnance, Weapons Danger Zone (WDZ) footprints shall be provided for all ordnance not already covered in this order or where required based on ordnance type (see Appendix C). This information shall be provided **NLT five (5) business days prior** to evolution. Ensure applicable RTA has been reserved **prior** to submitting WDZs. Refer to Chapter 4 and Appendix C of this order for specific target restrictions. 4. Requests for laser training outside of the parameters prescribed in the Laser Range Certification Report require no less than thirty (30) days advance notice. All laser systems shall be approved by the Laser Safety Review Board (LSRB) before requests for their use on MCAS Yuma's ranges will be considered. Contact the Range Safety Office for more information.	

FIGURE 1-3 RTA REQUESTS, DEVIATIONS/WAIVERS, BRIEFS, SDZ/WDZ DIAGRAMS, AND AIRSPACE REQUIREMENTS

PROCESSING SUPPORT REQUESTS

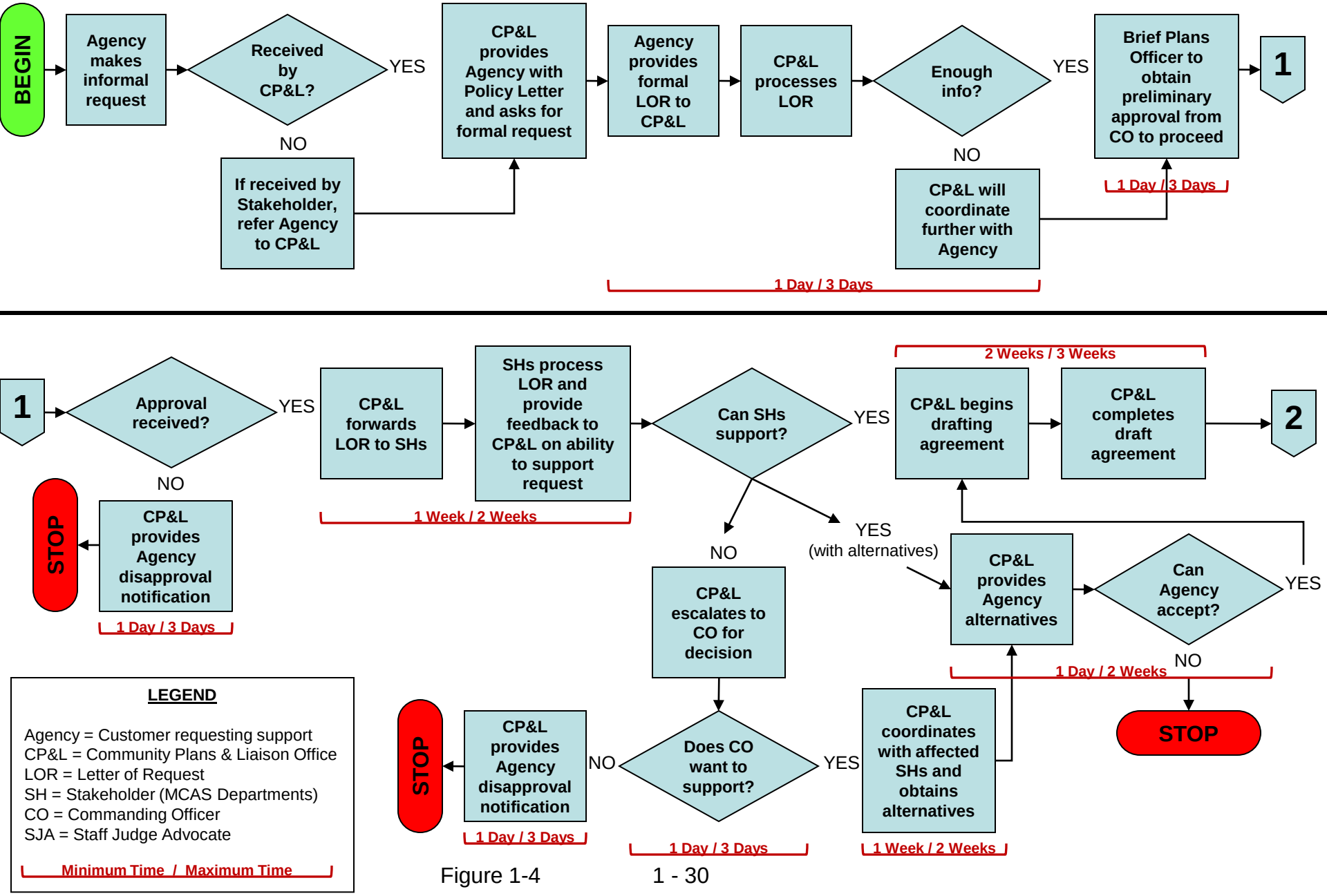

Figure 1-4

PROCESSING SUPPORT REQUESTS

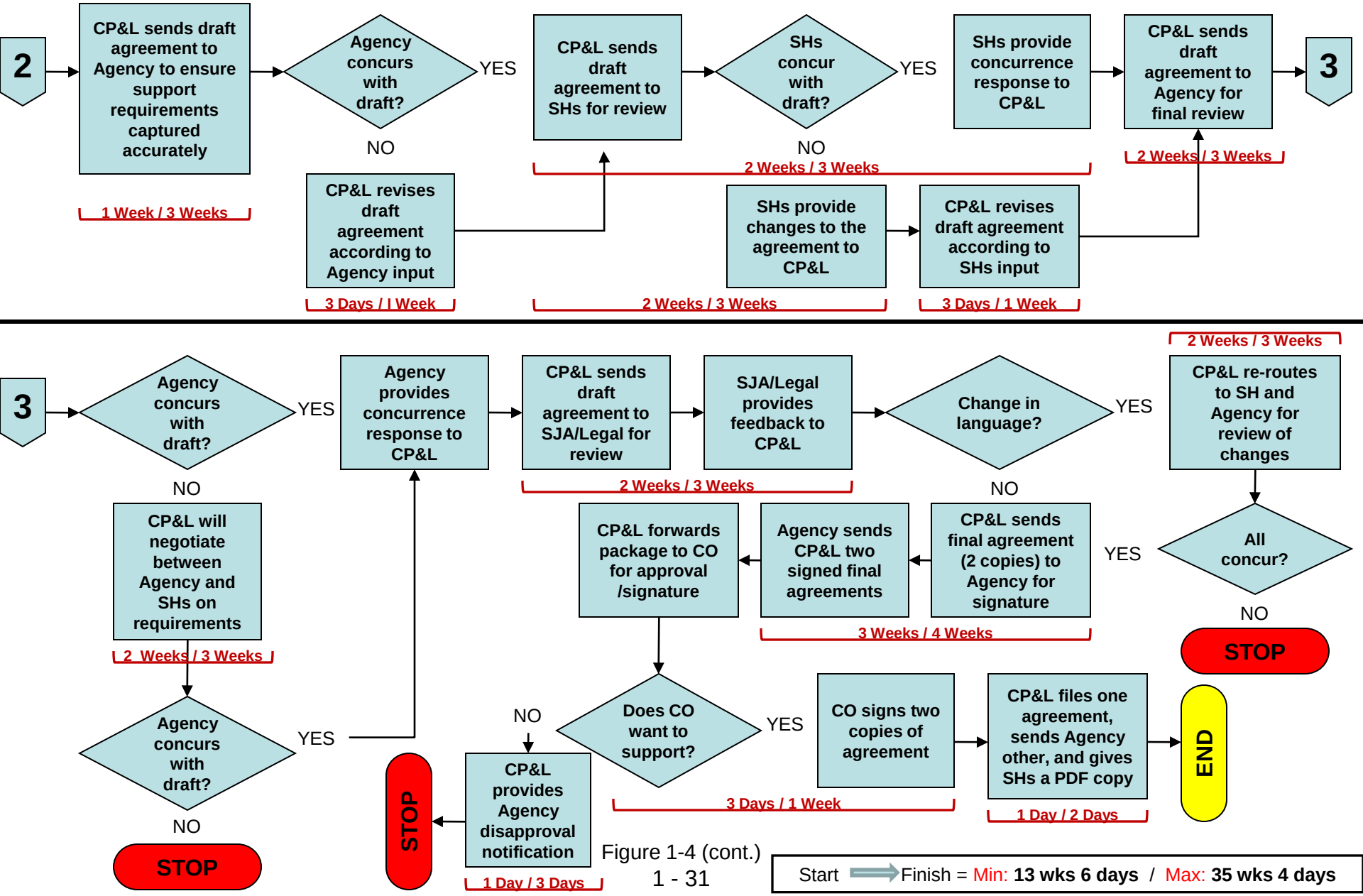

Figure 1-4 (cont.)

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CHAPTER 2

ENVIRONMENTAL PROCEDURES

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CHAPTER 2

ENVIRONMENTAL PROCEDURES

2000. PURPOSE AND SCOPE

The MCAS Yuma RTA are heavily used. These ranges are also the home to some endangered species and sensitive habitats, which are protected by federal laws strictly enforced by local regulatory agencies. To successfully achieve all training objectives while complying with environmental laws and regulations, it is essential to consider environmental concerns while planning training operations and exercises. Proper planning will preserve all training facilities for future generations of the branches of the Armed Forces; therefore, it is essential that training units adhere to the provisions in this chapter. All users of ranges and training areas are responsible for knowing and adhering to applicable environmental laws and regulations. Questions concerning applicable environmental regulations may also be referred to Range Management (928)269-3402.

2001. POLICIES AND ACTS

In an effort to preserve natural and cultural history, protect indigenous and endangered plants and wildlife, MCAS Yuma complies with the regulations listed below:

a. The National Environmental Policy Act of 1969 (NEPA)

b. The Clean Air Act (CAA)

c. The Clean Water Act (CWA)

d. The Resource Conservation and Recovery Act (RCRA)

e. The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)

f. The Endangered Species Act (ESA)

g. The National Historic Preservation Act (NHPA)

h. The Archeological Resources Protection Act (ARPA)

i. Antiquities Act of 1906

j. The Federal Facilities Compliance Act (FFCA)

k. The Migratory Bird Treaty Act

l. Integrated Natural Resources Management Plan (INRMP)

m. Native American Graves, Protection and Repatriation Act (NAGPRA)

n. Military Lands Withdrawal Act (MLWA) 1999

o. Sikes Act

p. Arizona Native Plant Law

2002. CULTURAL AND HISTORIC RESOURCES

Federal and State historic preservation laws have been developed to protect our cultural heritage and these laws are enforced on the ranges. Violation of these laws could incur a fine and prison time.

2003. PROHIBITED ACTIVITIES

The following activities are prohibited on all ranges and training areas aboard MCAS Yuma's RTA:

a. Burying, dumping, abandoning, or disposing of solid waste (e.g., trash, rubbish, or garbage) except in approved containers (i.e., "dumpsters") or at established landfills.

b. Burying, dumping, abandoning, or disposing of any type of unused military munitions.

c. Unlawfully disposing hazardous waste, including unlawfully releasing (e.g., venting, draining, or spilling) oil, fuel, and all other hazardous substances from vehicles, equipment, storage tanks, or containers into the air, ground, or water.

d. Removing or intentionally destroying threatened or endangered plants. Cutting or removing tree limbs or large portions of any other plant is also prohibited. At no time will vegetation be used as camouflage material.

e. Contact YRMD prior to conducting activities involving: cutting/removing/trimming of brush, trees, cactus, any type of vegetation, soil excavation, grading, filling, or digging fighting positions in or adjacent to protected habitat.

f. Killing, injuring, or harassing wildlife and livestock. Killing poisonous snakes and other wildlife in self-defense is

not prohibited. Most snake bites are the result of untrained individuals attempting to handle snakes.

g. Removing (i.e. stealing) intentionally destroying, or intentionally disturbing archaeological, Native American, and/or historical materials, artifacts, buildings, and/or sites.

h. Earthwork impact berms contain lead, a toxic metal and potential hazardous waste. Consult with the Range Management Department before beginning earthwork on or near impact berms.

2004. PENALTIES AND ENFORCEMENT

Violations of these provisions may result in disciplinary action under the Uniform Code of Military Justice, or prosecution in state or federal court. Violation of these provisions may also result in potential adverse impacts to future training opportunities aboard the Base.

2005. ENDANGERED, THREATENED, AND SENSITIVE WILDLIFE

1. General. The primary function of the Natural Resources Section is to ensure that all range users comply with the requirements set forth by MCOs, Federal and State Laws and Statutes, as well as by the ESA and the NEPA. The Natural Resources section of the Range Management Department provides surveys, recommendations, and oversight of existing areas of concern and reviews requests for new areas of training use/occupation. Only range areas specifically approved by Range Management are authorized for use/occupation.

2. Responsibilities. The following responsibilities are accomplished by ensuring environmental compliance and documentation, providing natural and cultural resource management, and monitoring legislative actions affecting MCAS Yuma’s portion of the Bob Stump Training Range Complex (BSTRC).

a. The Natural Resources Section assists in the preparation of all NEPA documents, to include Environmental Impact Statements (EISs), Environmental Assessments (EAs), and Categorical Exclusions (CATEXs) when required.

b. Management of the natural resources of the BSTRC involves identifying and monitoring the natural habitats of several animal species found within the BSTRC including; the Desert Pronghorn Antelope, the Flat-tailed Horned Lizard, and the Desert Tortoise.

c. The Natural Resource Section is involved with environmental conservation programs including identifying, documenting, preserving and protecting these species as well as historical and cultural areas of the BSTRC.

d. These duties are accomplished by conducting extensive field inspections and research. The Natural Resources Section uses Global Positioning System (GPS) equipment to precisely locate and plot areas of critical environmental concern as well as specific target areas.

2006. OFF-LIMIT AREAS

1. General. Off-limits Areas are those areas that have been deemed to contain items of historical or archaeological significance, a refuge for wildlife or known/suspected to contain Unexpended Ordnance (UXO).

2. Off-Limit Areas. The following are designated as historical/archaeological sites:

a. Mohawk Mountains and Dunes (BMGR)

b. Tinajas Altas Mountains (BMGR)

c. Cabeza Prieta National Wildlife Refuge (BMGR)

3. Other Restrictions

a. Munitions Treatment Range (MTR), except with specific authorization from YRMD (928)269-5570/5574

b. Installation Restoration and National Priority List (NPL) environmental cleanup areas

c. Improved Conventional Munitions (ICM) Box and Impact Areas of the CMAGR (R-2507)

d. Any area where training land restoration and erosion control work is ongoing, these areas will be marked with appropriate warning signs and fences.

e. Training in the vicinity of natural drainage areas may require special consideration; therefore, it is subject to the provisions of Paragraphs 2010 and 2011 in this chapter.

f. Avoid parking vehicles or heavy equipment under the canopies of trees to the maximum extent possible. Do not dig

fighting holes under the canopies of trees. These activities damage the root systems and eventually destroy the trees.

g. Four-wheel drive vehicles do great damage to the desert environment. All personnel must drive on existing roads or jeep trails to preserve plant and wildlife habitats.

h. Authorized vehicular traffic on the ranges may be restricted during periods of degraded road conditions. Unauthorized vehicle traffic leads to decreased training opportunities and hazardous conditions that create safety concerns. Vehicular traffic will remain on designated roads.

Note:

Due to hydrographic flow, UXO hazards exist outside the ICM box and present a danger throughout Iris Wash. Contact YRMD for more information.

2007. RULES OF CONDUCT FOR PROTECTING WILDLIFE

Rules of conduct for protecting wildlife are provided in the Range Safety/Environmental Brief provided by YRMD to all personnel prior to accessing ranges.

2008. POLICING OF RANGE AND TRAINING AREAS

1. General. Policing of ranges and training areas is the responsibility of the using unit. It is the responsibility of the OIC/RSO to ensure ranges, training facilities, and training areas used by their units have been properly policed. All solid waste brought to ranges, training facilities, and training areas; including cardboard, wrapping materials, food waste, communication wire, will be removed from those areas and recycled or disposed in approved containers (i.e. “dumpsters”). Expended brass, links, and ammunition containers will be collected and turned into the ammunition supply point (ASP) IAW StaO P8600. If a field ASP is not available, all brass turn-in will be conducted with station weapons upon completion of the exercise. No unit will depart their training location until that area is in a proper state of police. Exercise units will police training area prior to the departure of any exercise unit. An exercise representative, Range Control Inspector and Range Management representative prior to the departure of exercise participants will conduct a post-exercise inspection.

2. Aviation ordnance is exempt from the policy of policing of brass, with the exception to onboard collection devises (CH-46 and CH-53) for crew-served weapons. The collection devices will

not be emptied onto ranges utilized. Units will coordinate for brass pick-up at the Combat/Cargo Aircraft Loading Area (CALA) or recovery site. All ground units conducting live-fire operations in authorized areas shall police their brass prior to departure of assigned training areas.

3. Dumpsters. The MCAS Yuma Rifle and Pistol ranges are the only ranges that have designated dumpsters for disposal of target supplies and non-hazardous materials. If dumpsters are required, units will coordinate with the MCAS Yuma I&L Department via (928)269-2722. Station I&L will coordinate with YRMD to ensure the dumpsters will be clear of surface danger zones. Units will coordinate the removal of dumpsters upon completion of training.

2009. HAZARDOUS WASTE GUIDELINES

Hazardous materials (e.g. paint, Petroleum, Oil, and Lubricants (POL), etc.) used while training will be stored in approved, closed, leak-proof containers. All hazardous materials will be clearly marked, identifying the contents of the container. All hazardous material spills will be reported immediately to LEG IRON or the MCAS Fire dispatch via (928)269-2385 with the following information; location, type, and size (quantity) of spill. Units will use required equipment to prevent and contain spills either at or near the source of the spill. Hazardous waste will be removed daily from ranges and training areas by the using unit.

2010. PORTABLE TOILETS AND GREY WATER

1. General. Any organization assigned to a range and/or training area will use portable toilets when occupying MCAS Yuma ranges. Units will also properly dispose of all grey water accumulated throughout their training evolution.

2. Portable Toilets. Portable toilets may be coordinated through Civil Engineering Technicians via (928)941-7146. Prior to placement, users will coordinate the planned location for delivery of portable toilets through the Range Scheduling Office via DSN 269-2214/2215 or Commercial (928)269-2214/2215. This ensures portable toilets will be clear of surface danger zones. For safety reasons, check portable toilets for poisonous insects and other hazards before using.

3. Grey Water. Wastewater from temporary showers or field mess facilities (grey water) will be managed according to the following guidelines:

a. In California (CMAGR), grey water will be collected into bladders and contracted to be pumped out. At no time will grey water be allowed to drain freely on this range.

b. In Arizona (BMGR), grey water can be released in soil utilizing leaching fields. Approval will come through both the MCAS Yuma Range Management and Environmental Departments per Title 18 Chapter 9 of the Arizona Administrative Code.

2011. MESSING SPOILS

Messing spoils will not be discarded into surface waters or the ground. All messing spoils will be disposed as wet garbage at appropriate disposal sites or contracted for removal. Liquid messing wastewater will be collected and transported for proper disposal. Disposal of liquid messing wastewater in the field is not authorized.

2012. UNEXPLODED ORDNANCE

All personnel, prior to entering any MCAS Yuma impact area (i.e. target areas or designated areas of concern), shall receive an UXO brief. All briefs will be scheduled through Explosive Ordnance Disposal (EOD) via (928)269-2788. Briefs should be scheduled no less than one week in advance. If units are unsure whether a brief is required or whether the ground area being requested is within an impact area, contact the Range Safety Office for more information.

2013. PERSONALLY OWNED VEHICLE (POV) ACCESS AND RULES

POVs are authorized at the discretion of the unit’s CO. Those personnel operating on the range in an official capacity are therefore not recreating. All-Terrain Vehicles (ATV), and motorcycles are not authorized POVs. Refer to Paragraph 1007 (page 1-11) for recreational permit and access procedures. If operating under the recreation permit, all rules apply. At no time will a member of the Department of Defense (DOD) operating with a Recreational Permit be permitted in the Hazard Areas or Training Sites when training is being conducted.

2014. GROUND SUPPORT AREAS

Ground support areas (also called “sites”) are intended to be multiple use areas. Authorized activities include: bivouacking, berm construction, trenching, Forward Logistics Base (FLB) operations, field mess, and field showers. HST, Forward Arming and Refueling Point (FARP) activities, landing

zone operations, and UAS activity are authorized only in those sites west of the 113° 53′ West longitude line. See Appendix B for a list of available sites and their locations.

a. MCAS Yuma has established the multiple-use site as a means to reduce the environmental burden on training units, ensure environmental compliance, and extend the use of our valuable training lands. In most cases, no environmental clearance is required. Coordinate use directly with Range Management Dept., Range Scheduling Section via DSN 269-2214/2215 or Commercial (928)269-2214/2215.

b. Wastewater discharge, bulk fuel storage and hazardous waste management each have specific requirements which need to be coordinated with Range Management.

c. If the established ground support site does not meet with your training needs, Range Management will consider additional sites. However this action requires advance planning and survey efforts (coordinate 30-60 days in advance, if possible). Contact Range Scheduling to initiate this process.

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CHAPTER 3

SCHEDULING PROCEDURES

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CHAPTER 3

SCHEDULING PROCEDURES

3000. PURPOSE AND SCOPE

The MCAS Yuma Range Scheduling Office is the scheduling activity for all MCAS Yuma Range and Training Areas. Range Scheduling also provides scheduling services to U.S. Naval Air Facility (NAF) El Centro. MCAS Yuma Range Scheduling hours of operation are Mondays through Fridays 0730-1630, Yuma local time, and closed on holidays. See Figure 4-1 for a list of areas for which MCAS Yuma is the Using Agency (scheduling activity).

3001. MCAS YUMA RANGE SCHEDULING WEBPAGE

The MCAS Yuma Range Scheduling Webpage provides vital information for the scheduling and utilization of all MCAS Yuma RTA. To access the Yuma Range Management Webpage, usmc.mil users should go to the following web address:

https://intranet.mciwest.usmc.mil/yuma/rng/roc/skeds/default.aspx

If you have trouble viewing this site, contact Range Scheduling, and the appropriate computer settings for viewing this page can be provided.

3002. RANGE FACILITY MANAGEMENT SUPPORT SYSTEM (RFMSS)

1. General

a. In accordance with [reference (h)], “RFMSS is the centerpiece of the Range Management System; it is the approved Marine Corps RTA scheduling and management tool. This system provides a standard, integrated, web-based program that installation RTA management personnel can use to schedule training support for users and manage Marine Corps RTA property. RFMSS supports all major range management processes, to include unit/organization RTA requests, subsequent range control approval/disapproval action, and the automation of range firing desk operations.”

b. Yuma Range Scheduling currently utilizes RFMSS for ground and airspace scheduling.

c. Ground ranges falling within restricted airspace require concurrent scheduling of associated airspace.

d. Users shall ensure that any necessary ground setup and/or teardown time requirements are equally reflected in ground and airspace requests.

2. Access

a. To obtain access to RFMSS, users may go to https://rfmss.belvoir.army.mil. Select “USMC Sites” then “MCAS Yuma.” Click on the “Request New Account” link and follow the instructions provided.

b. Once an account has been created, users may access the current Range Bulletin and submit/edit/cancel requests for all MCAS Yuma RTA.

3. Request Control Number Identifier (RCNI)

a. This number is assigned by the RFMSS system to uniquely identify a request.

b. Only a single entry is authorized per RCNI number for airspace requests. A single entry shall consist of no greater than one range or training area and will be limited to the confines of 0001-2359 (AZ local time) on a single day. Requests for multiple days or ranges shall be made under separate RCNIs for each entry. The only time more than one entry per RCNI will be allowed is when requesting any combination of either the TACTS High or TACTS Low, Cactus West and/or Dome MOA concurrently for a single period or when requesting any combination of the R-2507 North, R-2507 South, Abel North and/or Abel South concurrently for a single period. **Multiple-day entries on a single RCNI airspace request will be disapproved.**

c. Once a request has been submitted, follow-up tracking on the status is the responsibility of the requesting unit and tracking of the request may be performed via the RCNI. An RCNI assignment does NOT constitute approval/reservation of the request. It is the user’s responsibility to check their pending requests periodically until a reservation or other action has been made.

4. Training. Units or personnel requiring any training in the use or implementation of RFMSS, contact Yuma Range Scheduling via email at yuma.skeds@usmc.mil, or call DSN 269-2214/2215/2690/5575 or Commercial (928)269-2214/2215/2690/5575.

5. Changes/Updates. Units or personnel requesting functionality changes to the RFMSS Database or looking to update their unit

information may contact the RFMSS Programmer (Yuma Ranges) via email at yuma.skeds@usmc.mil, or call DSN 269-2215 or Commercial (928)269-2215.

3003. RANGE PRIORITIES

1. General

a. The MCAS Yuma Range Priorities Matrix was developed by Marine Corps Installations West (MCIWEST) and 3rd Marine Aircraft Wing (3rd MAW) with concurrence from Marine Corps Combat Development Command (MCCDC) (Figure 3-1).

b. Units desiring priority consideration for use of MCAS Yuma's RTA shall submit the appropriate Naval/AMHS message to MCAS Yuma via the chain of command with no less than Wing (or General/Admiral) level endorsement using the following Plain Language Address (PLAD): MCAS YUMA AZ. Deadlines for priority requests are established via the MCAS Yuma Range Priorities Matrix (see Figure 3-1). The advance notice requirements vary dependent upon the level of priority being requested. Once the Naval/AMHS message has been submitted, units shall follow-up with a phone call to MCAS Yuma Range Scheduling at Commercial (928)269-2214/2215/2690/5575 to avoid having their priority request overlooked and to ensure that the message was received.

c. To receive priority consideration, units shall submit requests endorsed from the appropriate declaration source cited in Figure 3-1 no later than the advance notice deadline established for the priority being sought. **Priority requests are processed based upon the size of the event and type of training being requested. Simply submitting a request before a designated priority request deadline DOES NOT necessarily qualify a unit for that priority.** Priority opportunity is forfeited when deadlines are not met. Requests for priority should contain, at a minimum, the following information:

(1) Description of training and reason for request along with specific priority being requested (1 through 10)

(2) Dates of priority event

(3) Names of participating units/squadrons

(4) Name of Event Coordinator (must have aviation background) for scheduling purposes

d. Units approved for a range priority can expect their requests to be processed within the RFMSS window established for the level of priority being sought. This window shall be strictly enforced. Any priority unit that fails to submit range requests prior to their designated deadline shall forfeit priority allowing other users or lower priorities to reserve range booking.

e. Due to the acute competition for range time, units that submit unjustified extensive requests or attempt to block schedule ranges risk having their requests disapproved based on the current operational tempo. Units that practice smart scheduling practices and possess reasonable utilization rates accomplish their mission while opening more range time for other users which contributes to the success and increased combat readiness of the total force. Abuse of the priority system deters from efficient use of the ranges, may degrade combat readiness of the total force, and will be addressed at the highest levels. To police range efficiency, MCAS Yuma Range Scheduling provides 3rd MAW and MCI West monthly utilization rates for all squadrons training in MCAS Yuma's RTA.

f. Coordination with MCAS Yuma Range Scheduling prior to submitting requests for priority will assist units in identifying other range conflicts such as range closures, range clearances, target inserts, environmental surveys, etc. Where conflicts arise between units possessing the same priority, Range Scheduling will reserve ranges in such a way as to provide the unit with the higher range utilization rate the requested range. Units are strongly encouraged to coordinate with other units in order to maximize the training benefits of all. Units can also view the following web link, which displays upcoming events taking place in the MCAS Yuma RTA. The link is updated as necessary to reflect priority approvals and other known events.

https://intranet.mciwest.usmc.mil/yuma/rng/Lists/Range%20Calendar/MyItems.aspx

g. Units are advised to avoid priority requests during semi-annual MAWTS-1 training exercises such as the Weapons Tactics Instructor (WTI) courses (March–May and September–October) and all other scheduled large force exercises. Other recurring exercises can be found in Chapter 5 of this order.

h. The CO MCAS Yuma shall retain ultimate decision-making authority when determining range assignments. Other unforeseen Higher Headquarters' events may also take precedence over currently planned priority events. Such HQMC events include

Foreign Military Sales (FMS) agreements, which are coordinated typically six months in advance. Upon the establishment of a FMS case number, MCAS Yuma will solicit 3rd MAW, MCI West, and MCCDC (C465) for the purpose of resolving potential conflicts with the FMS event. Unless conflicts are identified, MCAS Yuma will confirm FMS events 90 days in advance of the foreign deployment. Prior to solidifying FMS RTA requests, MCAS Yuma Range Management will coordinate FMS events around known exercises and will rely on chain of command support in identifying other planned exercises that may have the potential to conflict with the HQMC FMS event.

2. AUX-II Priority. The AUX-II airspace will be scheduled separately from other R-2301W sub-ranges. A letter titled "Operating Procedures at AUX-II Airfield, Yuma, AZ" dtd 04 Feb 2000 establishes the scheduling priority of the AUX-II Airfield. MAG-13 Operations is designated the controlling agency for operations in and around AUX-II except during the semi-annual WTI course. However, MAG-13 will have priority scheduling over all non-WTI units for the AUX-II LHD deck when RFMSS reservations are made in excess of 14 days prior to the event. When scheduling is not accomplished by MAG-13 prior to the 14 day reservation window, no such priority exists.

3004. RANGE SCHEDULING

1. General. Yuma Range Scheduling uses RFMSS for processing range requests, collecting usage data, and receiving cancellations online. The system allows users to view, request, edit, and/or cancel range times via the web. Note that all MCAS Yuma RTA are scheduled in Yuma local time. Arizona does not observe Day Light Savings Time. Yuma local time is Zulu minus seven.

2. Scheduling via RFMSS

a. Yuma Range Scheduling runs a two-week scheduling system. **Non-priority** requests will not be reserved further than two weeks from the actual date of training. Units may submit their requests further out; however, range scheduling will not process those requests until the two-week mark. The only exception to reservations made beyond the two-week window will be for units possessing a priority as outlined in the Scheduling Priority Matrix in Figure 3-1.

b. Priority requests are due to Yuma Range Scheduling based on the Scheduling Priority Matrix in Figure 3-1. Yuma Range Scheduling will disapprove incomplete or erroneous requests.

Users shall utilize the two-week calendar within RFMSS to avoid scheduling conflicts with other units that have range times reserved or are a higher priority.

c. Any changes, cancellations, or new requests must be submitted in RFMSS no later than 1500 Yuma local (Monday thru Thursday). For weekend and/or holiday training, the deadline is 1400 Friday (or 1400 the business day prior to the holiday). Requests made after these deadlines will not be approved and will not be reflected on the fire desk on the following day.

d. Same-day RFMSS requests are authorized; however, only the fire desk will approve real-time, non-live-fire events. Accordingly, if the 1400 (Yuma local) Friday deadline is missed for training desired for the weekend or the following Monday, the unit shall wait until the morning of training to submit a same-day RFMSS request. The same-day request shall be followed up by a phone call to LEG IRON at (928) 269-7080.

e. Before submitting RFMSS requests, units are required to review the range descriptions in Chapter 4, Airspace and Aviation Operations, to ensure the ranges being requested will accommodate training requirements. Additionally, Appendix C provides a list of approved ordnance for each applicable range. Ordnance requests beyond these approved parameters require coordination with the Range Safety Office (see Figure 1-3 for non-standard request deadlines).

f. Units shall check the Range Notifications webpage (below) to ensure the ranges that are being requested do not have any special restrictions outside of the currently published regulations (see Paragraph 4000.3.l-n on page 4-6 for detailed NOTAM and Range Notification guidance).

http://www.yuma.usmc.mil/rangenotifications/messages.jspx

g. Units requesting TACTS/TCTS/EW support for flights in the TACTS High airspace must contact the Naval Surface Warfare Center Corona, MCAS Miramar via DSN 267-6116 or Commercial (858) 577-6116. These services are available upon request Monday-Friday (excluding holidays) 0800-1600 Pacific Time.

3. Prior Permission Requirements (PPRs)

a. Units desiring to conduct aviation ordnance expenditure and aviation lasing operations between 0600 to 1400 Zulu (2300 to 0700 Yuma local time) daily are required to contact MCAS Yuma Range Scheduling no later than 72 hours in advance in order to

coordinate such activities. MCAS Yuma Range Management Department will determine supportability based on current staffing levels. Additionally, **all ground training** to include live-fire and/or LASER ground training during these nighttime/early morning hours for units other than MTU will require thirty (30) days advance notice.

b. MCAS Yuma Range Scheduling can be contacted via phone DSN 269-2214/2215/2690/5575 or Commercial (928)269-2214/2215/2690/5575 or via email yuma.skeds@usmc.mil. Range Scheduling will log all timely PPR requests with the appropriate unit, POC, requested range, time, and ordnance information. High explosives ordnance deliveries in the R-2507 are restricted to the hours of 0600-2200 Pacific Time (California local time). Accordingly, after hours aviation ordnance requests will be approved for inert ordnance only during these hours.

4. Co-use Agreements

a. Units shall indicate co-use coordination in the "communication" tab on their RFMSS request. MCAS Yuma Range Scheduling has the final approval authority regarding co-use coordination and shall deny co-use under any circumstance it is determined that insufficient coordination between the requesting units took place. Improper co-use coordination/dissemination represents a hazard to safety of flight. Only the scheduled unit may authorize co-use and/or release a range slot to another unit by contacting Yuma Range Scheduling and/or using the RFMSS scheduling system.

b. Co-use agreements between air units must be made to Range Scheduling no later than 1500 Yuma local (Monday thru Thursday). For weekend and/or holiday aviation training, the deadline is 1400 Friday (or 1400 the business day prior to the holiday).

c. Co-use agreements between air units and ground units must be made in writing via email to yuma.skeds@usmc.mil at least **two business days prior** to the training evolution.

d. Co-use agreements between ground units require a minimum of **two business days advance notice**. Both unit RSOs are required to provide a coordination brief to the Range Safety Office prior to being approved for co-use (see Figure 1-3).

3005. SPECIAL ORDNANCE SCHEDULING REQUIREMENTS

1. General. Yuma Range Scheduling has special scheduling requirements for certain ordnance items to include JDAM, ICM,

Missiles, and LASERs. Specific ordnance restrictions per range can be found in Appendix C. Ordnance requests beyond these approved parameters require coordination with the Range Safety Office (see Figure 1-3 for non-standard request deadlines).

a. Requests for JDAM must be made 48 business hours prior to the requested training date. Advance notice is required by Range Scheduling in order to ensure that there is no scheduled ground activity within the Weapon Danger Zone (WDZ) area associated with the submitted JDAM request. The presence of ground activity (i.e. power line maintenance, ground units not participating in the requested JDAM event, law enforcement presence) all require coordination to safely clear the surface area prior to JDAM (and other large WDZ-profiled activities') release. Users requesting to employ JDAM shall submit a JDAM request form found in Appendix E via email to yuma.skeds@usmc.mil. All JDAM requests must fall within the JDAM Acceptable Regions Parameters as listed on the last page of Appendix C.

b. Missile firing requests must go through the Installation Range Safety Officer for approval and therefore must be submitted no later than five (5) business days prior to the evolution to ensure proper time for processing. Missile firing request forms can be found in Appendix E and must be submitted via fax to DSN 269-2216 or email to yuma.skeds@usmc.mil. Missile firing requests accompanied with WDZ footprints may receive expedited processing based on the availability of Range Safety personnel.

3006. STANDARD SCHEDULED ALTITUDES

1. General. Figure 3-2 outlines standard scheduled altitudes for all MCAS Yuma RTA. Requests for other than standard scheduled altitudes require coordination with Yuma Range Scheduling. Airspace requests outside of published hours shall require a minimum of two hours notice to activate and NOTAM [see references (i) and (j)]. During published hours, a thirty minute notice shall be required.

a. Western Ranges. See Figure 3-3 for a visual reference of standard scheduled altitudes for the R-2507 areas and adjacent MOAs/ATCAAs.

b. Eastern Ranges. See Figure 3-4 for a visual reference of standard scheduled altitudes for the R-2301W (and its sub-ranges) and the Dome MOA/ATCAA.

3007. AVIATION RANGE CHANGES AND CANCELLATIONS

1. General. Aviation ranges that are scheduled and go unused due to no-shows have a negative impact on both military training and FAA use of the National Airspace System (NAS). Every effort shall be made by units to utilize approved range times. A monthly report is produced which identifies units not utilizing ranges as scheduled. A unit's utilization information can be provided upon request.

2. Changes and Cancellations

a. Changes and cancellations not submitted in a timely manner shall be recorded as a NO SHOW.

b. Any changes and/or cancellations must be submitted in RFMSS (or made via phone call based on Range Scheduling supportability) no later than 1500 Yuma local (Monday thru Thursday). For weekend and/or holiday training, the deadline is 1400 Friday (or 1400 the business day prior to the holiday). Requests made after these deadlines will not be approved and will not be reflected on the fire desk on the following day.

c. Cancellations submitted past these deadlines, although reflected as a NO SHOW, will make the aviation range available for other units. For same-day cancellations, contact Yuma Range Scheduling via DSN 269-2214/2215/2690/5575 or Commercial (928) 269-2214/2215/2690/5575.

d. Same-day RFMSS requests are authorized; however, only the fire desk (LEG IRON) will approve real-time, requested events. Accordingly, if the 1400 (Yuma local) Friday deadline is missed for training desired for the weekend or the following Monday, the unit shall wait until the morning of training to submit a same-day RFMSS request. The same-day request shall be followed up by a phone call to LEG IRON at (928)269-7080.

3008. EXERCISE TRAINING

1. Coordination

a. Event Coordinator. All approved Priority 1-5 exercises/events and foreign military training shall require the approved unit to designate an "Event Coordinator". This designated individual will be Range Scheduling's single point of contact for all exercise-related scheduling. Specifically, this individual will be responsible for submitting all air and ground RFMSS requests and will ensure that supporting units'

information is properly identified in the RFMSS request. Having a single point of contact avoids confusion when Range Scheduling is contacted by supporting units (that may or may not be aware of the Event Coordinator's scheme of maneuver). Additionally, the Event Coordinator is the single point of contact for any co-use situation that may be requested by other units not directly supporting the priority exercise. The most common miscommunication occurs when ground RFMSS requests for impact areas are not covered by concurrent air RFMSS requests. Having an Event Coordinator helps to prevent these occurrences.

b. Scheduling Liaison. Range Scheduling will assign one of their Schedulers as a "Scheduling Liaison" to the unit whom will serve as a single point of contact to the Event Coordinator. The Scheduling Liaison will provide all RFMSS instructions and other range coordination information (to include Range Safety points of contact, range restrictions, copies of range SPINS, maps, etc.). Additionally, the Scheduling Liaison will identify to the Event Coordinator, all RFMSS deadlines. These deadlines will be strictly enforced as listed in Figure 3-1.

2. Large Force Exercises (LFEs). For all LFEs, a user account will be created to correspond with the name of the LFE (i.e. WTI, Scorpion Fire, Puma Strike, etc.). The Event Coordinator will be provided the RFMSS account information for accessing the LFE account for the purpose of requesting ranges for the priority event. All requests for ranges desired for the LFE shall be requested using the LFE account. Unit level requests submitted via other RFMSS accounts **WILL NOT** be processed with the level of priority approved for the LFE. Event Coordinators shall ensure their event is properly scheduled using only the RFMSS account established for that particular LFE.

3. Unit Level "White Space" Training. Often, during priority exercises/events, supporting units will desire to conduct their own unit level training (outside of their direct support of the approved exercise). This training is commonly referred to as "white space" training. **White space training, when not coordinated properly, represents a significant range safety concern not only to the larger exercise but to other units training in the area that may have been authorized co-use with the larger exercise.**

a. Unit level training requested outside of an approved priority event **DOES NOT** rate the same level of priority as the exercise for which the individual unit is supporting. Unit level training shall conform to normal range scheduling procedures and be requested via RFMSS directly from the unit.

Event Coordinators caught requesting ranges for supporting units' individual training (and not the exercise's) will risk having their exercise's priority forfeited.

b. If supporting units desire to conduct their own training under the larger exercise's scheduling requests, those units shall submit separate RFMSS requests (both ground and air requests where applicable) and request "co-use" with the exercise. The Event Coordinator for the priority exercise will then have to work out coordinating instructions if the co-use request from the supporting unit is approved.

3009. ADJACENT AREAS

1. NAF El Centro

a. MCAS Yuma Range Scheduling provides services to NAF El Centro for the purpose of scheduling the R-2510 and R-2512 airspace areas only. Range Scheduling defers to NAF El Centro Base Operations for priority determination and approval of nonstandard activities. Chapter 4 provides general guidance on NAF El Centro range operations parameters. Information regarding ground access and aviation target support features can be obtained by contacting NAF El Centro Base Operations via DSN 658-2601/2507 or Commercial (760)339-2601/2507.

b. The Blue Angels retain priority scheduling in NAF El Centro's ranges (primarily R-2510). The Blue Angels typically train annually at NAF El Centro during the January through March timeframe. Contact NAF El Centro Base Operations for more information on associated training activities and planned Blue Angel deployments.

2. Yuma Proving Ground

a. Army Yuma Proving Ground (YPG) is the Using Agency and scheduling activity for the R-2306, R-2307, R-2308, and R-2311 range complexes. YPG typically schedules ranges above FL180. Units scheduling YPG Ranges are responsible for confirming the available altitudes within the YPG Ranges prior to flight. This information can be obtained via DSN 899-6105 or Commercial (928) 328-6105.

b. Yuma Range Scheduling is unable to confirm YPG's range times and altitudes until 1300 Yuma local time the day prior and does not accept scheduling requests for the R-2306, R-2307, R-2308 or R-2311 ranges until after YPG's schedule is confirmed.

c. The R-2306, R-2307, R-2308, and R-2311 ranges are not available for scheduling through RFMSS. A request for these ranges must be made via phone call to Yuma Range Scheduling DSN 269-2214/2215/2690/5575. YPG maintains priority use of these areas.

MCAS Yuma Range Priorities**				
Priority	Exercise	Examples	Declaration Source	RFMSS Priority Access
1	Major Command Exercises **		Naval/AMHS Message from MEF / 3rd Fleet / CSFTWP: Greater than 90 days advance notice required	Greater than 45 Days before start of event
2	USMC Tactics/Wpns Schools	(i.e. WTI)		35 - 45 Days before event
3	Wing/Group-level Large Force Exercises (LFEs) / Pre-deployment Training Program (PTP) Assessment	(i.e. Scorpion Fire, MAG Wars, PTP Blocks 3,4,5 training)	Naval/AMHS Message from Wing: 60 - 89 days advance notice required	28 - 34 Days before event
4	FRS / Deployed Strike Detachments		Naval/AMHS Message from Wing: 30 - 59 days advance notice required	21 - 27 Days before event
5	MCCRE (Marine Corps Combat Readiness Evaluation), Pre-deployment Training Program (PTP) Events	(i.e. PTP Block 2 training)	Naval/AMHS Message from Wing	14 - 20 Days before event
6	CAS		Squadron thru MCAS Yuma Range Scheduling	14 - 20 Days before event
7	TACPEX		EWTGPAC Naval Message	14 - 20 Days before event
8	Unit Level Training / Foreign Military Unit Level Training	Fleet operations by USN and USMC aircraft assets to include SFWT, ACTI, Strike	Squadron thru MCAS Yuma Range Scheduling	14 - 20 Days before event
9	CNATRA Detachments for purpose other than Strike training	(i.e. FORM, FAMFORM, TACFORM)	Squadron thru MCAS Yuma Range Scheduling	14 - 20 Days before event
10	Ground Combat Element		Battalion / NSWG-1	14 - 20 Days before event

Note: The matrix above provides guidance when scheduling conflicts arise. CO MCAS Yuma retains ultimate decision-making authority when determining range assignments.

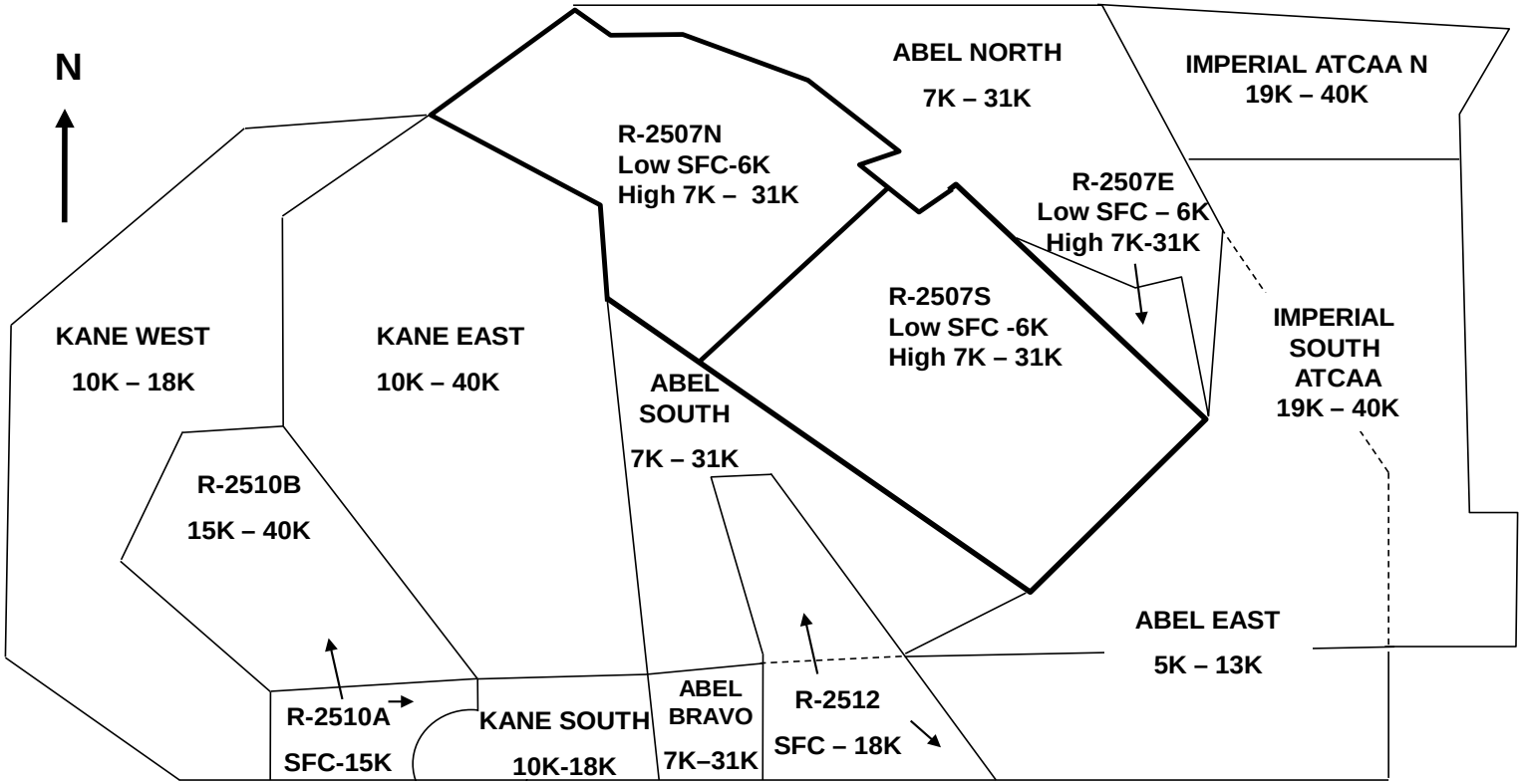
****** Higher Headquarters' events may take precedence over all other priority claims/events.

FIGURE 3-1 MCAS YUMA RANGE PRIORITIES

Published vs. Standard Scheduled Altitudes			
Area	Published Altitudes	Standard Scheduled Altitudes	Times
MCAS Yuma MOAs / ATCAAs			
Abel Bravo MOA/ATCAA	7,000 MSL to FL 400	7,000 MSL to FL 310	0500 - 2200 local - Monday through Friday - all other times by NOTAM
Abel East MOA	5,000 MSL to 13,000 MSL	5,000 MSL to 13,000 MSL	Intermittent by NOTAM with minimum 2 hours advance notice
Abel North MOA/ATCAA *	7,000 MSL to FL 400	7,000 MSL to FL 310	0500 - 2200 local - Monday through Friday - all other times by NOTAM
Abel South MOA/ATCAA	7,000 MSL to FL 400	7,000 MSL to FL 310	0500 - 2200 local - Monday through Friday - all other times by NOTAM
Dome MOA/ATCAA	6,000 MSL to FL 800	10,000 MSL to FL 400	Intermittent by NOTAM with minimum 2 hours advance notice
Imperial North ATCAA *	FL 190 to FL 400	FL 190 to FL400	
Imperial South ATCAA	FL 190 to FL 400	FL 190 to FL400	
Kane East MOA/ATCAA	10,000 MSL to FL 400	10,000 MSL to FL 400	0500 - 2100 local daily - all other times by NOTAM with minimum 2 hours advance notice
Kane South MOA	10,000 MSL to FL 180	10,000 MSL to FL 180	0500 - 2100 local daily - all other times by NOTAM with minimum 2 hours advance notice
Kane West MOA	10,000 MSL to FL 180	10,000 to 18,000 MSL	0500 - 2100 local daily - all other times by NOTAM with minimum 2 hours advance notice
Quail MOA/ATCAA	10,000 MSL to FL 220	10,000 MSL to FL 220	0700 - 1700 MST - Monday through Friday - all other times by NOTAM
Turtle MOA/ATCAA	11,000 MSL to FL 220	11,000 MSL to FL 220	0600 - 1600 PST - Monday through Friday - all other times by NOTAM
MCAS Yuma Restricted Areas			
R-2301W	Surface to FL 800	See sub-ranges below	See sub-ranges below.
AUX II AIRFIELD	N/A	Surface to 1200' AGL	Continuous
Cactus West (R-2301W)	N/A	Surface to 15,000 MSL	Continuous
TACTS High (R-2301W)	N/A	6,000 MSL to FL 500	Continuous
TACTS Low (R-2301W)	N/A	200 AGL to 5,000 MSL	Continuous
R-2507E	Surface to FL 400		
R-2507E Low	N/A	Surface to 6,000 MSL	0700 - 2300 local daily - all other times by NOTAM. The R-2507 E will be activated to match the altitudes scheduled in the R-2507 S.
R-2507E High	N/A	7,000 to FL 310	
R-2507E Both	N/A	Surface to FL 310	
R-2507N	Surface to FL 400		
R-2507N Low	N/A	Surface to 6,000 MSL	Continuous
R-2507N * High	N/A	7,000 to FL 310	Continuous
R-2507N * Both	N/A	Surface to FL 310	Continuous
R-2507S	Surface to FL 400		
R-2507S Low	N/A	Surface to 6,000 MSL	Continuous
R-2507S High	N/A	7,000 to FL 310	Continuous
R-2507S Both	N/A	Surface to FL 310	Continuous
* During Early Shelf times (0730-1030L and 1400-1600L) these areas will be restricted to FL 310.			
FACSFAC San Diego / NAF El Centro Restricted Areas			
R-2510A	Surface to 15,000 MSL	Surface to 15,000 MSL	0700 - 2300 local daily - all other times by NOTAM with minimum 24 hours advance notice
R-2510B	15,000 MSL to FL 400	15,000 MSL to FL 400	0700 - 2300 local time weekends only with minimum 48 hours advance notice
R-2512	Surface to 23,000 MSL	Surface to FL 180	0600 - 2300 local daily - all other times by NOTAM with minimum 24 hours advance notice

FIGURE 3-2 STANDARD SCHEDULED ALTITUDES

WESTERN RANGES
INCLUSIVE OF THE CHOCOLATE MOUNTAIN AERIAL GUNNERY RANGE
(CMAGR – R-2507 AREAS)



Note: The altitudes provided above are standard scheduled altitudes.
Users must specifically request higher altitudes if they are desired – up to published altitudes.

FIGURE 3-3 WESTERN RANGES AIRSPACE DIAGRAM WITH STANDARD SCHEDULED ALTITUDES

EASTERN RANGES
INCLUSIVE OF THE BARRY M. GOLDWATER AERIAL GUNNERY RANGE (BMGR – R-2301W)

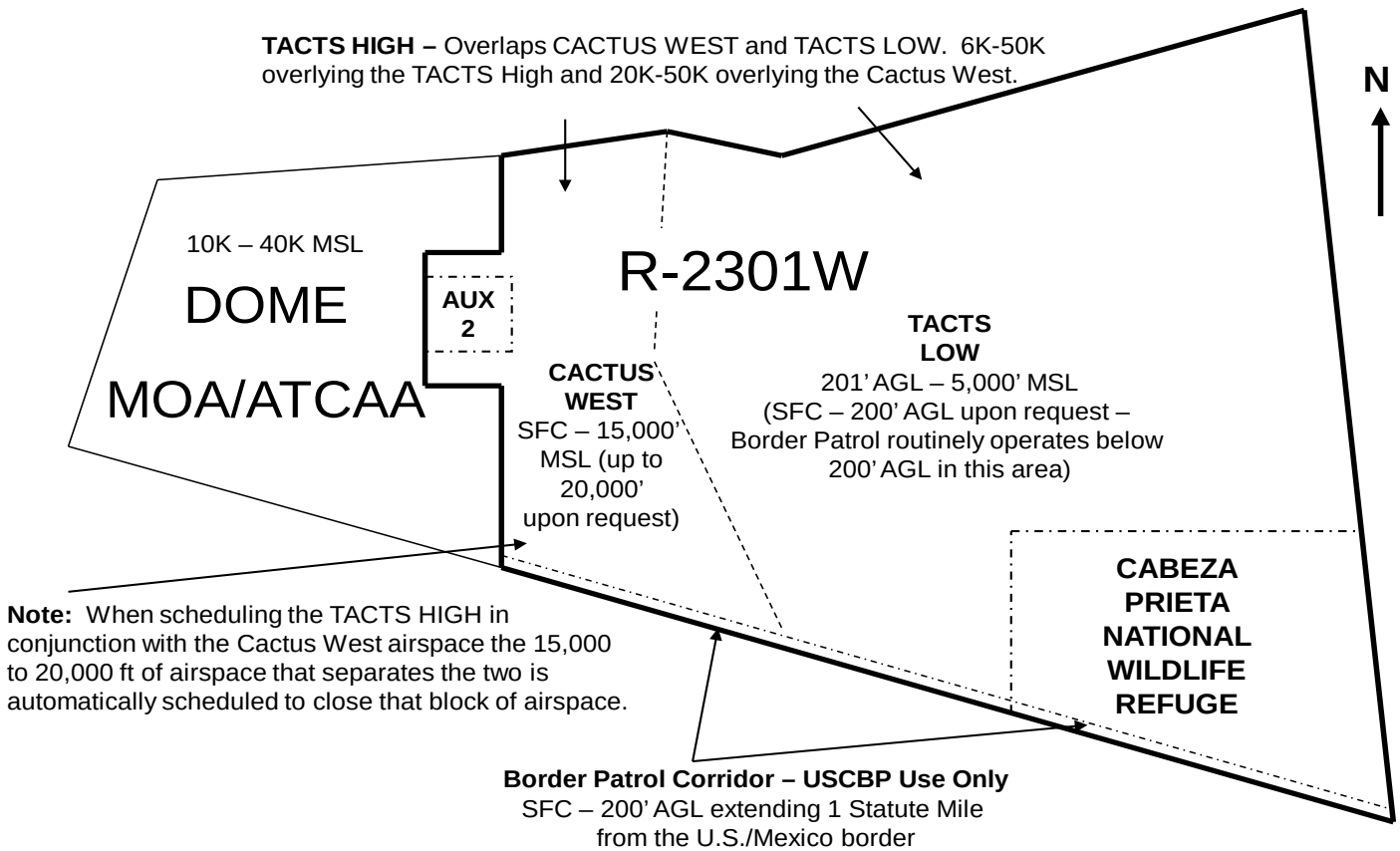


FIGURE 3-4 EASTERN RANGES AIRSPACE DIAGRAM WITH STANDARD SCHEDULED ALTITUDES

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AIRSPACE AND AVIATION OPERATIONS

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CHAPTER 4

AIRSPACE AND AVIATION OPERATIONS

4000. GENERAL

1. Purpose and Scope

a. This chapter describes Special Use Airspace (SUA), aviation operations and aviation training facilities within the BSTRC. The BSTRC includes the BMGR, the CMAGR, and the adjacent facilities belonging to the U.S. Army Yuma Proving Ground (YPG) and Naval Air Facility (NAF) El Centro. MCAS Yuma is the custodian for the BMGR West and the CMAGR only, but also provides scheduling services for NAF El Centro's airspace areas (see Figure 4-1). Instructions in this chapter are based upon current DOD and FAA policies and regulations. Nothing in these instructions will prevent the exercise of sound judgment to preserve lives and property, or to ensure the safety of personnel.

b. All flight operations within MCAS Yuma's portion of BSTRC will be conducted IAW current directives. Military Assumes Responsibility for Separation of Aircraft (MARSA) rules apply to operations within MCAS Yuma's AOR when not under the positive control of the MCAS Yuma CERAP (call sign YUMA RANGE).

2. SUA Definitions

a. Restricted Area. Restricted areas contain airspace identified by an area on the surface of the earth within which the flight of aircraft, while not wholly prohibited, is subject to restrictions. Restricted areas denote the existence of unusual, often invisible, hazards to aircraft such as artillery firing, aerial gunnery or guided missiles. Penetration of restricted areas without authorization from the "Using Agency" [see reference (j)] may be extremely hazardous to the aircraft and its occupants.

b. Military Operations Areas. MOAs consist of airspace of defined vertical and lateral limits established for the purpose of separating certain military training activities from Instrument Flight Rules (IFR) traffic. These areas are depicted on Enroute and Low Altitude charts.

c. Air Traffic Control Assigned Airspace. An ATCAA is similar to a MOA except that the airspace is entirely contained within Class A airspace.

d. The term RTA (defined in Chapter 1) can incorporate ranges and any associated SUA that is used for the activities stated above.

3. Aviation Safety

a. YUMA RANGE (MCAS Yuma CERAP) and LEG IRON (MCAS Yuma Range Operations) personnel have authority to refuse use to any flight or aircraft violating the provisions of this order.

b. Safety Briefs. Per MCO P3550.10, all aircrew are required to receive appropriate installation range safety briefs prior to operating within assigned airspace. Prior to having range times approved in RFMSS, Commands are required to submit a letter verifying that all aircrew have reviewed and understand the content of the MCAS Yuma Aircrew Range Safety Brief.

(1) Aircrew Range Safety Brief. All pilots shall be familiar with this order and the associated Aircrew Range Safety Brief available at the link below:

https://intranet.mciwest.usmc.mil/yuma/rng/roc/default.aspx

If you have trouble viewing this site, contact Range Scheduling, and the appropriate computer settings for viewing this page can be provided. For non-USMC users, contact Range Scheduling for a copy of this brief. Units desiring to train aboard MCAS Yuma's RTA shall submit an annual compliance letter (sample letter is provided at the above link) to the Range Operations Director acknowledging this Range SOP and associated Aircrew Range Safety Brief have been reviewed and incorporated into annual aircrew training classes. It shall be the responsibility of units training aboard MCAS Yuma's RTA to ensure that new pilots are familiar with these policies prior to the conduct of training.

(2) ATC Course Rules Brief. IAW MCAS Yuma StaO P3710.4_ Airfield Operations Manual, "A station operations course rules brief is required for all deploying squadrons to MCAS Yuma". Briefs will be scheduled through the ATC Officer at least 5 business days in advance via DSN 269-9231/8798 or Commercial (928)269-9231/8798. All Course Rules Briefs are provided by ATC and are mandatory prior to operating at MCAS Yuma.

c. All MCAS Yuma scheduled RTA are located within FAA designated Restricted Areas and MOA/ATCAAs and shall not be entered unless clearance has been received from YUMA RANGE/LEG IRON.

d. All air-to-ground targets are authorized for aviation laser activity within the parameters prescribed in the LASER

Range Certification Report **only**. To request LASER operations outside of these parameters, users shall submit a request to Range Safety no later than 30 days in advance for processing.

e. All restrictions pertaining to individual RTA are set forth in this chapter and the associated appendices.

f. A live ordnance and drop tank jettison area is located in the R-2301W (Cactus West sub-range) at the Cactus West bulls-eye. This area is located at 11S QR 44159 94337 or N32.459° W114.402°. All ordnance will be dropped “UNARMED”. Live ordnance will not be jettisoned without two-way radio contact with LEG IRON on frequency 310.0. Report item(s) and number(s) of ordnance jettisoned to LEG IRON.

(1) Contact YUMA RANGE for clearance into the Cactus West airspace.

(2) Conduct a clearing pass prior to jettison.

g. All aircraft will squawk Mode 3A/C within the RTA unless otherwise authorized by ATC.

h. Units operating within the Yuma RTA will ensure that all ordnance (with the exception of self-protection flares, decoy chaff, and illumination flares) is expended to impact in the designated target areas. For chaff operations, the following restrictions apply:

(1) Altitude restrictions: Chaff operations cannot exceed 20,000 ft. MSL in the R-2301 West. Chaff operations cannot exceed 10,000 ft. AGL in R-2507 North/South/East. These are the only areas were chaff is allowed.

(2) Restrictions to protect NEXRAD weather radar: All chaff must remain within the confines of the special use airspace. This means the chaff must be at ground level by the time it reaches the borders of the special use airspace.

(3) The aircrews must use current (NLT 2 hours before the mission) weather data for their chaff flow predictions.

(4) The Cease Buzzer point of contact for MCAS Yuma SUA is the MCAS Yuma Frequency Manager (928)269-3533/2218.

i. Refer to specific range training areas contained in this chapter and Appendix C for additional information on authorized ordnance.

j. All operations, including dummy runs, are prohibited when RTA have not been scheduled through Range Scheduling.

k. Aircraft and Forward Air Controllers (FACs) will visually confirm all targets are clear prior to ordnance drops.

Note:

Unauthorized personnel routinely trespass onto government property and foul restricted area target complexes. Any mission interrupted or aborted due to a fouled range will be immediately reported to LEG IRON for further action.

l. Periodic closing of targets to facilitate maintenance, range sweeps, target inserts, range debris clearance, etc. will occur. Pilots will comply with YUMA RANGE and LEG IRON instructions regarding closed targets and altitude restrictions where applicable. Reference RFMSS and the Range Notifications websites below for scheduled range closures. All firing will be conducted to ensure that all ordnance fall within the designated impact areas. All effects of fire will fall within the installation boundary.

m. All flights shall check MCAS Yuma (ICAO Identifier = KNYL) and NAF El Centro (ICAO Identifier = KNJK) NOTAMS for **airfield information** prior to launch. Go to the following NOTAM website for the current list of applicable NOTAMs:

https://www.notams.jcs.mil/dinsQueryWeb/

n. All flights **shall be familiar with current MCAS Yuma Range notifications and restrictions prior to launch**. Current notifications/restrictions can be obtained in three ways:

(1) All users can go to the following internet website for MCAS Yuma's current Range Notifications.

http://www.yuma.usmc.mil/rangenotifications/messages.jspx

(If the page does not appear, go to the MCAS Yuma homepage at http://www.yuma.usmc.mil and select "Range Notifications" located in the left column).

(2) USMC.MIL users can go to the following SharePoint weblink for current Range Notifications.

https://intranet.mciwest.usmc.mil/yuma/rng/roc/default.aspx

If you have trouble viewing the document, go to the internet "Tools" option and select "Internet Options", then select the "Security" tab and add the link as a trusted site.

(3) Lastly, if the two links above are not accessible, contact MCAS Yuma Range Scheduling for current range notifications/restrictions (928)269-2214/2215/2690. DSN is 269.

4. Communication

a. Fixed Wing/Tilt Rotor Aircraft shall contact MCAS Yuma ATC "YUMA RANGE" for clearance into Yuma Ranges and prior to exiting on 276.0 or 124.15. All Rotary Wing aircraft seeking access to R-2301W, R-2507, and R-2512 will check in with “LEG IRON” on frequency 310.0. LEG IRON will coordinate clearance and assignment of Mode 3A/C to Rotary Winged platforms seeking access to restricted airspace. Rotary Wing aircraft checking in with LEG IRON will be directed to utilize MAWTS-1 published Control Points, (current as of 1 December 2012) in order to remain clear of active small arms ranges. LEG IRON will pass any applicable range restrictions, identify locations of ground support units (if applicable), and enforce the policies outlined in this order.

b. All aircraft will squawk Mode 3A/C within the RTA unless otherwise authorized by ATC.

c. The following information will be passed to YUMA RANGE/LEG IRON when checking into designated areas.

Check-in:

(1) Call sign, number and type of aircraft

(2) Requested airspace

(3) Tactical frequency used while in the area

(4) Ordnance (to include any chaff and flares)

(5) Confirmation if working with any ground unit (JTAC, DASC, FO, etc.) or co-use agreements with other units.

YUMA RANGE/LEG IRON will clear aircraft into their appropriately scheduled SUA, assign altitude restrictions, and assign an aircraft SQUAWK code.

d. All aircraft seeking access to R-2507N will be advised of the status of Special Warfare Training Area-4 (SWAT-4). SWAT-4 is part of the Camp Billy Machen (CBM) Desert Warfare Training Facility (DWTF) located on the western boundary of R-2507N. SWAT-4 contains both Static and Live Fire and Maneuver small arms ranges. SWAT-4 is partitioned into North/Central/South sections. Active altitudes will generally be 3,000 feet Above Ground Level (AGL). Fixed Wing/Tilt Rotor Aircraft checking in

with YUMA RANGE on 276.0 will be advised of which SWAT section, or combination of SWAT sections are in an active status along with corresponding active altitudes. Aircraft shall remain clear of these active SWAT-4 sections (See Figure 4-10).

e. Fixed Wing/Tilt Rotor aircraft shall contact YUMA RANGE for clearance out of designated SUA. If requesting an IFR clearance, aircraft shall remain within SUA until an ATC clearance has been received or depart VFR. The following information will be passed to YUMA RANGE: Call sign; number of aircraft; location; intentions.

f. Rotary Wing aircraft shall contact LEG IRON for clearance out of designated SUA. The following information will be passed to LEG IRON: Call sign; number of aircraft; location; intentions.

g. The scheduled airspace user has a 15-minute window, from start of scheduled time to contact YUMA RANGE/LEG IRON. After 15 minutes, the block of time will be canceled and made available to other users. If a flight is going to be late, contact Range Scheduling for retaining the scheduled window.

h. Lost communications procedures will be IAW FAR 91.127 and are described in the individual airspace sections found within this chapter.

4001. UNMANNED AIRCRAFT SYSTEM (UAS) TRAINING

1. General. UAS operations at MCAS Yuma shall remain within restricted airspace unless a Certificate of Authorization (COA) or Waiver from the FAA has been granted [see reference (b)]. All UAS operations shall be coordinated with the RCO and scheduled per the procedures outlined in Chapter 3 of this order. Users desiring to request range training activities involving UAS platforms shall be in compliance with FAA requirements.

2. Communication. UAS operations shall not be conducted within MCAS Yuma RTA unless positive two-way communication is established and maintained between the UAS operator and YUMA RANGE or LEG IRON. The RSO shall advise LEG IRON prior to launching the UAS and when training is complete. Units conducting UAS operations shall have a radio to monitor LEG IRON transmissions. Additionally, coordination with the MCAS Yuma Frequency Manager is required before UAS training can be approved within MCAS Yuma’s RTA. The Frequency Manager can be contacted at (928)269-3533/2218.

3. Range Scheduling. Because UAS flights are typically longer than other aviation training events, co-use (shared airspace) between UAS flights and other units is becoming increasingly common. It is the responsibility of both units involved in approved co-use situations to adopt flight measures that keep both training events separated for flight safety. Range Scheduling will ensure both units have acknowledged co-use (with the other unit) before approving range requests. The UAS unit shall ensure that it has any necessary transit airspace scheduled. For example, a UAS unit operating out of AUX-II with scheduled TACTS Low/High airspace shall ensure that the Cactus West airspace has also been scheduled (or have coordinated co-use) simultaneously for transiting purposes.

4. Weather Minimums. UAS operations shall be conducted in accordance to system limitations and/or VMC, whichever is greater.

5. Safety Training. All UAS operators, at a minimum, shall review the MCAS Yuma Range Safety Brief. Additionally, Range OIC/RSO requirements as described in Chapter 1 are applicable to UAS training activities. Units are responsible for obtaining MCAS Yuma Range OIC/RSO certification prior to the conduct of training. Contact the Range Safety Office to schedule the required certification training.

6. Locations for UAS Training. Currently, at least three ground locations are available to support UAS training within MCAS Yuma's RTA. These locations are contained within restricted airspace. Accordingly, both air and ground requests shall be submitted when desiring to train in these areas.

a. AUX-II. The details of AUX-II can be found Paragraph 4004.1 (page 4-14). The AUX-II airspace (and adjacent airspace areas if needed) shall be requested simultaneously with the AUX-II runway (at a minimum) for UAS activity here.

b. Speed Bag. Grid location: 11S PS 47872 82708 (N33°16′24.0″ W115°24′44.2″). See Figure 4-10 for a graphic depiction of the area. Speed Bag is a dirt strip located just inside the R-2507 North airspace boundary east of the Siphon 8 bivouac area and southwest of the Siphon 8 FASP. The runway orientation is 13/31. The UAS runway is approximately 1000′ X 75′ with a 100′ X 50′ maintenance pad and a 100′ X 50′ launch pad. Units may bivouac at Speed Bag provided the appropriate logistical support (porta johns, trash collection, etc.) is established and meets with MCAS Yuma Range Safety and Station Environmental requirements. The R-2507 North airspace and Speed Bag UAS Strip (ground request) shall be requested simultaneously by units desiring to train in this area.

c. TACTS Airfield. Grid location: 11S QR 67655 99160 (N32°29′50″ W114°09′04″). TACTS Airfield is a dirt strip located immediately east of the Gila Mountains within the TACTS Low sub-range of the R-2301W. UAS operations out of this area will require range scheduling airspace requests for the TACTS Low airspace (to include requests for the surface to 200 feet airspace area). Additionally, ground requests will be required for physical occupation of the airfield. The strip is approximately 1,000′ X 100′ and oriented 12/30. The area elevation is approximately 800′. Note: a 195′ communications tower is located near the northeastern edge of the strip and should be considered when conducting airfield planning.

d. Other Areas. All designated training site areas located in the BMGR and west of the 113° 53′ longitude line are available for use by UAS operators following approval by YRMD. A reconnaissance visit to potential training sites should be made prior to training to ensure that the surface area of the site is supportable for such operations. Paragraph 2014 (page 2-9) provides details what is allowed in these areas. See Appendix B for specific locations.

4002. LANDING ZONES

1. Applicability. The following guidance pertains to aircraft landings within those areas that fall under the cognizance of the CO, MCAS Yuma **ONLY**. These areas include the land areas associated with Barry M. Goldwater Range (BMGR) West generally located below the R-2301 West and the Chocolate Mountain Aerial Gunnery Range (CMAGR) generally located below the R-2507 North/South/East. Note: the airspace and ground boundaries for both areas do not align. Range Scheduling shall only process requests for landings within MCAS Yuma areas of responsibility.

2. For the scheduling of “designated LZs”, a ground request shall be submitted. It should be noted that dependent upon its location, the LZ may require the concurrent scheduling of an air facility. Additionally, for LZs located near target polygons within the CMAGR Impact Area, range sweeps by EOD-qualified personnel may be required immediately before aviation training use due to the potential of UXO. For a list of designated landing zones, specific scheduling procedures, and associated EOD requirements, either go to the web link provided below or contact Range Scheduling. The list of designated LZs will continue to be updated as newly-designated LZs are established following appropriate environmental processing.

3. Helicopter (rotary wing) landings are authorized in **all MCAS Yuma designated LZs**. In addition to designated LZs, rotary wing

aircraft during non-emergency situations are authorized to land in the following areas:

a. R-2301 West (BMGR):

(1) **Within the land boundary of the BMGR only** and when properly scheduled, rotary wing aircraft are authorized to land within any non-prohibited area west of the 113° 53’ longitude line.

(2) Prohibited areas where landings are not authorized include specially-marked or fenced areas, designated areas for protected animal and plant species, and designated areas for the protection of cultural or archaeological discoveries.

b. R-2507 North/South/East (CMAGR):

(1) **Within the land boundary of the CMAGR only** and when properly scheduled, rotary wing aircraft are authorized to land within any non-prohibited area located south of the Inert Line within the R-2507 North, south of the following line within the R-2507 South: 11S PS 56040 84870 to 11S PS 85510 63060, and anywhere within the R-2507 East. Requests for landings within the CMAGR in areas north of the Inert Line (in the R-2507 North) and north of the line described above for the R-2507 South shall be processed on a case-by-case basis and shall be submitted to Range Scheduling with the applicable grid coordinate information. Requests for landings within prohibited areas will not be approved.

(2) Prohibited areas where landings are not authorized include designated target polygons to include the ICM Box (see Appendix B), specially-marked or fenced areas, designated areas for protected animal and plant species, and designated areas for the protection of cultural or archaeological discoveries. Aircraft shall avoid landing in areas of the Iris Wash immediately to the southwest of the ICM Box. The migration of UXO from the ICM Box poses a significant hazard to all ground activity to include aircraft landings.

(3) Tilt-rotor landings are **strictly limited to MCAS Yuma designated landing zones only**. All approved landing zones for tilt-rotor operations have been environmentally surveyed and assessed. Tilt-rotor landings in other than designated areas are **strictly prohibited** and may result in the cancellation of a violating unit’s remaining range training schedule. Unauthorized landings may also violate certain environmental laws and regulations (see Chapter 2).

4. The following link (accessible to usmc.mil users only) contains all currently-approved (designated) landing zones and other scheduling guidance to support requested operations. Select “Landing Zones” within the left column on the page. Non-USMC units may contact Range Scheduling directly for applicable information.

https://intranet.mciwest.usmc.mil/yuma/rng/roc/default.aspx

If you have trouble viewing the document, contact Range Scheduling for a list of computer settings necessary for viewing this site.

4003. WEAPON DANGER ZONE (WDZ) TOOL

1. General. WDZs identify the minimum area necessary to contain munitions and hazardous fragments within the installation boundary that result from air-to-ground ordnance delivery operations [see reference (b)]. WDZs for fixed wing, rotary wing, tilt-rotor, and unmanned aircraft systems will be generated using the WDZ Tool. The tool will determine aircraft type, ordnance, and delivery parameters that are permissible for each approved target polygon. A record (electronic or hard copy) of the analysis of each target engaged during the training evolution will be maintained at the Range Safety Office.

2. Information

a. WDZs may be generated by the using unit and submitted to the Range Safety Office for approval via RFMSS or hard copy. Footprints will be provided for all ordnance not already covered in this order (see Appendix C). The information required to build a WDZ shall be submitted to the MCAS Yuma Range Safety Office NLT five (5) business days prior to evolution. Units shall ensure that applicable RTA have been reserved prior to submitting WDZs/SDZs. Refer to specific RTA information in this chapter and Appendix C for specific target restrictions.

b. WDZs will be based on a 99.9999% level of containment and must be kept wholly within the range boundary. While containment levels on the WDZ Tool are adjustable from 1:10,000 to a 1:1,000,000 probability of munitions (for inert ordnance) or a hazardous fragment (for live ordnance) escaping the containment area, 1:1,000,000 is the range safety standard. If the selected containment level is less than 1:1,000,000, an appropriate risk analysis and deviation process must be completed as described in Chapter 1.

4004. R-2301 WEST BMGR

1. General

a. The BMGR is comprised of R-2301W and R-2301E. This order applies to the R-2301W. The R-2301E is scheduled by the 56th RMO (Luke Range Scheduling). The R-2301W consists of four sub-ranges: TACTS High, TACTS Low, Cactus West and Auxiliary Airfield (AUX) II (see Figure 4-3). These ranges provide for Air-to-Air (AA), simulated Air-to-Ground (AG), scored AG, super-sonic flight, Electronic Warfare (EW), Laser, Field Carrier Landing Practice (FCLP), Assault Landing Zone (ALZ) and Aerial Delivery (AD) operations.

b. The R-2301W cannot be scheduled in its entirety unless all four sub-ranges (TACTS High, TACTS Low, Cactus West and AUX-II) are scheduled concurrently.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for specific coordinate information.

b. Boundaries/Vertical Limits. Surface to Flight Level (FL) 800.

c. Overlapping/Adjacent Areas. Dome MOA/ATCAA to the west and the R-2301E to the East. A jet route within L.A. Center's airspace north of this restricted area includes a high volume of commercial air traffic. Remain vigilant with respect to containing training within the R-2301.

4004.1 AUXILIARY AIRFIELD II (AUX-II)

1. General. AUX-II is comprised of a FCLP Deck and an Assault Landing Zone (ALZ). AUX-II is primarily used to support AV-8B FCLP, KC-130 ALZ, Forward Arming and Refueling Point (FARP), Rapid Ground Refueling (RGR), AD, and Helicopter Support Team (HST) operations.

2. Range Description

a. Boundaries/Lateral Limits. That airspace within a 2 Nautical Mile (NM) radius, centered about N32°32.841' W114°30.289', 11S QS 34304 03853, and only that area located within the confines of the airspace boundary.

b. Boundaries/Vertical Limits. Surface up to and including 1,200 ft. Above Ground Level (AGL).

c. The ALZ is a 3,800' X 100' asphalt runway oriented 02/20 (see Figure 4-3).

d. The drop zone is located 1 NM southeast of the AUX-II airfield, centered about N32°32.295' W114°29.480', 11S QS 35594

02874, with a radius of 450 meters. The drop zone shall be certified for use by the requesting unit prior to training. Contact Range Safety for coordination.

e. A bivouac site is located immediately east of the runway. Information on the bivouac site can be found in Chapter 6.

f. A Munitions Treatment Range (MTR) is located approximately 1.1 nm south of AUX-II.

g. A Field Ammunition Supply Point (FASP) is located 1/4 nm northwest of AUX-II. The FASP is used solely for the storage and distribution of ground ordnance.

h. Overlapping/Adjacent Areas. AUX II lies within Cactus West Airspace sub-range of the R-2301W.

3. Communication. Refer to Paragraph 4000.4 (page 4-8) or Appendix D.

4. Scheduling

a. The AUX-II airspace will be scheduled separately from other R-2301W sub-ranges. A letter titled “Operating Procedures at AUX-II Airfield, Yuma, AZ” dtd 04 Feb 2000 establishes the scheduling priority of the AUX-II Airfield. MAG-13 Operations is designated the controlling agency for operations in and around AUX-II except during the semi-annual Weapons and Tactics Instructor (WTI) course. However, MAG-13 will have priority scheduling over all non-WTI units for the AUX-II LHD deck when RFMSS reservations are made in excess of 14 days prior to the event. When scheduling is not accomplished by MAG-13 prior to the 14 day reservation window, no such priority exists.

b. It is imperative that separate RFMSS requests for ground access (i.e. Aircraft Rescue and Fire Fighting [ARFF], MMT, Fuels and Ordnance) are made concurrently with airspace requests to allow surface support personnel range access.

c. C/KC-130s conducting AUX-II operations will schedule Cactus West or coordinate airspace co-use with the Cactus West scheduled unit for maneuvering airspace.

5. Special Instructions

a. A vertical hazard of 1,500 ft. AGL exists over the Known-Distance (KD) Rifle range, Pistol range, and Range 1. These ranges are located approximately 4 km west of AUX-II. Units using the KD Rifle range, Pistol range and Range 1 shall put themselves in a check-fire status when observing an aircraft in the immediate vicinity of the range area.

b. The Multi-purpose Machine Gun Range is located approximately 8 km southeast of AUX-II and has a vertical hazard of 3,000 ft. AGL when active.

c. Aircrew requesting status of the above ranges should contact LEG IRON via DSN 269-7080 or Commercial (928)269-7080.

d. Units conducting FARP operations at AUX-II shall not block vehicular traffic on County Road 19 passing near the runway. Units may place road guards at the runway entrance to keep traffic from turning into the FARP area, but **shall not restrict passage along the Country Road itself**. This road is used by other units and agencies and does not conflict with FARP operations when they are being conducted properly.

e. Fixed Wing

(1) C/KC-130s will maintain an easterly pattern while utilizing the AUX-II airfield to remain within the confines of the airspace boundary.

(2) AV-8B operations conducted at the AUX-II FCLP Deck will be IAW the Marine Air Group (MAG)-13 SOP (GruO P3710.2_) for conduct of flight operations.

f. Rotary Wing/Tilt Rotor - Helicopters must restrict all landing/touch and go operations to the asphalt runway only. All transit across the matting or surrounding stabilization must be at or above 50 ft. AGL. Rotary wing/tilt rotor activity is **NOT AUTHORIZED** at the AUX-II LHD. The matting is not certified for these types of activities.

6. Ordnance

a. Aircraft expendables (chaff and flare) are authorized within the confines of the AUX-II airspace. Chaff procedures are outlined in Paragraph 4000.3.h on page 4-6. See Appendix C for authorized ordnance in this facility.

b. Smokey SAMS training within the AUX-II facility requires concurrent scheduling of the Cactus West airspace since the vertical hazard associated with Smokey SAMS exceeds the AUX-II airspace area.

c. LASER activity is NOT authorized at AUX-II.

4004.2 CACTUS WEST AIRSPACE

1. General

a. Cactus West is comprised of a scored AG bulls-eye target, scored AG Urban Target Complex (UTC) named Yodaville, four acoustically-scored strafing berms, and a Moving Land Target (MLT). **Scheduling of Cactus West airspace does NOT include the AUX-II area.**

b. Overlapping/Adjacent Areas. TACTS High, TACTS Low and Dome MOA/ATCAA. AUX-II is a separate and underlying range training area.

2. Range Description

a. Boundaries/Lateral Limits Within R-2301 West, west of the Gila Mountains, beginning at the intersection of the U. S. Mexican border at N32°18′53″ W114°13′15″ thence along the U.S./Mexican border to N32°23′45″ W114°28′33″ to N32°30′00″ W114°28′33″ to N32°30′00″ W114°31′03″ to N32°35′00″ W114°31′03″ to N32°35′00″ W114°28′33″ TO N32°39′40″ W114°28′33″ to N32°40′45″ W114°18′35″ to N32°30′00″ W114°18′30″ to origin.

b. Boundaries/Vertical Limits. Surface to FL200. Cactus West is normally scheduled to 15,000 ft. MSL.

3. Communication

a. Range Check-in and Communication. Follow the Check-in/Check-out procedures prescribed in Paragraph 4000.4 (page 4-8). For target support, the Cactus West discrete target frequency is 311.85. The Yodaville discrete target frequency is 290.1. The back-up frequency for both targets is 348.15.

b. Entry/Exit. Procedures apply to departure from and/or recovery to MCAS Yuma.

(1) FW aircraft

(a) Entry from Rwy 03: Right turn to cross the Northwest corner of the restricted area boundary, at or above 7,500 ft. Mean Sea Level (MSL).

(b) Exit to Rwy 03: Exit the Southwest corner of the restricted area boundary at or above 7,500 ft. MSL.

(c) Entry from Rwy 21: Left turn to cross the southwest corner of the restricted area boundary at or above 7,500 ft. MSL.

(d) Exit to Rwy 21: Exit the Northwest corner of the restricted area boundary at or above 7,500 ft. MSL.

(2) RW aircraft Use point Tango as the entry/departure route for Cactus West. Minimum altitude when crossing the restricted area boundary is 500 ft. AGL. Avoid overflying populated areas.

c. Lost Communications. Procedures to be used in the event of two-way radio failure are prescribed in FAR 91.127. Should two-way radio failure occur when operating in the R-2301W (Cactus West) airspace and it is not practical to recover using VFR procedures, the aircraft shall proceed as follows:

(1) Aircraft shall squawk 7600.

(2) Aircraft shall maintain 5,000 ft. MSL, exit the R-2301W (Cactus West) to the north to intercept the BZA VORTAC R-075 to BZA, then direct the NYL TACAN R-340 IAF 15 mile fix (alternate IAF), or to IAF GROBE DME fix and execute the HIGH/LOW TACAN RUNWAY 21 RIGHT APPROACH or HIGH/LOW TACAN RUNWAY 3 LEFT.

(3) If the duty runway is known, aircraft shall execute the approach to the duty runway. If the duty runway is unknown, execute the HIGH/LOW TACAN RUNWAY 21 RIGHT APPROACH.

4. Scheduling

a. The Cactus West airspace will be scheduled separately from other R-2301W sub-ranges. AUX-II is not included when Cactus West airspace is requested. A separate request for AUX-II shall be submitted if the underlying range training area is desired.

b. If additional Cactus West airspace is desired, 15,000 ft. MSL to FL200 (or Cactus West High) can be requested through RFMSS.

c. Approval of Cactus West airspace only authorizes the use of the Cactus West target and the Cactus West strafing berm. All other targets within this airspace area, to include Yodaville (UTC), the Yodaville strafing berm, and the MLT require specific approval from Range Operations before they can be used.

d. If target scoring is requested, type **YES** in “TGT SCORING/MLT – YES/NO?” box at the top of the RFMSS request.

NOTE:
Scoring may not be available for Same Day Request.

e. As described above, the use of Yodaville is not authorized when scheduling the Cactus West airspace. Specific selection of “UTC YODAVILLE” under the “Events” tab (when requesting Cactus West airspace) is required if use of Yodaville complex is desired.

f. It is imperative that separate RFMSS requests for ground access (i.e. FACs/Tactical Air Control Party (TACP), Emitter support, etc.) are made concurrently with airspace requests. It is the user’s responsibility to verify RFMSS approval prior to conducting training.

5. Special Instructions

a. Noise Abatement. The R-2301W SUA extends north to Interstate 8 (I-8), from surface to FL800. The Foothills residential area south of I-8 and west of the Gila Mountains lies beneath R-2301W. Operations in Cactus West present the potential for low altitude over flight of this residential area. To minimize over flight at low altitude, fixed wing aircraft, should to the maximum extent practicable, avoid over flight of this residential area.

b. Tow Banner Drop Operations

(1) Coordinate tow banner drop operations with YRMD.

(2) The tow banner drop area is the AUX-II runway (NOT the FCLP Deck). Runway is oriented 02/20.

(3) Do not enter Cactus West airspace without approval from YUMA RANGE.

(4) Enter range at or above 3,500 ft. MSL.

(5) Release tow banner at an altitude of 300 to 500 ft. AGL.

(6) Banner and tow cable recovery is the responsibility of the using unit.

(7) The cable cutter (red and white striped) is located approximately 1,500 feet south of AUX-II at N32°32.100’ W114°30.4979’. Run-in heading is 195° magnetic.

(8) Bombing and strafing operations will be suspended during banner jettisoning.

c. Live Ordnance Jettison Area. Refer to Paragraph 4000.3.f on page 4-6.

d. When the Cactus West airspace is scheduled, the Cactus West target is simultaneously scheduled. Unless the target is specifically closed, units are authorized to engage the Cactus West target when scheduling the Cactus West airspace. The Yodaville UTC also falls within the Cactus West airspace. However, units desiring to train at the UTC must be specifically requested and approved for its use when scheduling the Cactus West airspace. Units can request Yodaville by selecting "UTC YODAVILLE" under the "Events" tab when scheduling the Cactus West airspace via RFMSS.

4004.2a CACTUS WEST TARGET

1. General. Cactus West Target is a bulls-eye which is optically scored, referencing the 140° run-in.

2. Range Description

a. The Cactus West Target (with a run-in line of 140° magnetic) is located at N32°27′34″ W114°24′08″ with an elevation of 397 ft. The primary target consists of a 40 ft. diameter bulls-eye and concentric circles of tires at 75, 150, and 300 ft. radii with a 1,500 ft. bladed radius around the target. The target is electrically lighted at the 3, 6, 9, and the 12 o'clock positions, to include run-in lights as depicted in the Cactus West diagram. There are distance markers off-set 500 ft. to the left of the run-in line, spaced every 6,000 ft., starting at 54,000 ft. prior to the bulls-eye. A radar reflector is located 2,700 ft. southeast of the bulls-eye. **Strafing of the bulls-eye is prohibited**.

b. The Cactus West strafing target located at grid N32°27.233′ W114°22.405′ is acoustically scored and consists of two berms. The strafing berms are located approximately 1 NM/6000 ft. southeast of the bombing target with a 140º run-in line. Target practice and tracer rounds are authorized here.

3. Communication

a. Reference Paragraph 4004.2.3 (page 4-17) for entry/exit procedures.

b. Frequency for Cactus West Target is 311.85.

c. Lost Communications. Refer to Paragraph 4004.2.3.c (page 4-18).

4. Special Instructions

a. Run-in heading is 140° magnetic.

b. Left-hand or right-hand patterns are authorized.

c. If scoring has been requested, contact Cactus West on discrete target frequency of 311.85 crossing the entry point, giving number of aircraft and type of delivery. On each subsequent run, call if type delivery changes and ensure the aircraft remains within the range boundary.

d. Call “Off Safe” and “No Drop” (when appropriate) after each run.

e. 7,500 ft. MSL is the minimum altitude for FW aircraft exiting the range.

f. Multiple weapon releases are restricted to stick lengths of 200 ft. or less.

g. High deliveries above FL200 are prohibited without the approval of the RCO.

h. Aircraft will avoid flying within 1,000 ft. of the tower complex 1.3 NM east of the bulls-eye, located at N32°27.503’ W114°22.569’.

i. Strafe Targets

(1) Forward firing aircraft

(a) Utilize panels 1 and 2

(b) Guns will be on “Safe” when off target; guns may be “Armed” only when on run-in heading of 140° magnetic.

(2) Side firing aircraft

(a) Utilize panels 1 and 2. Strafing of the Cactus West Bulls-eye is prohibited.

(b) Side firing aircraft will fly a left or right-hand racetrack pattern heading 050 or 230 (degrees) as directed.

(c) Commence fire with guns pointed at 140° magnetic only.

(d) No more than four aircraft are authorized in the pattern at one time.

j. Ordnance. Refer to Appendix C for specifically authorized ordnance. Cactus West target supports conventional ordnance up to 1,000 pounds.

k. LGTR (BDU-59) is authorized on the Cactus West bulls-eye with the following restrictions:

(1) Airspeed: 350-550 KTAS

(2) Altitude: 5,000 to 15,000 ft MSL

(3) Release Angle: 0 to -20°

(4) Release Range: 344 meters to 5,840 meters

or 0.2 NM to 3.0 NM

(5) Run-in Heading: 130° to 150° (or 140° ± 10°)

l. Strafing of Cactus West bulls-eye is prohibited. The Cactus West strafing berm is limited to 25mm TP and below and shall be performed in accordance to the parameters prescribed above.

m. No special weapons, cluster bombs, or ordnance requiring immediate recovery are authorized.

n. Red and White Phosphorus is not authorized.

o. Cactus West target is authorized for aviation laser activity within the parameters prescribed in the MCAS Yuma Laser Range Certification Report **only**. To request laser operations outside of these parameters, users shall submit a request to Range Safety no later than 30 days in advance for processing.

p. All aircraft employing ordnance on targets within Cactus West/Yodaville will provide quantity, type, and target area where ordnance was expended.

4004.2b UTC AT YODAVILLE

1. General. The UTC consists of over 180 buildings made from shipping containers of various types. The target features buildings of various sizes, vehicle targets (both civilian and military), and simulated personnel.

2. Range Description

a. See Paragraph 4004.2.2.a (page 4-17) for Cactus West Airspace vertical and horizontal boundaries.

b. The Urban Target Complex is centered at N32°26’16” W114°19’54”.

c. The Yodaville (UTC) strafing target located at grid N32°25.994’ W114°18.512’ is acoustically scored and consists of

two berms. The strafing berms are located approximately 1 NM/6,000 ft. southeast of the bombing target with a 140° run-in line.

d. There are five FAC Observation Posts (OPs) at Yodaville: four located at each semi-cardinal direction (300 meters from the UTC) and one located 1000m from the UTC and along the 140° run-in line. The OP at the 1000m location is named OP 1. Associated grid coordinates are located in Appendix B. The four 300-meter OPs are two-level towers. OP 1 is a 3-level tower located northwest of the target area. OP 1 is the **only** authorized OP when conducting LASER Guided Training Round (LGTR) operations. LGTR employment has restrictions (see paragraph 4004.2b.6 on page 4-27). When the 1000m OP and NW OP are simultaneously occupied, ground live-fire operations will be restricted to only the NW OP. Units shall coordinate directly with Range Safety prior to conducting small arms training from any Yodaville OP.

e. The majority of the buildings are scorable via the WISS as well as the No Drop Bomb Scoring (NDBS) system. Aircrews are strongly encouraged to utilize TACTS pods and the NDBS.

f. There are two strafing berms which are acoustically scored. The berms are located 2,000 ft. west of the South tower. Target elevation is 568 ft. Target practice and tracer rounds are authorized here.

g. A Moving Land Target (MLT) is located approximately 1NM east of the UTC. The MLT consists of a remotely-controlled vehicle which tows a target sled, available for helicopter gunnery. The towed sled is the target. Aircrew requesting use of the MLT should contact Navy TACTS via DSN 269-2025 for special instructions. The MLT is restricted to 20MM TP ordnance and below.

Note:

TACTS require a minimum 48-hour advance notice for use of the MLT.

h. Weather minimums for ordnance delivery

(1) Fixed-wing: Day - 3,000 ft. ceiling and 3 nm visibility. Night - 5,000 ft. ceiling and 5 nm visibility.

(2) Rotary-wing: Day – 500 ft. ceiling and 1 nm visibility. Night – 1,000 ceiling and 3 nm visibility.

3. Communication

a. Reference Paragraph 4004.2.3 (page 4-17) for Entry/Exit procedures.

b. If the user is conducting Close Air Support (CAS) with a manned FAC OP, **all** aircraft will check in with the FAC on the UTC frequency, 290.1 before any ordnance may be released.

c. NO ORDNANCE MAY BE RELEASED ONTO THE RANGE WITH A MANNED OP without a clearance by the FAC or Forward Air Controller, Airborne (FAC/A).

d. Lost Communications. Refer to Paragraph 4004.2.3.c (page 4-18).

4. Scheduling. Units desiring to train at the UTC must specifically request and be approved for its use when scheduling the Cactus West airspace. Specific selection of “UTC YODAVILLE” under the “Events” tab (when requesting Cactus West airspace) is required if use of Yodaville is desired. The target complex airspace may be scheduled 24 hours a day, 7 days a week.

5. Special Instructions

a. Manned FAC OPs will be conspicuously marked during the day with an orange visible aircraft panel and during the night with a flashing clear or infrared strobe light, or other clearly visible marking device(s).

b. A NO FLY/FIRE zone will include plus or minus 15° either side of the FAC OP-to-target line. Aircraft will be allowed to conduct attacks within designated run-in headings for each OP. FACs and FAC/As will ensure that any assigned attack cones also fall within the mandatory run-in headings. These run-in headings (magnetic) are:

(1) Northwest OP	157°	clockwise to 232°
	127°	counter-clockwise to 052°
(2) Northeast OP	232°	clockwise to 307°
	202°	counter-clockwise to 127°
(3) Southeast OP	352°	clockwise to 067°
	322°	counter-clockwise to 247°
(4) Southwest OP	067°	clockwise to 142°
	037°	counter-clockwise to 322°

Note:

Only RW aircraft will be allowed inside the NO FLY/FIRE zone, and ONLY when in-between the FAC OP and target complex as depicted in Figure 4-4 (See Figures 4-5 through 4-8 for specific NFAs).

c. At Yodaville, manned OPs require a cold pass by designated aircraft. This cold pass will be flown within the prescribed run-in headings for the appropriate manned OP. Without a manned OP, the flight must conduct a cold pass (range sweep) to visually inspect the target set. Use of a Litening Pod for visual inspection of the Yodaville target set is an approved alternative to conducting a cold pass ONLY when there is not a manned OP.

d. All ordnance deliveries (during CAS missions) will be preceded with a "cleared hot" call from the FAC or FAC/A. If the FAC/A has been delegated ordnance release authority, then the FAC will monitor the radio calls and maintain final and absolute release authority.

e. Final attack headings (when delivering free fall ordnance and rockets) approaching perpendicular to the FAC-to-target line are inherently safer than attacks made close to the FAC-to-target line. Conversely, strafing attacks are safer when made parallel to the FAC-to-target line. Pilots should attempt to conduct attacks with consideration to these guidelines, but must always ensure their attack heading falls within the prescribed mandatory run-in headings from Paragraph b above.

f. The FAC, FAC/A, and flight lead must understand that attacking targets closest to the OP has the highest risk and that the risk gradually decreases as OP to target range distance increases. Four No Fire Areas (NFAs) are located within the target complex (see Figures 4-5 through 4-8) to provide an additional safety buffer. These NFAs are labeled NW, NE, SW, and SE to correspond with the nearest FAC OP. A NFA will be active when it's corresponding OP is manned. For example, if the Southwest OP is manned, NFA SW would be active; NFAs NE, NW, and SE would be inactive.

g. To the maximum extent possible, FACs will provide clearance to aircraft and observe impacts from inside the OP (M113). When using LGTRs, the FAC and aircrew will verify that the FAC is located in OP 1, which is l000 m northwest of the target complex.

h. All side firing guns (.50 cal/7.62mm) and AH-1 turreted guns will only be fired while pointed away from the manned FAC OP. Turreted and side firing guns will only be fired from

straight and level flight. Firing during turns or target pull-off is prohibited. RW aircraft firing within the NO FLY/FIRE zone (see Figures 4-5 through 4-8) will ensure that no targets between the manned OP and aircraft will be engaged, and that firing from side guns will be restricted to guns on the side of the aircraft away from the OP. AH-1s firing turreted gun (off axis) will conduct a weapons test firing at the strafing target East of the target complex prior to engaging targets at the UTC.

i. A maximum of ten personnel will occupy the FAC OP. Only essential personnel will man the FAC OPs. Each person will wear Personal Protective Equipment per Chapter 6 of this document. Only one FAC OP will be manned during any attack. A FAC may move to another OP between attacks and such movement will be communicated to the flight lead. There will be no attacks while the FAC is relocating. A new clearing pass must be conducted by the entire flight to confirm the new FAC location.

j. The senior FAC/FAC/A **MUST RECEIVE A YODAVILLE BRIEF** from the Range Management Department. For FAC parties operating from the 300m or 1000m Ops, this must be a FACE-TO-FACE brief. FAC/A operations conducted by aircraft not located at MCAS Yuma will conduct a telephonic brief with the Range Management Department via DSN 269-5574/2214/2215 or Commercial (928)269-5574/2214/ 2215. This brief will ensure all Yodaville SPINS are understood prior to the conduct of training.

k. One vehicle may be parked at the active OP to facilitate FAC movement and emergency requirements. No attacks may be controlled from any vehicle or location other than the designated OP’s. The vehicle must be marked in a similar manner as the manned OP as discussed in Paragraph 4004.2b.5(a) on page 4-24.

l. If scoring has been requested, contact Yodaville on the discrete target frequency of 290.1 crossing the entry point, giving number of aircraft and type of delivery. On each subsequent run, call if type delivery changes and ensure the aircraft remains within the range boundary.

m. Strafe Targets

(1) Forward firing aircraft

(a) Utilize panels 1 and 2

(b) Guns will be on “Safe” when off target; guns may be “Armed” only when on run-in heading of 140° magnetic.

(2) Side firing aircraft

(a) Utilize panels 1 and 2.

(b) Side firing aircraft will fly a left or right-hand racetrack pattern heading 050 or 230 (degrees) as directed.

(c) Commence fire with guns pointed at 140° magnetic only.

(d) No more than four aircraft are authorized in the pattern at one time.

6. Ordnance

a. The following light inert ordnance is authorized for delivery against any targets within the target complex: MK-76, Bomb Dummy Unit (BDU)-48, 2.75" Inert Rockets (or equivalent inert munitions).

b. LGTR (BDU-59) is authorized on the Yodaville UTC with the following restrictions:

(1) Airspeed: 250-350 KTAS

(2) Altitude: 5,000 to 10,000 ft MSL

(3) Release Angle: 0 to 0

(4) Release Range: 0.5 NM to 2.4 NM

(5) Run-in Heading: 1° to 360°

c. Strafing (25mm TP/20mm TP/.50 cal) of the UTC will be restricted to the military personnel targets and single story shipping cargo containers located north of the main East-West running road. No strafing is authorized against the larger multi-story structures located south of the main East-West running road. 7.62mm is authorized anywhere inside the target compound.

d. The Yodaville strafing berm is limited to 25mm TP and below and shall be performed in accordance to the parameters prescribed above to ensure Hazard Area containment. No special weapons, cluster bombs, or ordnance requiring immediate recovery are authorized.

e. Red and White Phosphorus is not authorized.

f. Refer to the Ordnance Matrix in Appendix C for specifically authorized ordnance.

g. The Yodaville UTC is authorized for aviation LASER activity within the parameters prescribed in the MCAS Yuma LASER Range Certification Report **only**. To request laser operations outside of these parameters, users shall submit a request to Range Safety no later than 30 days in advance for processing.

h. All aircraft employing ordnance on targets within Yodaville will provide quantity, type, and target area where ordnance was expended.

7. MAWTS-1 Special Instructions. The following Yodaville events are authorized for MAWTS-1 use **ONLY** and contingent upon proper coordination/notification and scheduling. These SPINS are based upon several years of previously-waivered and successfully-completed evolutions where no accidents or incidents resulted. Continued MAWTS-1 use of the parameters contained in this section will require annual certification to MCAS Yuma Range Management. This certification shall provide a safety update that all approved activities were conducted in a safe manner without the occurrence of a training incident. If the execution of any portion of these SPINS results in a safety incident, that portion of the SPINS will immediately be suspended until written authorization to continue those specific operations are authorized by the Range Control Officer.

a. MAWTS-1 employment of 5-inch inert rockets at Yodaville is authorized using the following conditions for fixed wing and rotary wing operations:

(1) For fixed wing employment, approved parameters include

(a) Airspeed 480 knots

(b) Final attack heading 140° to 200° magnetic

(c) Release altitude 4,700 to 5,500 feet AGL

(d) Release angle -30°

(e) Release range 1.54 to 1.23 NM (or 9,376 to 7,508 feet)

(2) For rotary wing employment, approved parameters include:

(a) Airspeed 60 to 80 knots

(b) Final attack heading 140° to 200° magnetic

(c) Release altitude 0 to 1,000 feet AGL

(d) Release angle -25° to -30° magnetic

(e) Release range 2000 to 700 feet

(3) Strafing of multi-story structures is authorized, however, all personnel in the UTC shall be located within existing bunkers or other bunkers constructed to minimize ricochet hazard.

b. MAWTS-1 employment of AGM-114 (inert Hellfire only) while flying a **west-to-east** route is authorized using the following conditions:

(1) Airspeed 60 knots

(2) Final attack heading 89° magnetic

(3) Release altitude 1,000 feet MSL

(4) Release angle -15° TO -20°

(5) Release point 4.3 NM (or 26,247 feet)

(6) Only essential personnel shall occupy the 1000m OP. A thorough risk assessment is required for all ground personnel located within the WDZ if the risk of injury is greater than the safety standard of 1:1,000,000.

(7) Access routes surrounding the UTC shall be cleared immediately prior to firing to prevent unauthorized entry of military and civilian personnel into the Hellfire WDZ.

(8) Only single story structures shall be targeted.

(9) MAWTS-1 shall provide firing position data and a missile firing request for inert Hellfire at Yodaville to MCAS Yuma Range Management no less than five business days prior to the scheduled event.

c. MAWTS-1 employment of AGM-114 (inert Hellfire only) while flying an **east-to-west** route is authorized using the following conditions:

(1) Airspeed 60 knots

(2) Final attack heading 232° magnetic

(3) Release altitude 1,000 feet MSL

(4) Release angle -15° TO -20°

(5) Release point 3.0 NM

(6) Only essential personnel shall occupy the 1000m OP. A thorough risk assessment is required for all ground personnel located within the WDZ if the risk of injury is greater than the safety standard of 1:1,000,000.

(7) Access routes surrounding the UTC shall be cleared (verified clear to LEG IRON) immediately prior to firing to prevent unauthorized entry of military and civilian personnel into the Hellfire WDZ. Road guards shall be posted at the following three locations:

(a) 11S QR 48727 96029 Run-in line to UTC

(b) 11S QR 52828 96918 North of intersection marker A8

(c) 11S QR 58361 91782 South of intersection marker A9

(8) Only single story structures shall be targeted.

(9) MAWTS-1 shall provide firing position data and a missile firing request for inert Hellfire at Yodaville to MCAS Yuma Range Management no less than five business days prior to the scheduled event.

d. MAWTS-1 employment of GBU-12 (inert LGB) is authorized using one of the following conditions:

(1) Condition 1:

(a) Airspeed no faster than 550 knots

(b) Final attack heading 0-360° magnetic (unless using manned OP)

(c) Release altitude 10,000 feet AGL

(d) Release angle 0 degrees

(e) Release point 3.7 NM

(2) Condition 2:

(a) Airspeed no faster than 300 knots

(b) Final attack heading 0-360° magnetic (unless using manned OP)

(c) Release altitude 25,000 feet AGL

(d) Release angle 0 degrees

(e) Release point 3.0 NM

(3) Condition 3:

(a) Airspeed no faster than 300 knots

(b) Final attack heading 0-360° magnetic (unless using manned OP)

(c) Release altitude 10,000 feet AGL

(d) Release angle 0 degrees

(e) Release point 2.0 NM

(4) If conducting CAS with a manned FAC OP, established NFA procedures contained in Paragraph 4004.2b.5.b on pages 4-24 and 4-25 shall be followed.

(5) Only essential personnel shall occupy the established OPs of Yodaville. A thorough risk assessment is required for all ground personnel located within the WDZ if the risk of injury is greater than the safety standard of 1:1,000,000.

(6) Only single story structures shall be targeted.

(7) MAWTS-1 shall provide firing position data and a missile firing request for inert Hellfire at Yodaville to MCAS Yuma Range Management no less than five business days prior to the scheduled event.

e. MAWTS-1 employment of GBU-54 (inert LJDAM) is authorized using the following conditions:

(1) Airspeed 300-550 knots

(2) Final attack heading clockwise between 54° to 105° magnetic

(3) Release altitude 10,000 to 25,000 feet MSL

(4) Release angle 0°

(5) Release point no further than 5.0 NM

(6) If ground personnel are present within Hazard Area IV, a FAC located at OP-1 or a FAC(A) must be utilized. Only essential personnel shall occupy the 1000m OP. The 1000m OP (OP-1) is the only authorized OP when conducting inert GBU-54 employment.

(7) Only single story structures shall be targeted.

(8) MAWTS-1 shall provide firing position data and a missile firing request for inert Hellfire at Yodaville to MCAS Yuma Range Management no less than five business days prior to the scheduled event.

f. MAWTS-1 use of ground units in an aviation-supporting role at Yodaville is authorized using the following conditions:

(1) Ground ordnance shall be limited to .50 caliber (from OP 1 only), 7.62mm, 5.56mm, 9mm (ball and tracer), 81mm smoke and illumination, 60mm smoke and illumination, and 40mm smoke and illumination.

(2) When ground units are within the confines of the UTC, no live aviation fires will be authorized. Only SIMCAS will be conducted.

(3) Combined operations involving surface and aviation fires shall be conducted only when all ground personnel in support of aviation fires are within the observation range of the OP and in fortified positions designed to protect personnel against ricochets.

g. MAWTS-1 engagement of targets within the UTC is authorized subject to the following conditions:

(1) All SDZs for planned fires are within Hazard Area IV.

(2) All .50 caliber operations (ground from OP 1 and air) shall **NOT** be conducted with a gun-to-target line between 70° to 100° magnetic.

h. MAWTS-1 is authorized to occupy Yodaville 300m OPs during LGTR use in accordance with established NFA procedures and after submitting an ORM Worksheet per reference (b). All personnel shall be located in current OPs or similarly constructed fortified positions located adjacent to existing OPs.

i. MAWTS-1 is authorized to negate the cold pass requirements for Yodaville due to extensive briefing, marking of OPs, and radio communication with ground personnel prior to ordnance delivery.

j. All aircraft employing ordnance on targets within Cactus West/Yodaville will provide quantity, type, and target area where ordnance was expended.

4004.3 TACTS LOW

1. General

a. TACTS Low is a sub-range of the R-2301 West and is comprised of, an AG No Drop Weapons Training Range (NDWT), and the Vopoki Box Helicopter training area (immediately west of the Gila/Tinajas Altas Mountains and east of the Vopoki Ridge and Butler Mountains). TACTS Low capabilities include Aerial Combat Maneuvering (ACM), EW, and LATT.

b. The Cabeza Prieta National Wildlife Refuge extends into the southeastern quadrant of the TACTS Low. All aircraft shall maintain a minimum altitude of 1,500 ft. AGL over the Cabeza Prieta National Wildlife Refuge.

c. Overlapping/Adjacent Areas. TACTS High, Cactus West, and R-2301E.

2. Range Description

a. Boundaries/Lateral Limits. Beginning at the intersection of the U. S. Mexican border at N32°05’52” W113°30’33” thence along the U.S. Mexican border to N32°18’53” W114°13’15” to N32°30’00” W114°18’30” to N32°40’45” W114°18’32” thence along the Southern Pacific Railroad and U. S. Highway to N32°44’15” W113°41’08” to the point of beginning, *EXCLUDING* that airspace below 3,000 ft. MSL, North of a line beginning at N32°40’45” W114°18’32” to N32°37’40” W114°12’43” to N32°37’40” W114°09’03” to N32°42’30” W113°45’03” to N32°44’15” W113°41’08”.

b. Boundaries/Vertical Limits. 200 ft. AGL to 5,000 ft. MSL. Surface to 5,000 ft. MSL is available upon request. TACTS Low excludes surface to 1,500 ft. AGL over the Cabeza Prieta National Wildlife Refuge.

CAUTION:

The U.S. Customs and Border Protection (USCBP) routinely operates 200 ft. AGL and below within a corridor. This corridor extends 1 NM north of the U.S./Mexico border. USCBP also conducts operations outside the corridor, 200 ft. AGL and below throughout TACTS Low on a regular basis.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling.

a. The TACTS Low airspace will be scheduled separately from other R-2301W sub-ranges.

b. Surface to 200 ft. AGL is available for use and scheduling through RFMSS.

c. It is imperative that separate RFMSS requests for ground access are submitted. It is the user's responsibility to verify RFMSS approval prior to conducting training. Units requesting TACTS/TCTS/EW Support must contact the Naval Surface Warfare Center Corona, MCAS Miramar via DSN 267-6116 or Commercial (858)577-6116. These services are available upon request Monday-Friday (excluding holidays) 0800-1600 PT.

5. Special Instructions

a. The Cabeza Prieta National Wildlife Refuge (NWR) is that portion of the R-2301W along the Mexican border, south of a line extending from 32°25'N/113°57'W and east of a line extending from 32°25'N/113°57'W. All aircraft will maintain a minimum altitude of 1,500 ft. AGL over the Cabeza Prieta National Wildlife Refuge. MAWTS-1 is exempt from this restriction during the semi-annual WTI course based on the parameters prescribed in a Memorandum of Understanding dated 21 November 1994.

b. In addition to the Cabeza Prieta NWR restriction cited in Paragraph 4004.3.1.b on the previous page, aircraft shall adhere to the following restrictions when flying within the TACTS Low east of the 113°53'W longitude line. During the dates 15 March to 15 July in accordance with U.S. Fish and Wildlife measures to protect the Sonoran pronghorn habitat, non-WTI aircraft flights shall remain west of the 113°53'W longitude line, or on designated transit routes, or above 1,000 ft. AGL (when flying east of this line). This time period is crucial for fawn growth and survival which is not compatible with low-level aircraft flights.

c. Be aware that the Vopoki Box is a commonly used helicopter training area that is often scheduled via co-use with those who have already reserved the TACTS Low. This area is wholly contained between the Gila/Tinajas Altas Mountains and the Vopoki Ridge and Butler Mountains. Contact Range Scheduling if this area is specifically requested.

d. When the TACTS Low SFC to 200' AGL and TACTS Low 200' AGL to 5,000' MSL are scheduled by different aviation units during a matching time block, a buffer of 1,000' shall be applied -

changing the lower limit for the higher block to 1,200′ AGL to 5,000′ MSL. This separation provides for safety of flight.

6. Ordnance

a. Refer to the Ordnance Matrix found in Appendix C for specific authorized ordnance within TACTS Low.

b. Aviation LASER activity within the TACTS Low shall be conducted within the parameters prescribed in the LASER Range Certification Report **only**. To request LASER operations outside of these parameters, users shall submit a request to Range Safety no later than 30 days in advance for processing. The LSTSS, located at N32 29′ 12.5″ W114 10′ 6.8″ is the only authorized LASER target within the TACTS airspace. LASER use from the TACTS Low requires concurrent scheduling to the surface.

4004.4 TACTS HIGH

1. General. TACTS High is a sub-range of the R-2301 West and is comprised of TACTS, and an AG NDWT Range. TACTS High capabilities include ACM and EW.

2. Range Description

a. Boundaries/Vertical Limits. 6,000 ft. MSL to FL 800 above the TACTS Low airspace and 16,000 ft. MSL to FL800 above the Cactus West airspace. When Cactus West is scheduled to FL200, the TACTS High airspace begins at FL210.

b. When scheduling Cactus West and TACTS High concurrently, the airspace includes the 15,000 ft. to 16,000 ft. MSL block.

c. When scheduling TACTS Low and TACTS High concurrently, the airspace includes the 5,000 ft. to 6,000 ft. MSL block.

d. Overlapping/Adjacent Areas. TACTS Low, Cactus West, Dome MOA/ATCAA and R-2301E. A jet route within L.A. Center’s airspace north of this area includes a high volume of commercial air traffic. Remain vigilant with respect to containing training within the R-2301 West.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

a. Lost Communications procedures to be used in the event of two-way radio failure are prescribed in FAR 91.127. Should two-way radio failure occur when operating in the R-2301W (Cactus West) airspace and it is not practical to recover using VFR procedures, the aircraft shall proceed as follows:

(1) Aircraft shall squawk 7600.

(2) Aircraft shall maintain 21,000 ft. MSL, proceed direct to NYL TACAN thence via the NYL R-340 to RADOS IAF and execute the HIGH TACAN RUNWAY 21 RIGHT APPROACH or HIGH TACAN RUNWAY 3 LEFT APPROACH.

(3) If the duty runway is known, aircraft shall execute the approach to the duty runway. If the duty runway is unknown, execute the HIGH/LOW TACAN RUNWAY 21 RIGHT APPROACH.

4. Scheduling

a. The TACTS High airspace will be scheduled separately from other R-2301W sub-ranges.

b. FL500 to FL800 is available for use and scheduling through RFMSS.

c. Units requesting TACTS/TCTS/EW Support must contact the Naval Surface Warfare Center Corona, MCAS Miramar via DSN 267-6116 or Commercial (858)577-6116. These services are available upon request Monday-Friday (excluding holidays) 0800-1600 PT.

d. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of the RFMSS and/or via phone call to Yuma Range Scheduling DSN 269-2215/14 or Commercial (928)269-2215/14.

5. Special Instructions

a. All supersonic flight operations in the R-2301W will be conducted in strict accordance with the provisions of OPNAVINST 3710.7_. Supersonic flight will be limited to that portion of the R-2301W south of NYL (Ch 84) 89 degree radial to the Mexican border, between 20-52 NM, surface to FL 800. Supersonic flight will be executed with the aircraft inside the supersonic area heading east/southeast.

b. Flights are to remain clear of Cactus West Ranges below 16,000 ft. MSL or below 21,000 ft. MSL when Cactus West High is in use.

6. Ordnance

a. Refer to Appendix C for specific authorized ordnance within TACTS High.

b. Aviation LASER activity within the TACTS High shall be conducted within the parameters prescribed in the LASER Range

Certification Report **only**. To request LASER operations outside of these parameters, users shall submit a request to Range Safety no later than 30 days in advance for processing. The LSTSS, located at N32 29′ 12.5″ W114 10′ 6.8″ is the only authorized LASER target within the TACTS airspace. LASER use from the TACTS High requires concurrent scheduling to the surface.

4005. R-2507 NORTH/SOUTH/EAST/CAMP BILLY MACHEN CMAGR

1. General

The CMAGR is comprised of R-2507N, R-2507S, R-2507E and Camp Billy Machen. The R-2507N is divided into four sectors: Dead Man’s, Punch Bowl, Bald Mountain, and Iris Wash. The R-2507S is divided into three sectors: Blue Mountain, Mount Barrow and Mammoth. The Bull sector is an additional training area that lies outside the restricted airspace, located adjacent to Mount Barrow and Mammoth, within the military reservation boundary. These ranges provide for Air-to-Air (AA), Air-to-Ground (AG), Low Altitude Tactics Training (LATT), LASER, Landing Zone (LZ), Forward Arming and Refueling Point (FARP), Unmanned Aerial System (UAS), and Helicopter Support Team (HST) operations. However, the above named sectors are not specifically available for scheduling. They can be used for co-use coordination and range closures only for the purpose of enabling aviation training in the rest of the airspace area(s) to continue. Camp Billy Machen (CBM) is a Desert Warfare Training Facility located on the northern and western boundary of R-2507N. This training facility is comprised of (1) demolition range, (1) hand grenade range, (1) anti-mechanized range (5) static small arms ranges and (14) Live Fire and Maneuver ranges. These ranges are referred to as Special Warfare Training Areas (SWAT) four and five. Naval Special Warfare Group One (NSWG-1) maintains a year around presence at CBM.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for specific coordinate information for the R-2507 North, R-2507 South, and R-2507 East.

b. Boundaries/Vertical Limits. Surface to FL400 for R-2507N/S/E. These ranges are further divided into a High and Low ranges. The R-2507N/S/E Low is from surface to 6,000 ft. MSL. The R-2507N/S/E High is from 7,000 ft. MSL to FL400.

c. When the High and Low are scheduled concurrently, the airspace from 6,000 ft. to 7,000 ft. is included.

d. Restricted airspace boundary does not coincide with the surface military reservation boundary.

e. Overlapping/Adjacent Areas. Abel North, Abel South, Imperial South and Kane East. A jet route within L.A. Center's airspace north of these restricted areas include a high volume of commercial air traffic. Remain vigilant with respect to containing training within the R-2507 North.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

a. Lost Communications. Procedures to be used in the event of two-way radio failure are prescribed in FAR 91.127. Should two-way radio failure occur when operating in the R-2507 airspace and it is not practical to recover using VFR procedures, the aircraft shall proceed as follows:

(1) Aircraft shall squawk 7600.

(2) Aircraft shall maintain 17,000 ft. MSL and proceed direct to RADOS IAF and execute the HIGH TACAN RUNWAY 21 RIGHT APPROACH or HIGH TACAN RUNWAY 3 LEFT.

(3) If the duty runway is known, aircraft shall execute the approach to the duty runway. If the duty runway is unknown, execute the HIGH/LOW TACAN RUNWAY 21 RIGHT APPROACH.

4. Special Instructions

a. Weather minimums for ordnance delivery:

(1) FW: Day - 3,000 ft. ceiling and 3 nm visibility. Night - 5,000 ft. ceiling and 5 nm visibility.

(2) RW: Day – 500 ft. ceiling and 1 nm visibility. Night – 1,000 ceiling and 3 nm visibility.

b. High explosive ordnance deliveries (air or indirect fire) are restricted to the hours of 0600-2200 Pacific Time (California local time) for noise abatement purposes.

c. The R-2507 North and R-2507 South ground areas will be closed as required for EOD sweeps, target inserts, range maintenance, and operational range clearance. Dates will be published via the Range Notifications websites (see Paragraph 4000.3.l-n on page 4-7).

d. Prior to delivering ordnance, the flight lead or FAC **will make a visual check of the impact area for trespassing persons.**

Refer to of this order for specific procedural information concerning trespassers.

e. The following locations and the area within 1,000 m of each are prohibited from the effects of all live and inert ordnance deliveries:

(1) Gas Line Road: 11S PS 400850 to 11S PS 423990 to 11S PT 402110 or N33°17′43″/W115°29′45″ to N33°25′16″/ W115°28′07″ to N33°31′39″/W115°29′23″

(2) Niland Blythe Road: 11S PS 433816 to 11S PS 529861 to 11S PS 556900 to 11S PS 583975 to 11S PS 601978 or N33°15′52″/W115°27′41″ to N33°20′16″/W115°19′40″ to N33°24′19″/ W115°17′49″ to N33°24′27″/W115°16′39″

(3) Niland Pegleg Road: 11S PS 520776 to 11S PS 580789 to 11S PS 593808 to 11S PS 662843 or N33°13′38″/W115°22′05″ to N33°14′15″/W115°18′13″ to N33°15′19″/W115°17′22″ to N33°17′07″/ W115°12′52″

Note:

Ground access to the above roads requires scheduling of the associated airspace above the road in order to resolve conflicts with aviation training. Specific co-use may be coordinated between the ground entity and the scheduled aviation unit(s) when simultaneous range occupation can be accomplished in a safe manner. Range Scheduling will not approve co-use coordination until all parties involved have acknowledged safety measures are in place to protect ground personnel on these roads. LEG IRON may coordinate real-time ground access on a case-by-case basis only when conflicts with aviation activity have been resolved.

f. Inert Line. Within the R-2507 North, no high explosive ordnance of any type will be expended south of the Inert Line. The area south of the Inert Line is designated for inert bombs, inert rockets, and strafing only. The Inert Line is defined by the following grid coordinates:

11S PT 20453 04700 (N33°28′30″ W115°42′13″) to

11S PT 31490 03704 (N33°27′53″ W115°35′06″) to

11S PT 38995 02515 (N33°27′11″ W115°30′16″) to

11S PS 47308 99311 (N33°25′23″ W115°24′56″) to

11S PS 52201 97015 (N33°24′06″ W115°21′48″) to

11S PS 56995 94596 (N33°22′45″ W115°18′44″) to

11S PS 61444 92351 (N33°21’30” W115°15’53”)

g. Improved Conventional Munitions (ICM) Box. The R-2507 North supports expenditures of ICM in this target location only. ICM box expenditures are restricted to a single drop per run. Dual Purpose ICM (DPICM) and Wind Corrected Munitions Dispensers (WCMD) are not authorized in MCAS Yuma’s ranges. All effects of ICM expenditures will be contained within the following coordinates:

(1) 11S PS 500 950

(2) 11S PS 520 950

(3) 11S PS 500 960

(4) 11S PS 520 960

or:

(5) N33°23.030’ W115°23.180’

(6) N33°23.030’ W115°21.940’

(7) N33°23.560’ W115°23.180’

(8) N33°23.560’ W115°21.940’

h. All aircraft employing ordnance on targets within R-2507 will, upon check out, provide quantity, type, and target area where ordnance was expended. The following target areas may be utilized in R-2507:

(1) Blue Mountain – 1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 10S, 12S, 13S, 14S, and 15S.

(2) Punch Bowl – 2N, 9N, 10N, and 11N

(3) Dead Man – 3N

(4) Iris Wash – 1N, 6N, 7N, 13N, and 14N

(5) ICM Box

(6) WISS Airfield – 15N

(7) Mount Barrow (Rotary Winged Aircraft only)

Note:

See Appendix C for authorized ordnance in the ICM Box. The ICM Box is the only target south of the Inert Line in the R-2507 North where live ordnance can be employed.

5. Ordnance

a. Multiple live ordnance drops during a single run are authorized. When employing HE ordnance on HE-approved targets the following maximum net explosive weight limits for air-to-ground deliveries per aircraft pass:

Qty 12 = MK-82 (500-pound) bombs (General Purpose Bombs only)
or
Qty 6 = MK-83 (1,000-pound) bombs (General Purpose Bombs only)
or
Qty 4 = MK-84 (2,000-pound) bombs (General Purpose Bombs only)

When using a combination of the ordnance items listed above, the maximum net explosive weight limit per aircraft pass shall be 6,000 lbs.

b. HE ordnance is not authorized in the ICM Box other than those items allowed for this target listed in Appendix C. The ICM Box is restricted to a single drop per run. All ordnance deliveries will be aimed toward the established target areas for each impact area. See Appendix B for the target coordinates associated with each impact area.

c. Red and White Phosphorus is authorized in HE target areas **ONLY**.

4005.1 R-2507 NORTH LOW

1. General. The R-2507N Low provides for AA, AG, LATT, EW, UAS, and LASER operations.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. The R-2507N Low is surface to 6000 ft. MSL.

c. Restricted airspace boundary does not coincide with the surface military reservation boundary.

d. R-2507N consists of 12 designated ordnance/LASER areas, 11 of which include various target arrays. Ordnance/LASERs are only authorized in designated target areas. Specific target and authorized ordnance information can be found in Appendix C (Ordnance Matrices). R-2507N also consists of nine AFAs, nine OPs, two FARPs, and one UAS strip. All OPs are approved for ground-based LASER operations.

e. SWAT ranges are adjacent to R-2507N and supports numerous rifle, machine-gun, rocket, and explosive demolition that are utilized on a daily basis. Effects from these ground fires penetrate restricted airspace. CFAs Niland and Bombay lie outside the restricted airspace boundary.

f. Overlapping/Adjacent Areas. R-2507N High and R-2507S Low

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures. Reference Paragraph 4005.3.a (page 4-38) for lost communications procedures.

4. Scheduling. It is imperative that separate RFMSS requests for ground access are submitted. It is the user’s responsibility to verify RFMSS approval prior to conducting training. Airspace requests must include time for ingress/egress of ground personnel to/from range boundary.

5. Special Instructions

a. Inert Line. Within the R-2507 North, no high explosive ordnance of any type will be expended south of the Inert Line. The area south of the Inert Line is designated for inert bombs, inert rockets, and strafing only. Reference Paragraph 4005.4.f (page 4-39) for Inert Line grid coordinates.

b. FARP Snake is located on the extreme western edge of the R-2507N airspace. Aviation assets are required to schedule the airspace when conducting operations in FARP Snake. Ground units shall submit ground requests when desiring to access FARP Snake. (Full scale FARP operations require both airspace and ground requests via RFMSS). Airspace requests are not required when ground-based units desire to operate at FARP Snake for the purpose of setup/teardown of equipment or other ground-only activity. However, Range Scheduling will identify the presence of ground personnel at FARP Snake via the Range Notifications webpage when these activities are not already covered by ongoing exercise SPINS.

6. Ordnance

a. High explosive ordnance deliveries (air or indirect fire) are restricted to the hours of 0600-2200 Pacific Time (California local Time) for noise abatement purposes.

b. Refer to Appendix C for specific authorized ordnance within R-2507N. **All authorized ordnance shall be directed toward established target areas only.** Target coordinates are available in Appendix B. ICM Box SPINS can be found in Paragraph 4005.4.g (page 4-40).

c. Refer to Chapter 8, LASER Operations, for specific procedures within R-2507. The MCAS Yuma Range website can also be referenced for further guidance. Select LASER Range Certification Report when visiting the link.

d. AIM-9 (rotary wing only) and other aviation missile requests shall be submitted using the Missile Firing Request Form located in Appendix E and following the deadlines in Figure 1-3.

e. JDAM expenditures shall be in compliance with the approved parameters located on the last page of Appendix C. The following Range Operations website (accessible by usmc.mil users only) contains WDZ Tool profiles for these parameters.

https://intranet.mciwest.usmc.mil/yuma/rng/roc/default.aspx

If you have trouble viewing this site, contact Range Scheduling, and the appropriate computer settings for viewing this page can be provided.

(1) All non-mission essential personnel shall remain outside the weapon danger zone footprint. Mission essential personnel (TACP & support personnel, etc.) may remain in the weapon danger zone footprint only after WDZ Tool Analysis (see Paragraph 4003 on page 4-13) and compliance with [reference (b)].

(2) Use JDAM request form located in Appendix E (or found in the website above) to submit requests. All other parameters being requested beyond the currently approved Acceptable Regions require coordination and written approval from Range Safety. Figure 1-3 provides coordination deadlines for such requests.

4005.2 R-2507 NORTH HIGH

1. General. The R-2507N High provides for AA, AG and EW operations. AG and laser operations can be conducted with the concurrent scheduling of the R-2507N Low.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. The R-2507N High is from 7,000 ft. MSL to FL400.

c. When scheduling R-2507N Low and R-2507N High concurrently, the airspace includes the 6,000 ft. to 7,000 ft. MSL block.

d. Overlapping/Adjacent Areas. R-2507N Low, R-2507S High, Kane East, Abel North, and Abel South. A jet route within L.A. Center’s airspace north of this restricted area includes a high volume of commercial air traffic. Remain vigilant with respect to containing aircraft within the R-2507 North.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures. Reference Paragraph 4005.3.a (page 4-38) for lost communications procedures.

4. Scheduling

a. Any ordnance expenditure or LASER operations require concurrent scheduling of R-2507N Low.

b. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of RFMSS.

5. Special Instructions. No HE ordnance of any type will be expended south of the Inert Line with the exception of ICM. ICM Box SPINS can be found in Paragraph 4005.4.g (page 4-40). The area south of the Inert Line is designated for inert ordnance. The Inert Line is defined by the following grid coordinates:

11S PT 20453 04700 (N33°28’30” W115°42’13”) to

11S PT 31490 03704 (N33°27’53” W115°35’06”) to

11S PT 38995 02515 (N33°27’11” W115°30’16”) to

11S PS 47308 99311 (N33°25′23″ W115°24′56″) to

11S PS 52201 97015 (N33°24′06″ W115°21′48″) to

11S PS 56995 94596 (N33°22′45″ W115°18′44″) to

11S PS 61444 92351 (N33°21′30″ W115°15′53″)

6. Ordnance

a. Refer to Appendix C for specific authorized ordnance within R-2507.

b. Refer to Chapter 8, LASER Operations, for specific procedures within R-2507.

c. No ordnance or lasing is authorized without concurrent scheduling of the R-2507 North Low.

4005.3 R-2507 SOUTH LOW

1. General

a. These ranges provide for AA, AG, LATT, LASER, HLZ, FARP, and HST operations.

b. Restricted airspace boundary does not coincide with the surface military reservation boundary.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. The R-2507S Low is from surface to 6,000 ft. MSL.

c. The R-2507S Low is divided into three sectors: Blue Mountain, Mount Barrow, and Mammoth. The Bull sector is an additional training area that lies outside the restricted airspace, located adjacent to Mount Barrow and Mammoth, within the military reservation boundary.

d. The R-2507S Low consists of 14 designated ordnance/LASER target areas, all of which include various target arrays. Ordnance/LASERs are only authorized in designated target areas within an impact area. Specific target and authorized ordnance information can be found in Appendix C. Specific LASER Target Area information can be found in Chapter 8 (LASER Operations).

e. HST Bull (do not confuse with Bull FARPs) is a schedulable portion of the CMAGR ground space. This training area lies

outside the restricted airspace, located adjacent to Mount Barrow and Mammoth Mountain sectors. This site provides for HLZ and HST operations.

f. R-2507S also consists of one MP, one AFA, three OPs, and three FARPs. All OPs are approved for ground-based LASER operations. All LASER operations shall be conducted in accordance with the MCAS Yuma LASER Range Certification Report.

g. Overlapping/Adjacent Areas. R-2507S High, R-2507N Low, R-2507E Low, and Abel East.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling

a. It is imperative that separate RFMSS requests for ground access are submitted. It is the user's responsibility to verify RFMSS approval prior to conducting training. Airspace requests must include time for ingress/egress of ground personnel to/from range boundary.

b. The R-2507E is automatically scheduled concurrently with the R-2507S to accommodate R-2507S operations.

5. Special Instructions

a. Target 15 South (or 15S) – See Appendix B for coordinate information. HE ordnance is not authorized on the runway at this Blue Mountain target location. The targets surrounding the runway and/or located on the taxiways at this mock airfield are authorized for HE engagement. The restriction is an effort to preserve the runway for aerial reconnaissance.

b. Mt Barrow Target – See Appendix B for coordinate information. This target area is for helicopter operations only.

c. FARP Bull is located within the southern portion of the R-2507S airspace area and should not be confused with the ground area named "HST Bull" which lies immediately outside the airspace boundary (and is typically used for HST operations). Aviation assets are required to schedule the airspace when conducting FARP Bull operations. Ground units shall submit ground requests when desiring to access FARP Bull. (Full scale FARP operations require both airspace and ground requests via RFMSS). Airspace requests are not required when ground-based units desire to operate at FARP Bull for the purpose of setup/teardown of equipment or other ground-only activity. However, Range Scheduling will identify the presence of ground

personnel at FARP Bull via the Range Notifications webpage when these activities are not already covered by ongoing exercise SPINS. For training at HST Bull, a ground RFMSS request shall be submitted.

d. FARP Star is located on the extreme western edge of the R-2507S airspace. Aviation assets are required to schedule the airspace when conducting FARP Star operations. Ground units shall submit ground requests when desiring to access FARP Star. (Full scale FARP operations require both airspace and ground requests via RFMSS). Airspace requests are not required when ground-based units desire to operate at FARP Star for the purpose of setup/teardown of equipment or other ground-only activity.

6. Ordnance

a. HE ordnance deliveries (air or indirect fire) are restricted to the hours of 0600-2200 Pacific Time (California local Time) for noise abatement purposes.

b. Refer to Appendix C for specific authorized ordnance within R-2507S. **All authorized ordnance shall be directed toward established target areas only.** Target coordinates are available in Appendix B.

c. Refer to Chapter 8, LASER Operations, for specific procedures within R-2507. The MCAS Yuma Range website below can also be referenced for further guidance. Select LASER Range Certification Report when visiting the link below.

d. JDAM expenditures shall be in compliance with the approved parameters found on the last page of Appendix C. The following Range Operations website (accessible by usmc.mil users only) contains WDZ Tool profiles for these parameters.

https://intranet.mciwest.usmc.mil/yuma/rng/roc/default.aspx

If you have trouble viewing this site, contact Range Scheduling, and the appropriate computer settings for viewing this page can be provided. All non-mission essential personnel shall remain outside the WDZ. Mission essential personnel (TACP & support personnel, etc.) may remain in the WDZ only after analysis and compliance with [reference (a)]. Contact Range Safety for further information. Use the JDAM request form located in Appendix E (or found in the website above) to submit requests. All other parameters being requested beyond the currently approved Acceptable Regions require coordination and written approval from Range Safety. Figure 1-3 provides coordination deadlines for such requests.

e. AIM-9 (rotary wing only) and other aviation missile requests shall be submitted using the Missile Firing Request Form located in Appendix E and following the deadlines in Figure 1-3.

4005.4 R-2507 SOUTH HIGH

1. General. The R-2507S High provides for AA operations. AG and LASER operations can be conducted with the concurrent scheduling of the R-2507S Low.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. The R-2507S High is from 7,000 ft. MSL FL400.

c. Overlapping/Adjacent Areas. R-2507S Low, R-2507N High, R-2507E High, Abel South, Abel North, and Abel East.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures. Reference Paragraph 4005.3.a (page 4-38) for lost communications procedures.

4. Scheduling

a. Any ordnance expenditure or LASER operations require concurrent scheduling of R-2507S Low.

b. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of RFMSS.

5. Special Instructions. Not applicable.

6. Ordnance. No ordnance or lasing is authorized without concurrent scheduling of the R-2507 South Low.

4005.5 R-2507 EAST LOW

1. General

a. The R-2507E Low provides for additional airspace to support Mount Barrow sub-range operations. There are no targets located in the R-2507E.

b. Users should be aware that the R-2507E penetrates the corridors of VR-1266, VR-1267 and VR-1268. Therefore, alternate routes associated with the MTRs shall be used when the R-2507E is active.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. The R-2507E Low is from surface to 6,000 ft. MSL.

c. Overlapping/Adjacent Areas. R-2507E High and R-2507S Low.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling

a. The R-2507E Low is automatically scheduled concurrently with the R-2507S Low specifically to accommodate helicopter operations at Mount Barrow.

b. It is imperative that separate RFMSS requests for ground access are submitted. It is the user’s responsibility to verify RFMSS approval prior to conducting training. Airspace requests must include time for ingress/egress of ground personnel to/from range boundary.

5. Special Instructions. There are no targets or impact areas within the R-2507E. No ordnance will be expended in the R-2507E.

4005.6 R-2507 EAST HIGH

1. General. The R-2507E provides for maneuvering airspace between Abel North and R-2507S High.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. The R-2507E High is from 7,000 ft. MSL to FL400.

c. Overlapping/Adjacent Areas. R-2507E Low, R-2507S High, and Abel North.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Special Instructions

a. There are no targets or impact areas within the R-2507E.

b. The R-2507S and the R-2507E are scheduled concurrently.

4006. ABEL BRAVO MOA/ATCAA

1. General. The Abel Bravo MOA/ATCAA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 7,000 ft. MSL up to but not including FL400.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of RFMSS.

5. Ordnance. No laser or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4007. ABEL EAST MOA

1. General. The Abel East MOA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 5,000 ft. MSL up to but not including 13,000 ft. MSL.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Scheduling of the Abel East requires a minimum of two hours notice.

5. Ordnance. No laser or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4008. ABEL NORTH MOA/ATCAA

1. General. The Abel North MOA/ATCAA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 7,000 ft. MSL up to but not including FL400.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of RFMSS.

5. Ordnance. No LASER or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4009. ABEL SOUTH MOA/ATCAA

1. General. The Abel South MOA/ATCAA provides for aircraft maneuvering and Air Refueling.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 7,000 ft. MSL up to but not including FL400.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of

the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of RFMSS.

5. Ordnance. No laser or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4010. DOME MOA/ATCAA

1. General. The Dome MOA/ATCAA provides for ACM, tactical air maneuvers, all-weather flight training and air refueling.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information. A jet route within L.A. Center’s airspace north of this military operations area includes a high volume of commercial air traffic. Remain vigilant with respect to containing training within the Dome MOA.

b. Boundaries/Vertical Limits. 6,000 ft. MSL up to FL800.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. The Dome MOA is schedulable intermittently by NOTAM. The MOA is generally scheduled no less than two weeks in advance. Contact Range Scheduling for requests less than two weeks (and no less than 2 business hours) in advance to ensure appropriate NOTAM processing. The NOTAM must be in place no less than two hours before airspace activation.

5. Ordnance. No LASER or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4011. KANE EAST MOA/ATCAA

1. General. The Kane East MOA/ATCAA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 10,000 ft. MSL up to, but not including, FL400.

c. There is a designated out-of-control training spin area with a 5NM radius around the IPL TACAN, Channel 106, 325° radial/13 DME.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Refer to Figure 3-2 for altitudes and published hours.

5. Ordnance. No LASER or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4012. KANE SOUTH MOA

1. General. The Kane South MOA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 10,000 ft. MSL up to but not including FL180.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Refer to Figure 3-2 for altitudes and published hours.

5. Ordnance. No LASER or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4013. KANE WEST MOA

1. General. The Kane West MOA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 10,000 ft. MSL up to but not including FL180.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of RFMSS.

5. Ordnance. No LASER or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4014. IMPERIAL NORTH ATCAA

1. General. The Imperial North ATCAA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. FL190 up to but not including FL400.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of RFMSS.

5. Ordnance. No LASER or ordnance operations are authorized (to include chaff and flares).

4015. IMPERIAL SOUTH ATCAA

1. General. The Imperial South ATCAA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. FL190 up to but not including FL400.

3. Communication. Reference Paragraph 4000.4 (page 4-8) for Entry/Exit procedures.

4. Scheduling. Published vertical altitude limits are not the regularly scheduled altitudes. Refer to Figure 3-2 for a list of the standard scheduled altitudes. If required, non-standard altitudes will be specifically requested in the comments section of RFMSS.

5. Ordnance. No LASER or ordnance operations are authorized (to include chaff and flares).

4016. QUAIL MOA/ATCAA

1. General. The Quail MOA/ATCAA provides for aircraft maneuvering.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 10,000 ft. MSL up to but not including FL220.

3. Communication. Aircraft must contact L.A. Center for clearance into the Quail MOA/ATCAA and prior to exiting the area.

4. Scheduling. Scheduling of the Quail MOA/ATCAA requires a minimum of two hours notice for any time requested outside of published hours. Refer to Figure 3-2 for published times.

5. Ordnance. No LASER or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4017. TURTLE MOA/ATCAA

1. General. The Turtle MOA/ATCAA provides for aircraft maneuvering and AR.

2. Range Description

a. Boundaries/Lateral Limits. See Appendix B for coordinate information.

b. Boundaries/Vertical Limits. 11,000 ft. MSL up to but not including FL220.

3. Communication. Aircraft must contact L.A. Center for clearance into the Turtle MOA/ATCAA and prior to exiting the area.

4. Scheduling. Scheduling of the Turtle MOA/ATCAA requires a minimum of two hours notice for any time requested outside of published hours. Refer to Figure 3-2 for published times.

5. Ordnance. No LASER or ordnance operations are authorized (to include flares). Chaff procedures are outlined in Paragraph 4000.3.h (page 4-6).

4018. ADJACENT AREAS

Though not under the authority of CO, MCAS Yuma, the following areas are supported by the Range Scheduling Office. All priorities and nonstandard activities being requested for these areas require the approval of the local commander.

4018.1 NAF EL CENTRO RANGES (R-2510 and R-2512)

The R-2510A (SFC to 15,000 feet MSL) overlies Shade Tree (Target 101) and Loom Lobby (Target 103) which provide for AG, LASER, HLZ, and AD operations. ***Shade Tree and Loom Lobby are inert only targets.*** The R-2512 overlies Inky Barley (Target 68) and Kitty Baggage (Target 95) targets which provide for AG, HLZ, and AD operations. ***Inky Barley and Kitty Baggage are inert only targets.*** Below are detailed descriptions of each restricted area.

4018.1a R-2510 A/B Description

1. General

a. Altitude Structure/Operating Times. The R-2510 is vertically separated by R-2510A from surface to 15,000 feet MSL (0700-2300 Pacific Time daily; other times by NOTAM at least 24 hours in advance) and the R-2510B from 15,000 feet MSL to FL400 (0700-2300 Pacific Time **weekends only** when activated at least 24 hours in advance).

b. R-2510A/B Boundary Limits. R-2510A and R-2510B do not share common boundaries. See DoD FLIP AP/1A.

c. Overlapping/Adjacent Areas. Kane East, Kane West and Kane South.

2. Shade Tree (Target 101)

a. Shade Tree Boundaries/Lateral Limits: See DoD FLIP AP/1A.

b. Target elevation: 105 ft. MSL.

c. General Location: Shade Tree is located approximately 7 miles northwest of NAF El Centro and runs along the north side of the Superstition Mountains.

d. Description: Shade Tree has a 40 ft. diameter bulls-eye centered at N32°55’49.15” W115°43’47.82” or 11S PS 18740 44277 with concentric rings of tires at 75, 150, 300, and 2,000 ft. radii and electric lights for night bombing. The run-in line headings for inert BDU delivery are 112° or 292° magnetic. 360° unrestricted small arms interdiction is authorized up to .50 cal. The target is Weapon Impact Scoring System (WISS) scored.

e. Communication: Aircraft shall contact “Shade Tree” frequency 283.2 (primary), 277.2 (secondary), and 120.375 for clearance into the restricted area. Aircraft shall also check out with “Shade Tree” and pass utilization data before switching over to the appropriate ATC agency.

f. Strafing: An acoustically-scored strafing berm is located approximately 1NM east of the bombing target at N32°55’53.02” W115°43’03.04” or 11S PS 19901 44410. The run-in line heading is 300º magnetic.

g. Mobile Land Target (MLT): A MLT is is located approximately 1.5NM east of the bombing target at N32°55’59.02” W115°43’02.04” or 11S PS 19925 44595. The run-in line heading is 296º magnetic.

h. A recoverable Bomb Dummy Unit (BDU) target: A BDU target is located approximately 5NM northwest of Target 101. It has a 20 ft. diameter bulls-eye centered at N32°58’41” W115°48’17” with concentric rings of tires at 75, 150, and 300 ft. radii. The run-in line headings for inert BDU delivery are 112º or 292° magnetic. ***This target is not to be used for any ordnance except recoverable BDUs and must be prearranged with NAF El Centro Range Manager.***

i. Helicopter Landing Pads:

(1) An un-maintained asphalt helicopter landing pad exists at grid N32°55’57” W115°42’15”.

(2) A maintained concrete helicopter landing pad exists at grid N32°51’38” W115°46’28”.

j. Drop Zones (DZ):

(1) The Bullhead Drop Zone is located at N32°52’05” W115°45’59”.

(2) The Camelot Drop Zone is located at 32°53′24″ W115°47′14″.

(3) The Superstition Drop Zone is located at N32°55′50″ W115°42′23″.

k. No LASER operations are authorized in Shade Tree.

3. Loom Lobby (Target 103)

a. Boundaries/Lateral Limits: See DoD FLIP AP/1A.

b. Target elevation: 130 ft. MSL.

c. General Location: Loom Lobby is located approximately 12 miles west of NAF El Centro and runs along the south side of the Superstition Mountains.

d. Description: Loom Lobby has a 40 ft. diameter bulls-eye centered at N32°51′49.22″ W115°53′05.54″ or 11S PS 04333 36724 with concentric rings of tires at 75, 150, 300 ft. radii and electric lights for night bombing. The run-in line headings for inert BDU delivery are 143° and 332° magnetic. The run-in line heading for LGTR delivery is restricted to 143° magnetic. Eastbound race track patterns are required to avoid spill out of R-2510 airspace. 360° unrestricted small arms interdiction is authorized up to .50 cal. The target is Weapon Impact Scoring System (WISS) scored.

e. Communication: Aircraft will contact “Loom Lobby” frequency 306.75 (primary), 277.2 (secondary), and 120.375 for clearance into the restricted area. Aircraft will also check out with “Loom Lobby” and pass utilization information data before switching over to the appropriate ATC agency.

f. An acoustically-scored strafing berm is located approximately 1NM northwest of the bombing target at N32°52′42.52″ W115°53′35.54″ or 11S PS 03536 38357. The run-in line heading is 170º magnetic and a left-hand pattern is required to avoid spill out of R-2510 airspace.

g. LASER Evaluator System (LES): A LES is located adjacent to the 5,000 ft. marker on the 143º magnetic run-in line. No ordnance is authorized on this system.

4. Scheduling

a. MCAS Yuma Range Scheduling is responsible for scheduling the R-2510 airspace. Contact MCAS Yuma Range Scheduling via commercial (928)269-5575/2214/2215/2690 or DSN 269-

5575/2214/2215/2690. Scheduled airspace operations in the R-2510 are in Mountain Standard Time (MST).

b. Users requesting ground activities at NAF El Centro shall contact Fleet Liaison via Commercial at (760)339-2655/2665 or DSN 658-2655/2665. NAF El Centro ground activities are scheduled in Pacific Time (PT).

c. For all other user requests, contact NAF El Centro Air Operations at commercial (760)339-2601 or DSN 658-2601.

d. Scoring is available 0700-2300 PT; Monday through Friday. All other times by request only with a 48-hour advance notice.

e. The LASER Designator Simulator System (LDSS) and MLT are available with a minimum of 48 hours notice.

f. Paradrops and Unmanned Aerial Vehicle operations require the scheduling of R-2510A and 2510B airspace to include both the Shade Tree and Loom Lobby targets.

5. Special Instructions

a. R-2510 General

(1) Pilots are cautioned that the run-in line for Target 101 and Target 103 both originate from the “Green Spot.” Pilots should ensure they are on the correct run-in line for their respective targets.

(2) Pilots shall conduct a clearing pass of the target area prior to any ordnance deliveries. Off-road and recreational vehicles are often observed on the target areas and run-in lines in spite of warning signs and security patrols.

(3) All ordnance deliveries must be conducted on established run-in lines.

(4) Strafing is authorized only on the strafing berms and bulls-eye targets. Tracer rounds are not authorized on the strafing berms due to fire hazard.

(5) All Aircraft Parachute Flare (APF) duds will be reported to WISS Control. If unable, a complete report will be sent via naval message to NAF El Centro.

(6) Aerial refueling is not authorized within R-2510A.

(7) Use caution to avoid the V-66 airway as it lies immediately south of R-2510.

(8) For additional information contact the NAF El Centro Range Manager at Commercial (760)339-2616/2604 or DSN 658-2616/2604.

b. Shade Tree (Target 101)

(1) Aircraft will avoid over-flight of the control building to the southeast when carrying ordnance.

(2) Runs on the MLT will be aborted if a red rotating beacon is activated on the moving target.

(3) Pilots will maintain a left-hand strafing pattern.

c. Loom Lobby (Target 103)

(1) All ordnance deliveries to include bombing, strafing, and laser operations will cease when trains are present in the northeast vicinity of Target 103 (Loom Lobby).

(2) Use caution to avoid a 320 ft. MSL microwave tower located 1NM east of Loom Lobby.

6. Ordnance Restrictions

a. Only light inert ordnance is authorized within R-2510. Aircraft expendables such as flares and chaff are not authorized on either target except MK-45 APFs on Shade Tree.

b. Refer to Appendix C for specific authorized ordnance within R-2510.

c. All LASER operations are restricted to the Loom Lobby (Target 103) only and shall be performed in accordance with the parameters established in the NAF El Centro LASER Range Certification Report (September 2011). Contact NAF El Centro Air Operations for a copy of the report and further guidelines.

7. Explosive Ordnance Disposal (EOD) Training

a. General

(1) The small arms EOD training area is located about 500 yards north of the Weapons Impact Scoring System (WISS) Building 5000 within the northeast corner of R-2510 near Target 101. The training area is surrounded by low-lying foothills to minimize explosive material. All EOD training at NAF El Centro will be conducted in the designated area.

(2) EOD training is authorized on the range during other aircraft activities.

b. Scheduling. Contact the NAF El Centro Fleet Liaison Office (FLO) 48-hours in advance at (760)339-2655/2656 or DSN 685-2655/2656.

c. Special Instructions

(1) On the scheduled day of training approval EOD training personnel will contact the WISS at (760)339-2238 or DSN 685-2238 for range coordination. Upon check-in at the WISS EOD training personnel will receive a Range/Flat-Tailed Horned Lizard briefing, obtain handheld radios, and submit an EOD list of intended ordnance to be demoed.

(2) WISS personnel will advise aircraft within the vicinity that EOD training is being conducted.

(3) At the completion of EOD training EOD personnel will return issued handheld radios to the WISS and report any changes to the proposed EOD list of intended ordnance to be demoed.

(4) An approved AA&E ordnance matrix for EOD training can be found in Appendix C, page C-8.

4018.1b R-2512 Description

1. General

a. Altitude Structure/Operating Times. The R-2512 is from surface to FL230 (0600-2300 PT daily; other times by NOTAM 24 hours in advance).

b. Boundaries/Lateral Limits. Jet route (J2-18) south of this restricted area includes a high volume of commercial traffic. Remain vigilant with respect to containing training within the R-2512. See DoD FLIP AP/1A.

c. Overlapping/Adjacent Areas: Abel South and Abel Bravo.

2. Inky Barley (Target 68)

a. Inky Barley Boundaries/Lateral Limits: See DOD FLIP AP/1A.

b. Target Elevation: 90 ft. MSL.

c. General Location: Inky Barley is located approximately 16 miles northeast of NAF El Centro and runs east of the Highline Canal and south of Highway 78.

d. Description: Inky Barley has a 20 ft. diameter bulls-eye centered at N32°56’30.30” W115°13’42.32” or 11S PS 65612 46221 with concentric rings of tires at 75, 150, and 300 ft. The run-in line headings for inert BDU delivery are 73° and 253° magnetic. Northbound or southbound race track patterns are authorized. 360° unrestricted small arms interdiction is authorized up to .50 cal. The target is Weapon Impact Scoring System (WISS) scored.

e. Communication: Aircraft shall contact “YUMA RANGE” on 276.0 for clearance into the restricted area. After clearance from YUMA RANGE and established in the restricted area, aircraft shall contact “Inky Barley” frequency 264.7 (primary) or 277.2 (secondary). Once operations are complete, aircraft shall check out with “Inky Barley” and pass utilization data before switching to YUMA RANGE for exiting instructions.

f. Strafing: Two acoustically-scored strafing berms are located approximately 1NM north of the bombing target. Strafing berm 68 is located at N32°56’42.64” W115°13’40.45” or 11S PS 65655 46602. Strafing berm 68-2 is located at N32°56’42.02” W115°13’41.04” or 11S PS 65638 46675. The run-in line heading for both berms is 78° magnetic with a right-hand recovery pattern.

3. Kitty Baggage (Target 95)

a. Kitty Baggage Boundaries/Lateral Limits: See DOD FLIP AP/1A.

b. Target Elevation: 90 ft. MSL.

c. General Location: Kitty Baggage is located approximately 16 miles northeast of NAF El Centro and runs east of the Highline Canal and north of Highway 78.

d. Description: Kitty Baggage has a 20 ft. diameter bulls-eye centered at N33°02’29.01” W115°17’04.80” or 11S PS 60174 57183 with concentric rings of tires at 75, 150, and 300 ft. It has a run-in line heading for inert BDU delivery of 168° with north or south recovery patterns. Small arms interdiction is authorized up to .50 cal. but restricted from 30° to 60° due to surface danger zone issues. The target is not WISS scored.

e. Communication: Aircraft shall contact “YUMA RANGE” on 276.0 for clearance into the restricted area. After clearance from YUMA RANGE and established in the restricted area, aircraft shall contact “Kitty Baggage” frequency 265.8 (primary) or 277.2 (secondary). Once operations are complete, aircraft shall check

out with “Kitty Baggage” and pass utilization data before switching to YUMA RANGE for exiting instructions.

4. Drop Zone (DZ)

The Rolf Drop Zone is located at N32°52’39” W115°13’15”. It allows for AD operations, freefall, and static line parachute operations to be conducted south of the Inky Barley bulls-eye. When the Holtville airstrip is used with parachute operations, units are responsible for publishing the appropriate NOTAM. NOTAMs will be submitted to NAF El Centro (see Paragraph 4000.3.l-n on page 4-7).

5. Scheduling

a. MCAS Yuma Range Scheduling is responsible for scheduling the R-2512 airspace. Contact MCAS Yuma Range Scheduling via commercial (928)269-5575/2214/2215/2690 or DSN 269-5575/2214/2215/2690. Scheduled airspace operations in the R-2512 are in Mountain Standard Time (MST).

b. The R-2512 is normally scheduled surface to FL180. If required, surface to FL230 will be specifically requested in the comments section of Range Facility Management Support System (RFMSS).

c. Paradrops and UAS operations require the scheduling of the entire R-2512 airspace.

d. Users requesting ground activities at NAF El Centro shall contact Fleet Liaison via Commercial at (760)339-2655/2665 or DSN 658-2655/2665. NAF El Centro ground activities are scheduled in Pacific Time (PT).

e. For all other requests, contact NAF El Centro Air Operations at commercial (760)339-2601 or DSN 658-2601.

f. Users requesting ground activities within R 2512 shall contact NAF El Centro Air Operations at commercial (760)339-2601 or DSN 658-2601 before accessing R-2512. El Centro is responsible for authorizing ground access and securing airspace overhead. El Centro ground activities are scheduled in Pacific Time (PT).

g. Scoring is available 0700-2300 PT; Monday through Friday. All other times by request only with a 48-hour advance notice.

6. R-2512 Special Instructions

a. Pilots will conduct a clearing pass of the target area prior to any ordnance deliveries. Off-road and recreational

vehicles are often observed on the target areas and run-in lines in spite of warning signs and security patrols.

b. All ordnance deliveries must be conducted on established run-in lines.

c. Strafing is authorized only on the strafing berms and bulls-eye targets. Tracer rounds are not authorized on the strafing berms due to fire hazard.

d. Aerial refueling is not authorized within R-2512.

e. L.A. Center. Remain vigilant with respect to V-137 when traversing from NAF El Centro and R-2512. V66-458 and J2-18 are located immediately south of R-2512 and support a high volume of commercial traffic. Remain vigilant with respect to containing training within the R-2512. See DOD FLIP AP/1A.

f. For additional information, contact the NAF El Centro Range Manager at Commercial (760)339-2616/2604 or DSN 658-2616/2604.

7. Ordnance

a. Only light inert ordnance is authorized within R-2512. Aircraft expendables (such as flares, APFs, and chaff) are not authorized in the R-2512. ***APFs and night illumination devices are not authorized in the R-2512.***

b. Refer to Appendix C for specific authorized ordnance within R-2512.

c. All aircraft employing ordnance on targets within R-2512 will provide quantity, type, and target area where ordnance was expended.

d. LASER operations are not authorized in R-2512.

4018.2 R-2306, R-2307, R-2308, R-2311 - ARMY YUMA PROVING GROUND (YPG)

YPG is a Major Range Test and Facility Base (MRTFB) whose primary mission is testing and evaluation. The restricted airspace associated with YPG exists to support that testing. Customers take precedence over training activities, and their schedules dictate the availability of airspace for other uses. This mission focus will restrict airspace scheduling to the day prior for any non-YPG sponsored activity. YPG airspace scheduling is completed daily M - F before 1200L. Testing at YPG includes various aircraft platforms and their associated systems, munitions and weapons, air delivery systems, and combat

automotive systems. Airspace related to these tests will be released at the end of the testing period for other uses. Contact YPG Range Scheduling at (928)328-6094 for additional information.

4018.3 R-2301 EAST (BMGR EAST) - LUKE AFB RANGE

The U.S. Air Force, 56th Fighter Wing, Luke AFB is the Using Agency for the R-2301 East and associated training areas. For scheduling support for Luke-associated ranges, including the airspace tactical (TAC) ranges or ground areas (such as STOVAL), contact Luke Range Scheduling via DSN 896 or Commercial (623)856-7654/3330.

Area	Controlling Agency	Using Agency	Scheduled By
Special Use Airspace (SUA)			
R-2301W	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
R-2306 A/B/C/D/E	FAA, LA ARTCC	US Army, YPG, Yuma, AZ	US Army, YPG, Yuma, AZ
R-2307	FAA, LA ARTCC	US Army, YPG, Yuma, AZ	US Army, YPG, Yuma, AZ
R-2308 A/B/C	FAA, LA ARTCC	US Army, YPG, Yuma, AZ	US Army, YPG, Yuma, AZ
R-2309	FAA, LA ARTCC	USAF, WADS/DOS, McChord AFB, WA	Non-Schedulable Airspace
R-2311	MCAS Yuma, AZ	US Army, YPG, Yuma, AZ	US Army, YPG, Yuma, AZ
R-2507 N/S/E	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
R-2510 A/B	FAA, LA ARTCC	USN, FACSFAC, San Diego, CA	MCAS Yuma, AZ
R-2512	FAA, LA ARTCC	USN, FACSFAC, San Diego, CA	MCAS Yuma, AZ
Abel E/B/N/S MOA	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
Kane E/S/W MOA	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
Imperial N/S ATCAA	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
Dome MOA	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
Dome ATCAA	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
Quail MOA	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
Turtle MOA	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
Training Ranges and Facilities (Ground)			
Desert Target Range 2510	NAF El Centro, CA	NAF El Centro, CA	NAF El Centro, CA
Desert Target Range 2512	NAF El Centro, CA	NAF El Centro, CA	NAF El Centro, CA
Tactical Aircrew Combat Training System (TACTS)	MCAS Yuma, AZ	MCAS Yuma, AZ	MCAS Yuma, AZ
Barry M. Goldwater Aerial Gunnery Range (BMGR)	MCAS Yuma, AZ	MCAS Yuma, AZ	MCAS Yuma, AZ
Urban Target Complex - Yodaville (2301W)	MCAS Yuma, AZ	MCAS Yuma, AZ	MCAS Yuma, AZ
Cactus West (2301W)	MCAS Yuma, AZ	MCAS Yuma, AZ	MCAS Yuma, AZ
AUX-II (2301W)	MCAS Yuma, AZ	MCAS Yuma, AZ	MCAS Yuma, AZ
Chocolate Mountain Impact Area	MCAS Yuma, AZ	MCAS Yuma, AZ	MCAS Yuma, AZ
Chocolate Mountain Aerial Gunnery Range (CMAGR)	MCAS Yuma, AZ	MCAS Yuma, AZ	MCAS Yuma, AZ
Navy Special Warfare Training Area 4 (SWAT 4)	MCAS Yuma, AZ	Naval Special Warfare Group - 1 (NSWG-1)	MCAS Yuma, AZ
Associated Military Training Routes (MTRs)			
VR-1266	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
VR-1267	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
VR-1267A	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
VR-1268	FAA, LA ARTCC	MCAS Yuma, AZ	MCAS Yuma, AZ
IR-216	FAA, LA ARTCC	MCAS Miramar, CA	MCAS Miramar, CA
IR-217	FAA, LA ARTCC	MCAS Miramar, CA	MCAS Miramar, CA
IR-218	FAA, LA ARTCC	MCAS Miramar, CA	MCAS Miramar, CA

Notes: Military Operating Areas (MOAs) shall only include areas within the vertical limits of surface to and not including FL 180. Air Traffic Control Assigned Airspaces (ATCAAs) shall include areas within the vertical limits of FL 190 to the determined altitude agreed upon by the Controlling Agency and the Using Agency via a Letter of Agreement (LOA). Controlling Agency -- authorizes transit through or flight within a SUA in accordance with a joint-use letter issued by the Federal Aviation Administration (FAA). Using Agency -- is the agency, organization, or military command whose activity within a SUA necessitates the area being so designated and shall schedule activities within the SUA unless delegated differently via a LOA. MCAS Yuma is the Using Agency of record for the Turtle MOA, Quail MOA, Kane South MOA, Kane West MOA, R-2510A, and R-2510B. However, MCAS Yuma does not have the requisite communications or surveillance capabilities in these areas; so, control is retained by Los Angeles ARTCC (LA Center).

Source: FAAO 7400.8U (January 26, 2012).

FIGURE 4-1 CONTROLLING AGENCY VS. USING AGENCY

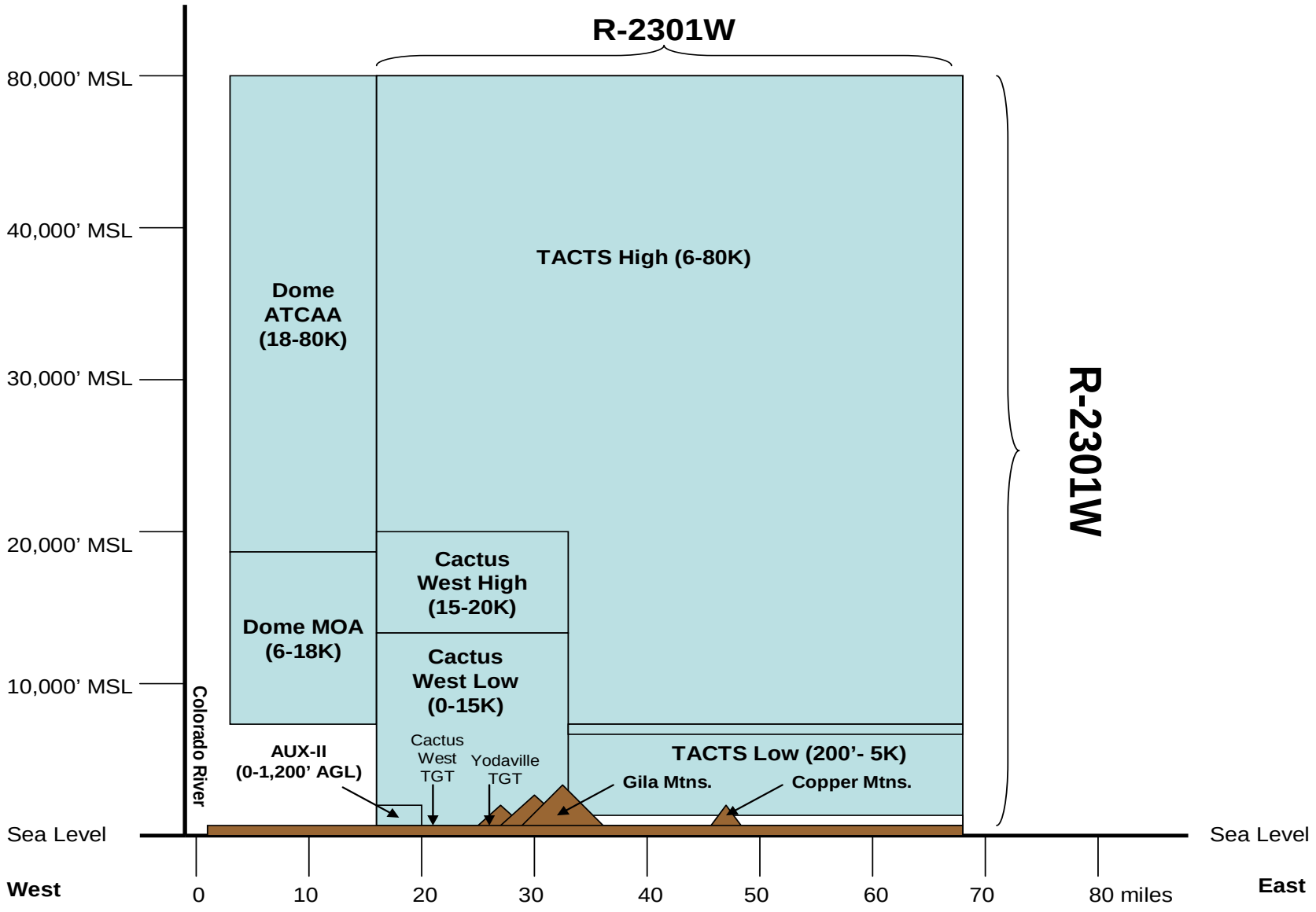


FIGURE 4-2 R-2301 WEST BMGR CROSS SECTION

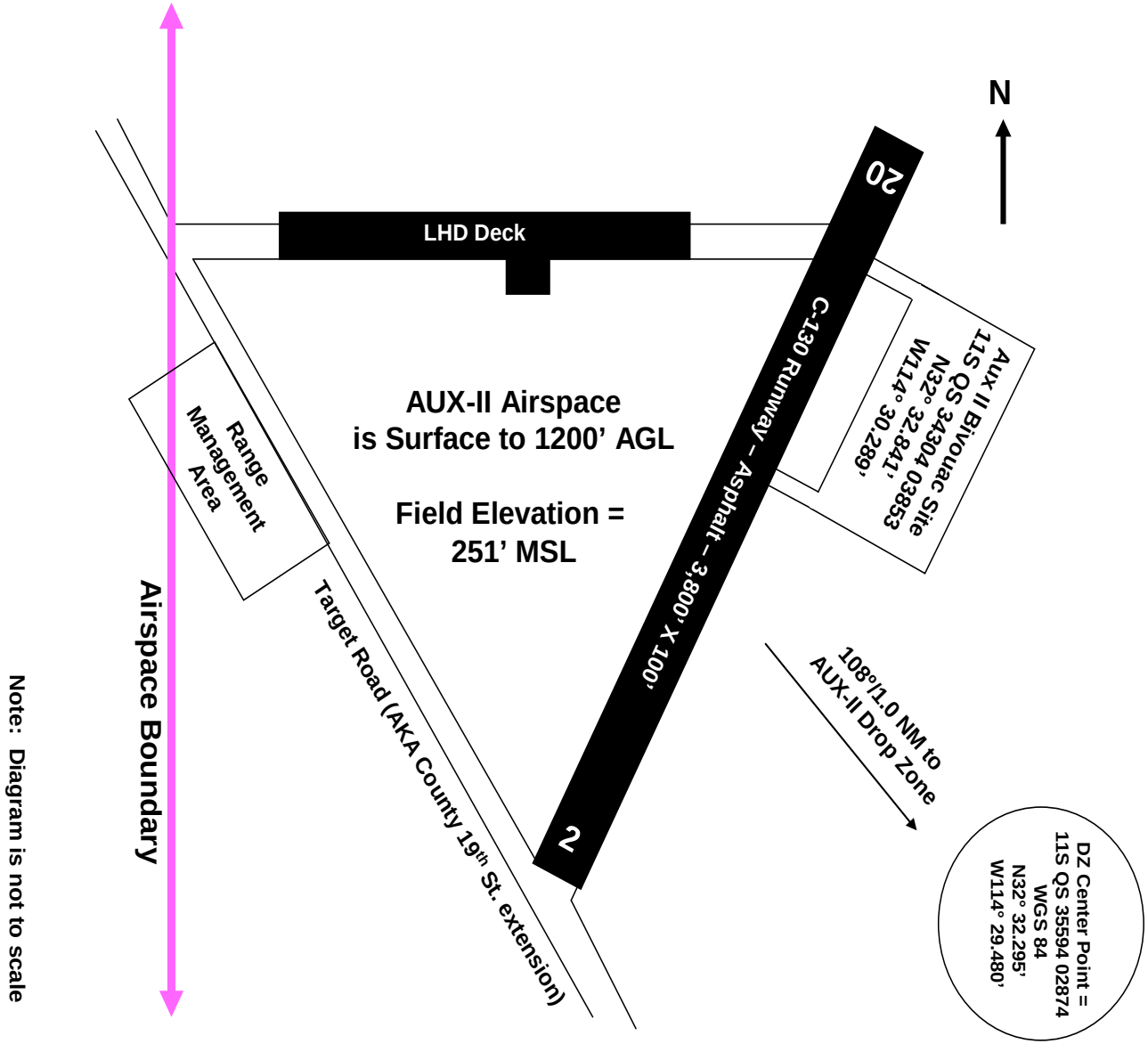


FIGURE 4-3 AUX-II DIAGRAM

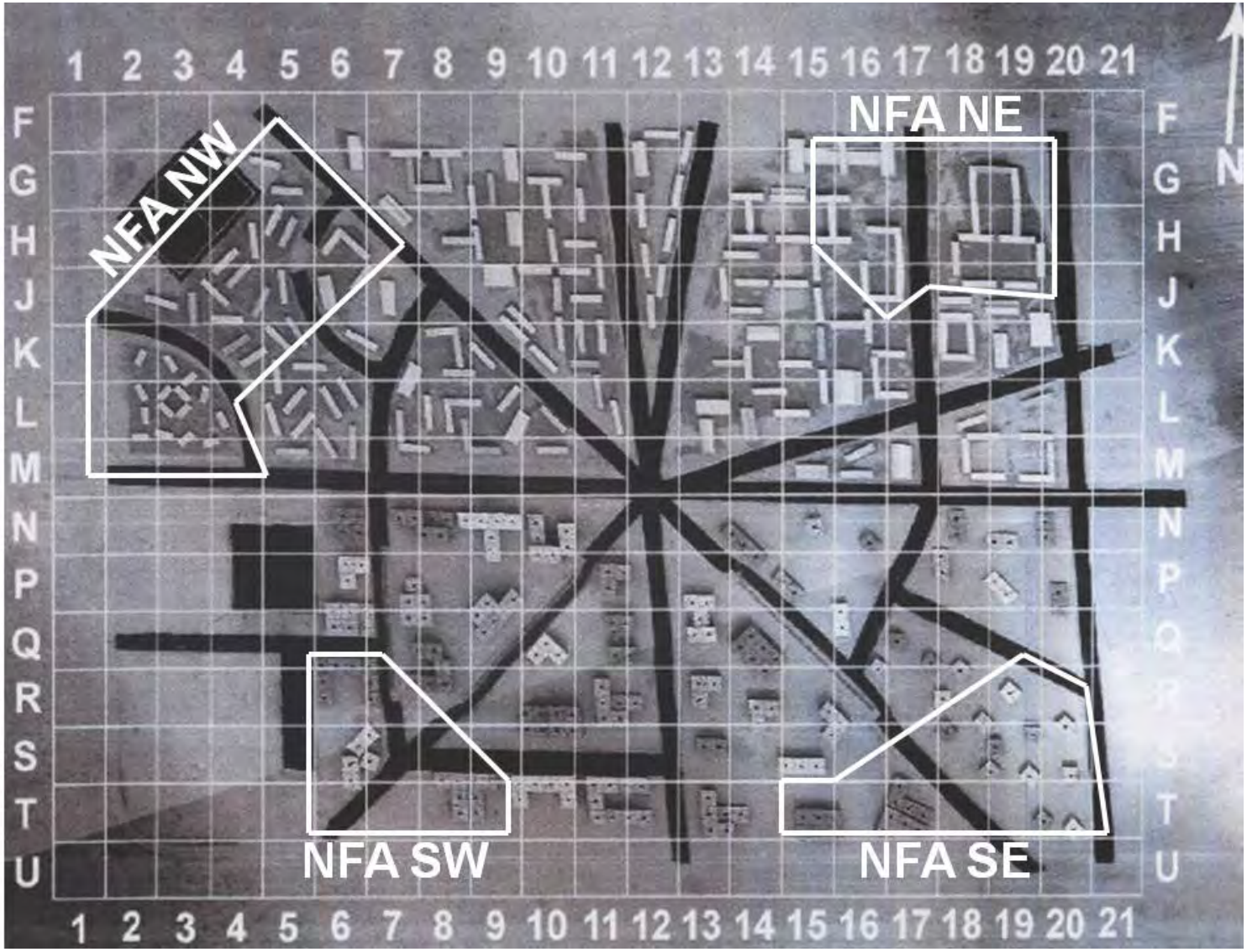


FIGURE 4-4 YODAVILLE UTC

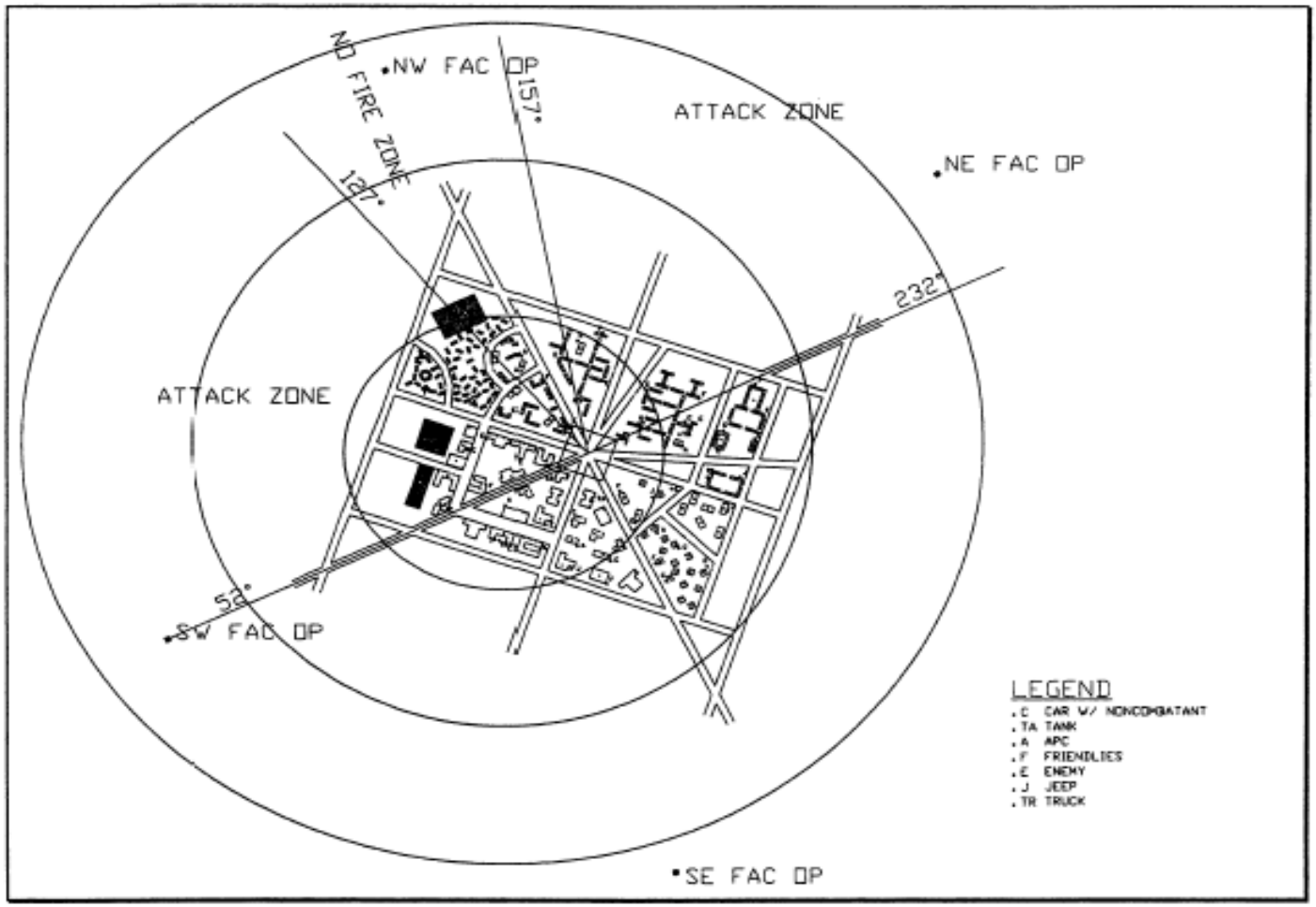


FIGURE 4-5 YODAVILLE UTC NORTHWEST FAC OP

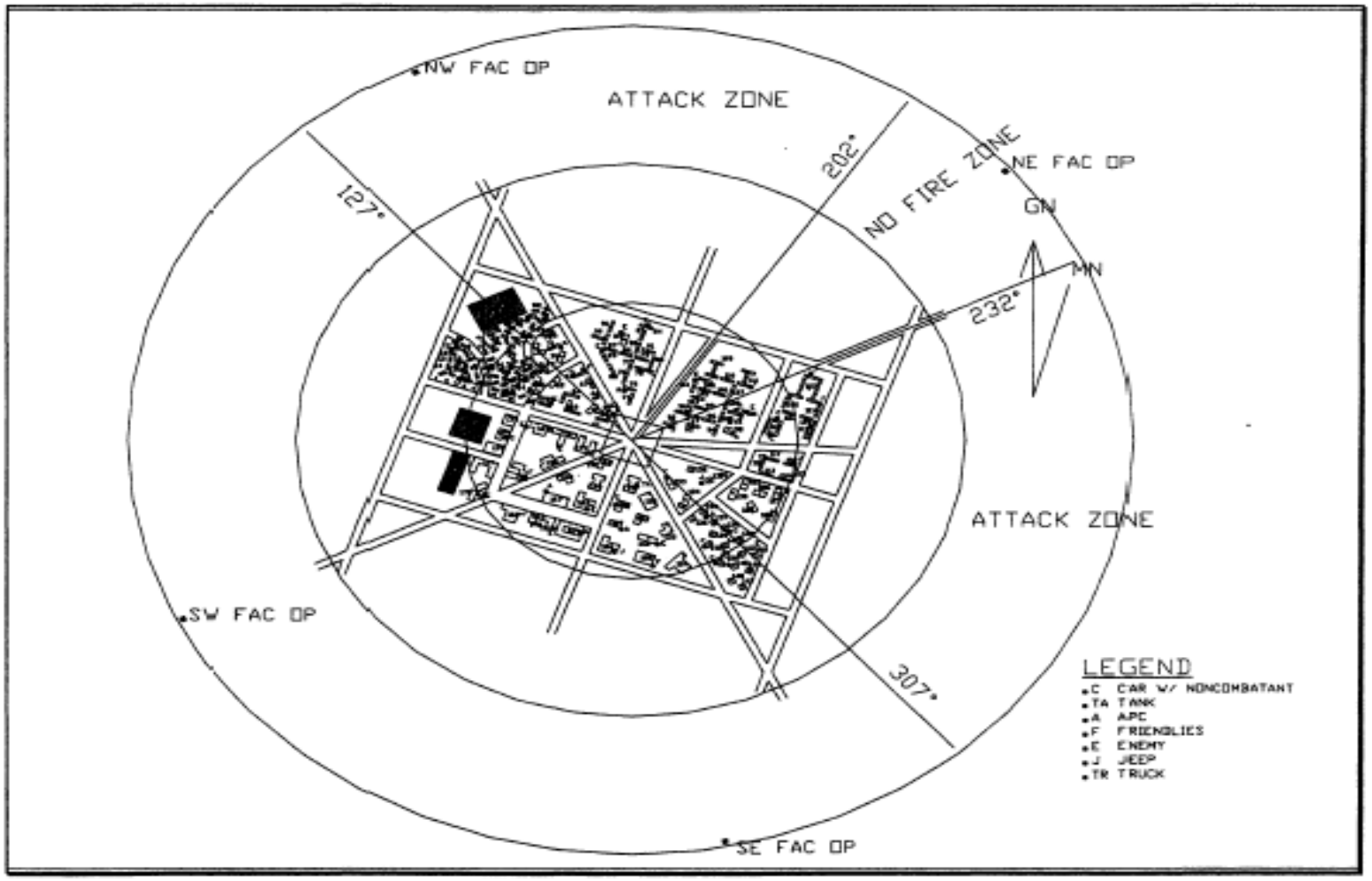


FIGURE 4-6 YODAVILLE UTC NORTHEAST FAC OP

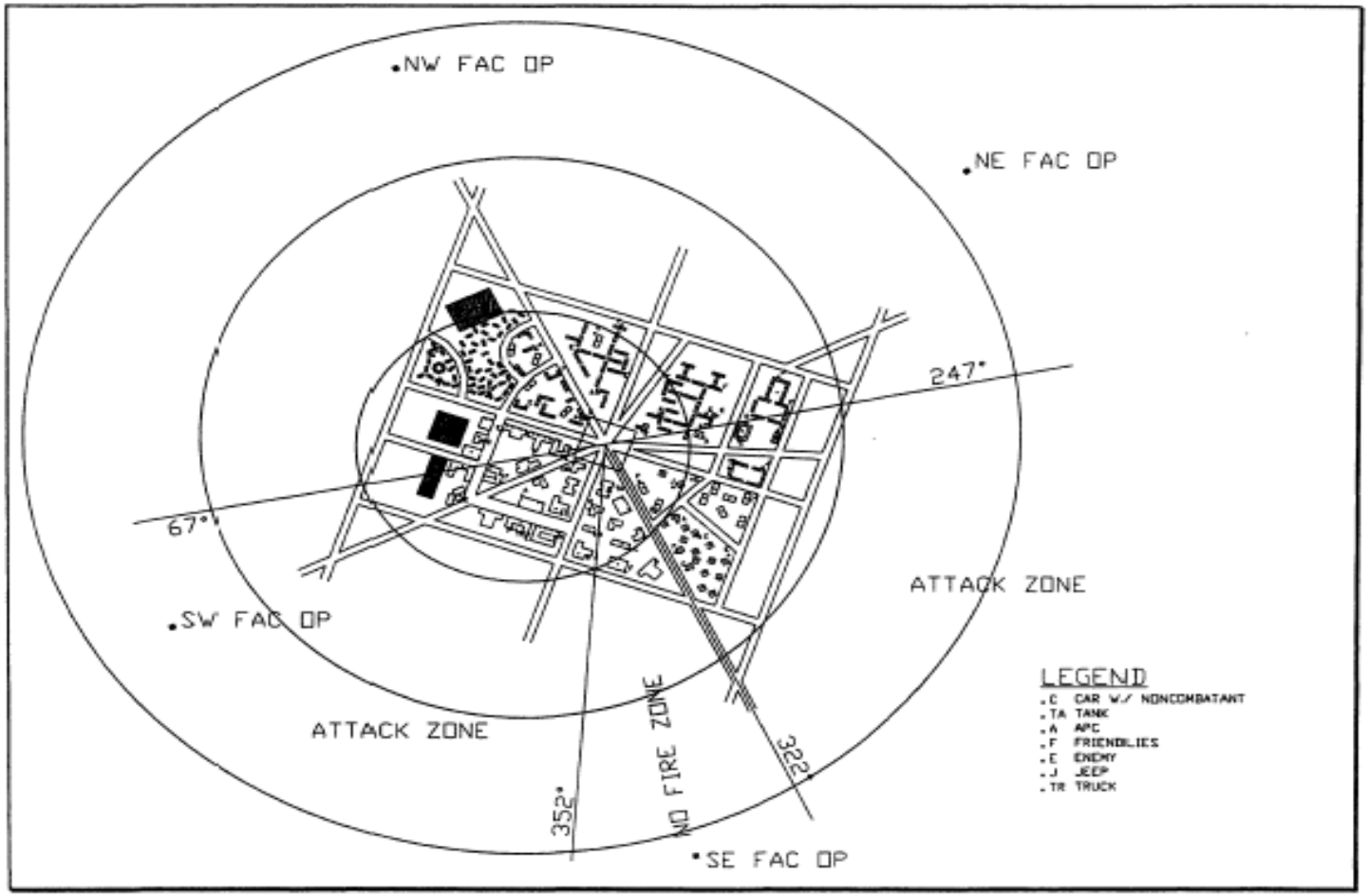


FIGURE 4-7 YODAVILLE UTC SOUTHEAST FAC OP

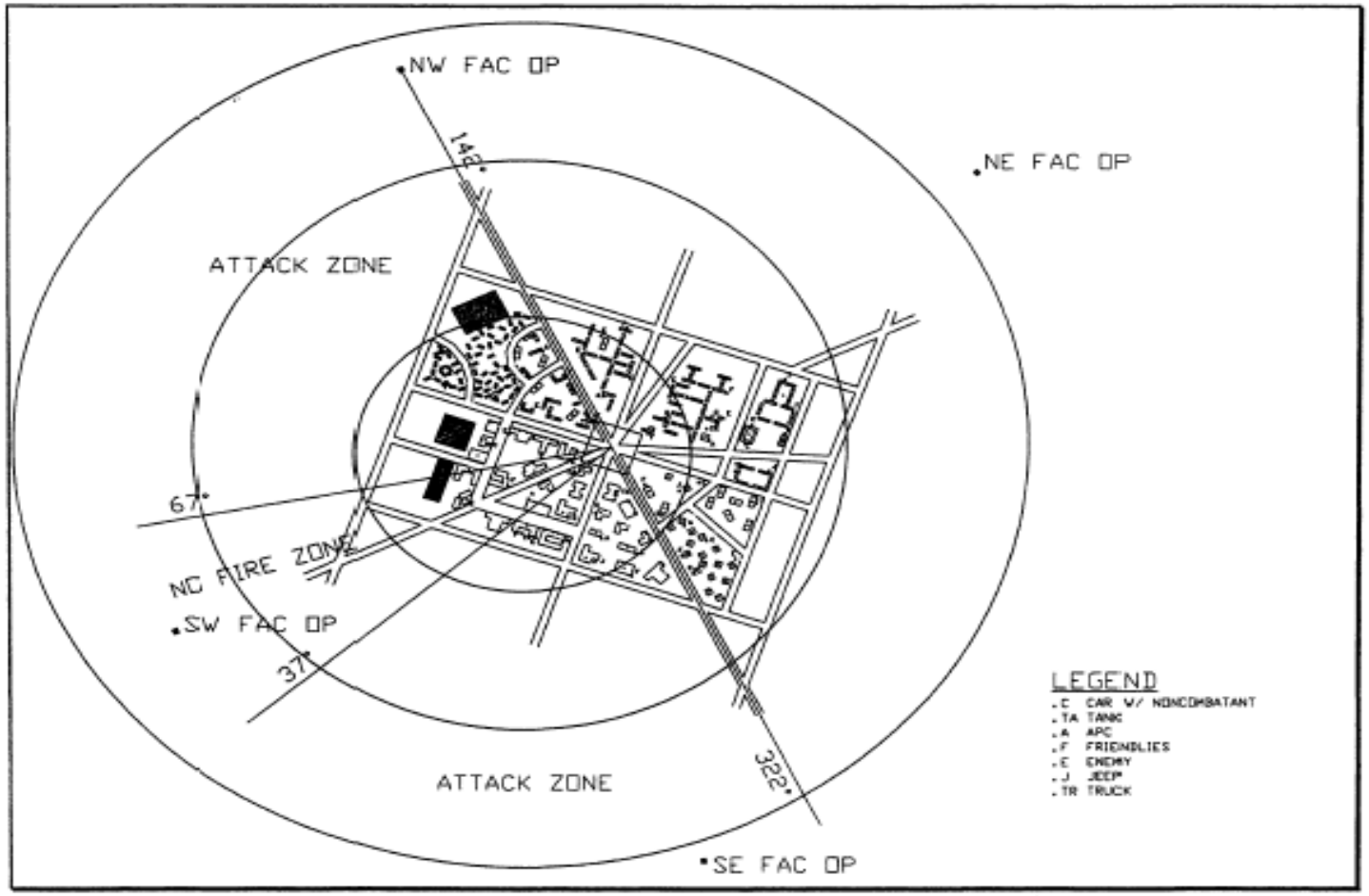
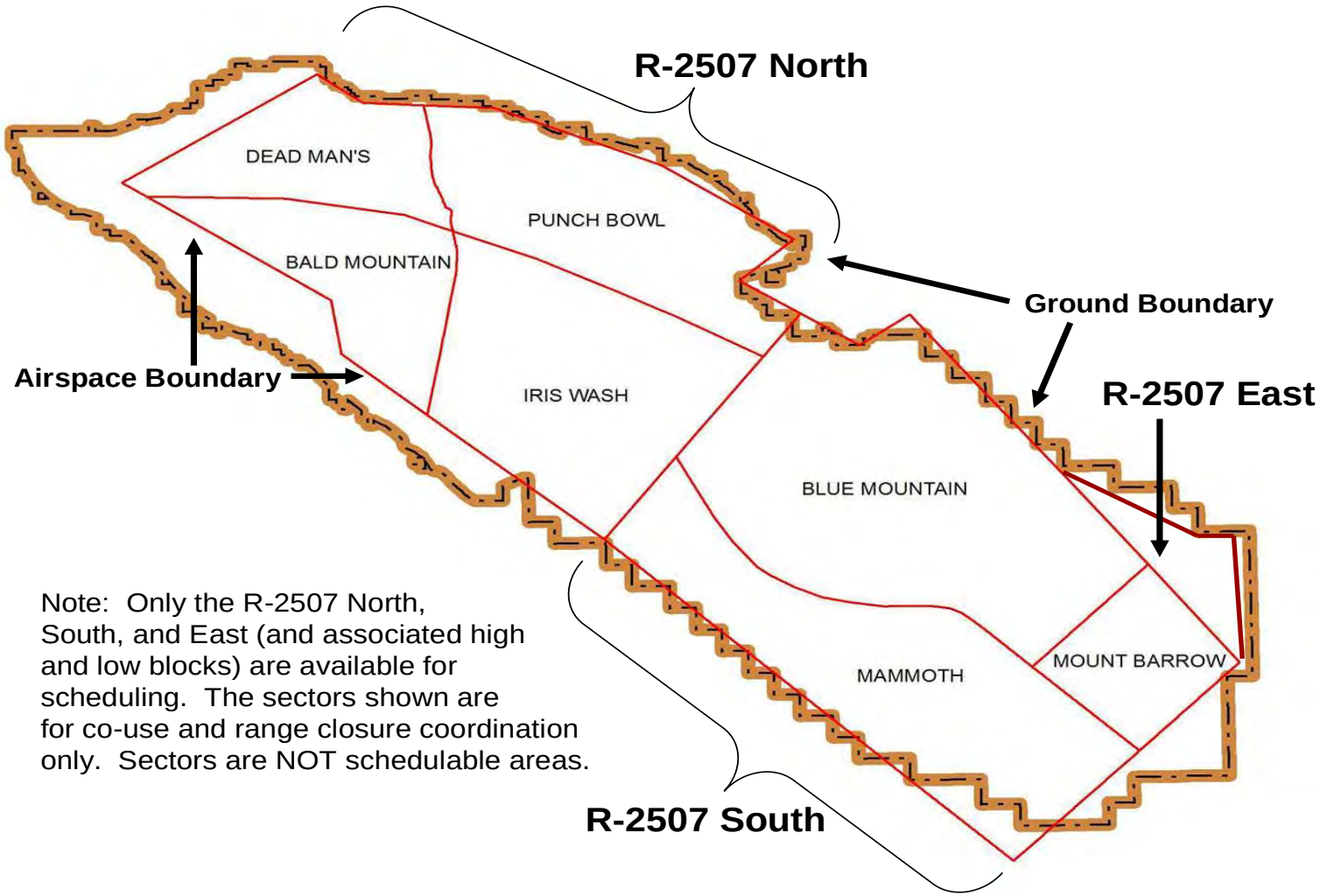
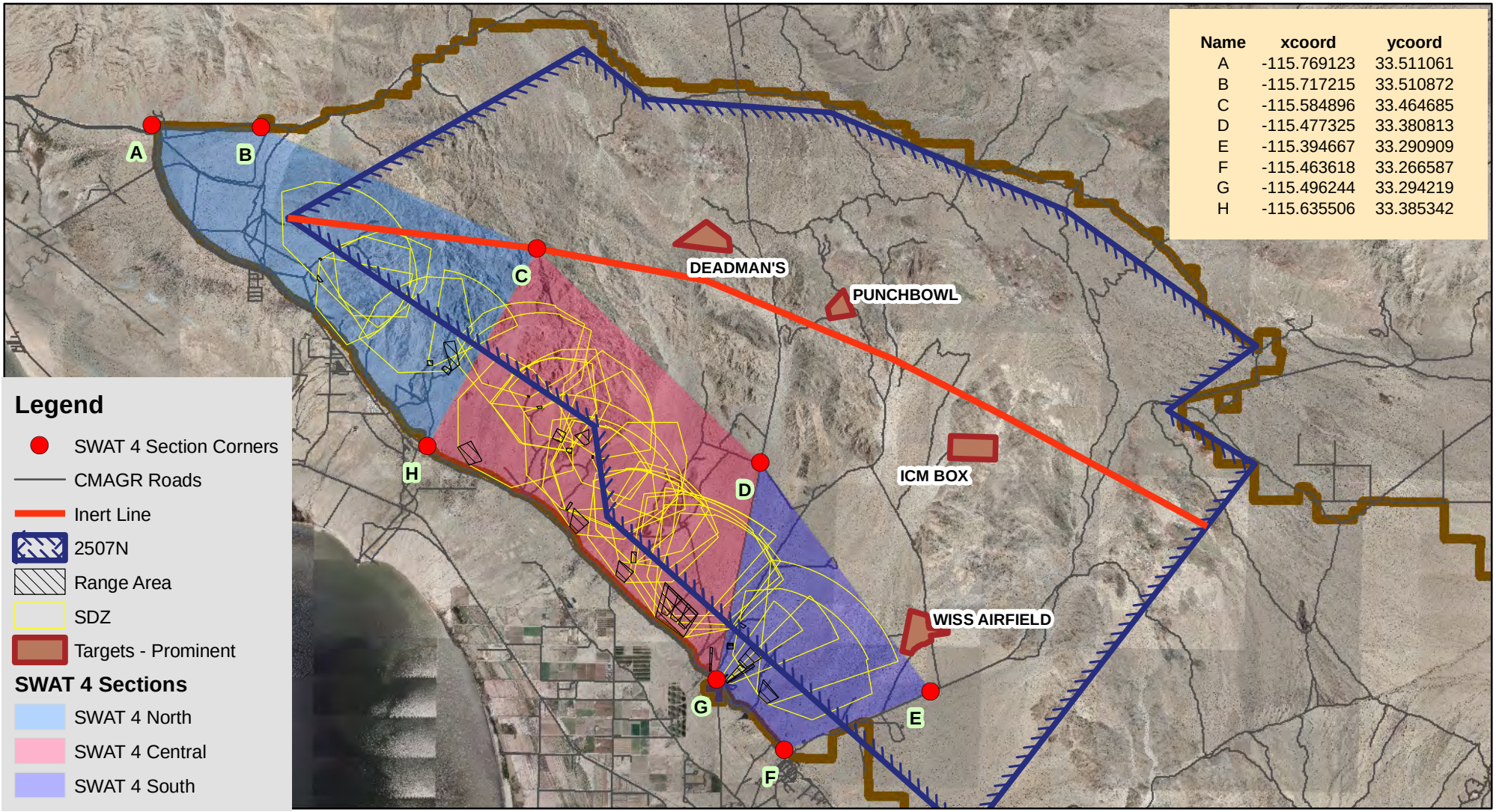


FIGURE 4-8 YODAVILLE UTC SOUTHWEST FAC OP



Note: Only the R-2507 North, South, and East (and associated high and low blocks) are available for scheduling. The sectors shown are for co-use and range closure coordination only. Sectors are NOT schedulable areas.

FIGURE 4-9 R-2507 N/S/E AIRSPACE SECTORS



Name	xcoord	ycoord
A	-115.769123	33.511061
B	-115.717215	33.510872
C	-115.584896	33.464685
D	-115.477325	33.380813
E	-115.394667	33.290909
F	-115.463618	33.266587
G	-115.496244	33.294219
H	-115.635506	33.385342

SWAT 4 NORTH, CENTRAL, AND SOUTH SECTIONS

CHOCOLATE MOUNTAIN AERIAL GUNNERY RANGE

MCAS-YUMA

N W E S

1:250,000

0 1.5 3 6 Miles

WO 12-521: Updated 1/25/2013

FIGURE 4-10 SWAT 4 NORTH/CENTRAL/SOUTH SECTIONS

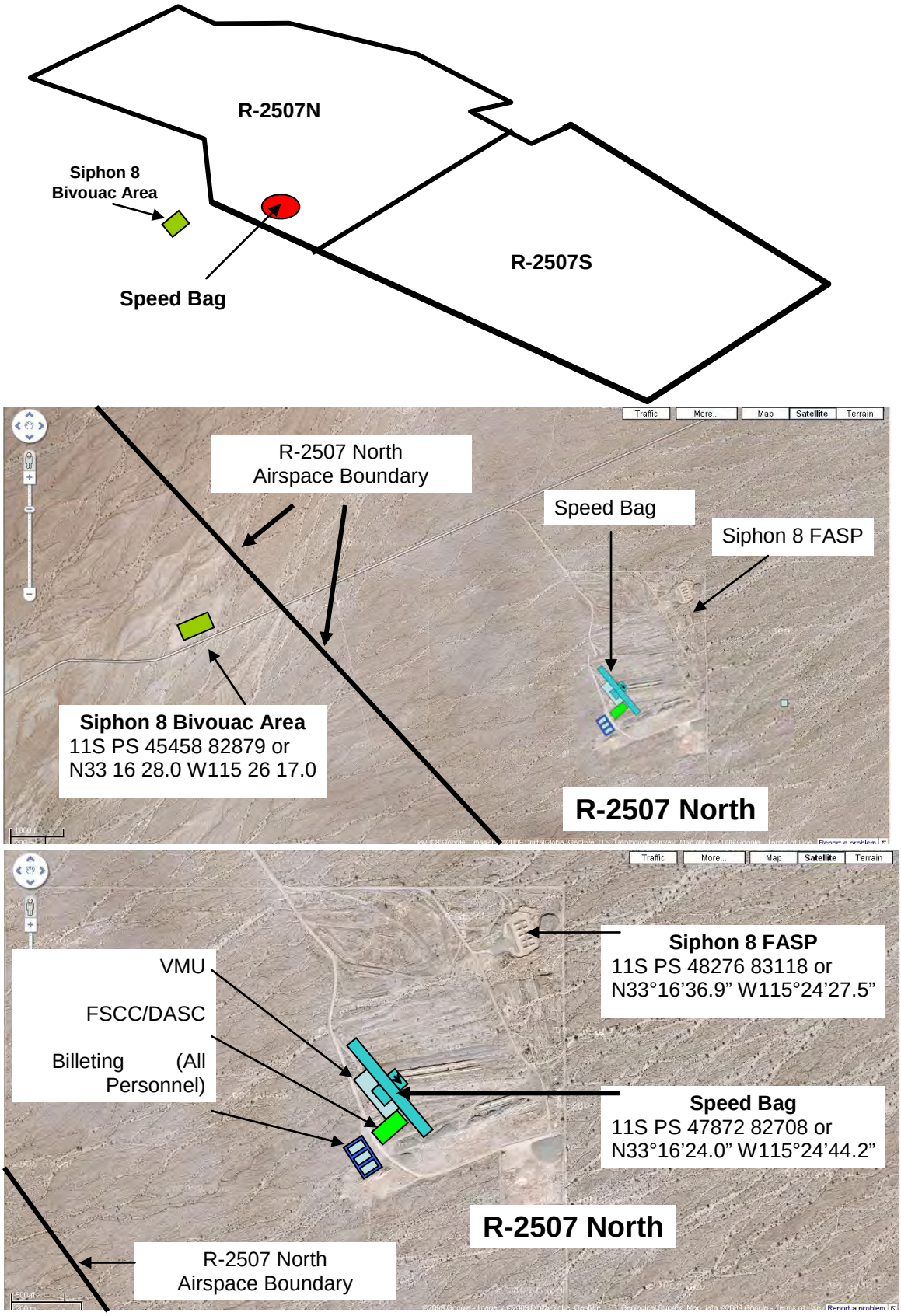


FIGURE 4-11 SPEED BAG – UAS STRIP

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CHAPTER 5

EXERCISES

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CHAPTER 5

EXERCISES

5000. PURPOSE AND SCOPE

1. General

a. This chapter describes procedures supporting the planning, coordination, scheduling, execution, and clean up associated with the conduct of training exercises and Research Development Testing and Evaluation (RDT&E) activities. The instructions in this chapter are based upon current DOD, DON, and FAA policies and regulations. Nothing in these instructions will prevent the exercise of sound judgment to preserve lives and property, or to ensure the safety of personnel.

b. MCAS Yuma ranges support training for various Marine Air Ground Task Force (MAGTF) elements as well as joint and coalition forces. Aviation operations are the primary focus of activities within MCAS Yuma's RTA and take priority over all other operations. Prior planning, detailed coordination and adherence to procedures will ensure the safe conduct of multiple three-dimensional training events at MCAS Yuma's RTA.

5001. EXERCISES

1. Priority Events

a. MAWTS-1 conducts two biannual Weapons and Tactics Instructor (WTI) course which take place during the March/April and September/October timeframes. Range closures, due to EOD sweeps, Operational Range Clearance (ORC), and target inserts, are conducted prior to these events. Expect limited range availability and target/ordnance restrictions during and immediately prior to these events. Refer to the MCAS Yuma Range Notifications website and MCAS Yuma NOTAMs (KNYL) for specific restrictions (see Paragraph 4000.3.l-n on page 4-7).

b. The 3rd Marine Aircraft Wing (3MAW) periodically conducts Wing and MAG level exercises such as Scorpion Fire. Scorpion Fire exercises typically take place twice a year during the January/February and July/August timeframes.

c. Other priority events directed by CMC or other higher agencies can result in limited range availability during short periods. All known upcoming range events are available by

contacting Range Scheduling. Refer to Chapter 3 for range priority instructions.

d. The Officer Conducting the Exercise (OCE) will assign an Exercise/Event Coordinator (EC) prior to the beginning of any exercise planning. MCAS Yuma Range Scheduling will assign a Scheduling Liaison to coordinate with the EC. The EC shall submit all range scheduling requests on behalf of the exercise force elements (aviation & ground). The EC shall ensure that all requests are submitted NLT the assigned RFMSS priority deadline assigned to that exercise. Once an evolution has begun, the EC will provide daily updates and be readily available during the entire exercise. All changes and new requests made by exercise support elements must be forwarded through the EC to the Scheduling Liaison.

5002. EXERCISE SCHEDULING PRIORITY

There are special requirements for obtaining priority scheduling status. Refer to Chapter 3, Range Scheduling for specific instructions.

5003. EXERCISE SAFETY

1. General

a. All elements of any exercise force will be governed by the MCO 3570 series, this order, applicable TMs, unit SOPs, and common sense while operating on the MCAS Yuma’s RTA.

b. Refer to Chapter 1 for specific instructions on range safety and qualifications for personnel training in MCAS Yuma RTA.

5004. EXERCISE CLEAN UP

1. Inspection. A post exercise inspection of the RTA will be conducted upon completion of an exercise. It will be conducted by the EC and RSO or their respective representatives. The exercise force will not depart until the RTA is in a proper state of police.

2. Standards. Policing of RTA will be in accordance with Chapters 1 and 2 of this order. Preservation of the range areas is critical for continued military use and occupation.

5005. RESEARCH, DEVELOPMENT, TESTING AND EVALUATION (RDT&E)

1. RDT&E. MCAS Yuma's RTA occasionally support RDT&E events. RDT&E events conducted aboard Yuma's RTA take place on a "not to interfere" basis with training events. Training events take priority over RDT&E activities. All non-tenant RDT&E activities within the MCAS Yuma RTA must contact MCAS Yuma's Community Plans & Liaison (CP&L) Office for coordination and approval via DSN 269-3637/2047 or Commercial (928)269-3637/2047.

2. Certifications

a. Personnel desiring to conduct RDT&E events on MCAS Yuma's RTA will comply with the provisions of Chapter 6 of this order regarding OIC/RSO certifications and applicable briefs. RDT&E Event Coordinators will ensure that MCAS Yuma RTA are properly scheduled and accessed in accordance with this order. Events not properly qualified through MCAS Yuma Range Safety and properly coordinated will be ordered to exit the RTA until proper coordination has taken place.

b. Non-standard and non-certified explosives and ordnance are **NOT** authorized for use on MCAS Yuma's RTA without a limited safety review and letter of authorization from the requesting activity. All RDT&E requests shall be submitted to United States Marine Corps Systems Command (MARCORSYSCOM) and Training and Education Command (TECOM) Range and Training Area Management (RTAM) Division. Requesting units may be required to provide additional data before such requests will be considered.

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CHAPTER 6

RANGE OPERATIONS

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CHAPTER 6

GROUND RANGE OPERATIONS

6000. PURPOSE AND SCOPE

1. General

a. This chapter describes ground operations within the BMGR West and the CMAGR. Instructions in this chapter are based upon current DOD, DON, and FAA policies and regulations. The BMGR West and CMAGR are range training areas where air and ground operations are routinely conducted simultaneously.

b. Nothing in these instructions will prevent the exercise of sound judgment to preserve lives and property, or to ensure the safety of personnel.

c. Where conflicts occur with safety instructions contained in Field and Technical Orders, the provisions and directives contained in the Marine Corps Order (MCO) 3570 series will take precedence.

d. The entire BMGR West is an active military training area; therefore, military training has priority over all recreational activities. Portions of the BMGR have been opened for Public Access. Using units operating in Public Access Areas should be aware that contact with civilians is likely. Training conducted in areas of “No Public Access” could pose a hazard, therefore civilians are prohibited from entering these areas. The using unit is responsible for posting guards as identified in applicable SPINS in order to prevent civilians from gaining access into active training areas.

e. Range Special Instructions (SPINS) can be obtained by contacting Range Safety or by visiting the Range Safety SharePoint site below (usmc.mil accessible only). Review of the LASER special instructions contained in the current MCAS Yuma LASER Range Certification Report, applicable aviation special instructions, and all specific ground range special instructions shall be accomplished by commanders and all personnel in a supervisory role prior to conducting training aboard MCAS Yuma, AZ. Designated Range OICs and RSOs shall **physically possess a copy of applicable range SPINS** when training on certified ground ranges.

https://intranet.mciwest.usmc.mil/yuma/rng/roc/Safety/default.aspx

If you have trouble viewing this site, contact Range Scheduling, and the appropriate computer settings for viewing this page can be provided.

2. Operations

a. Unless otherwise coordinated, Range Management personnel or contractors working under the guidance of Range Management are required to operate electrical targets or simulators on ranges equipped for that purpose. Times must be included on the request when operators are required. When electrical targets or simulators are not used, the ranges may be scheduled without operator support.

b. Using units have no authority to modify the nomenclature, purpose, or design of any range.

c. Range Management personnel are direct representatives of the CO, MCAS Yuma for the purpose of enforcing Range Safety policies and the regulations contained in this order. Designated Range Management Department personnel are authorized access to all ranges and training facilities for the purpose of inspection, control and maintenance of all RTAs. These personnel will not disrupt unit training unless necessary to perform their duties.

d. Due to increased scrapper and trespasser activity in the CMAGR, CO, MCAS Yuma has established a Use of Force policy [reference (r)] applicable to non-law enforcement Marines operating in that area.

3. Targets

a. All targets for training shall be coordinated through and positioned by Range Management personnel only. Reimbursable support may be required on a case-by-case basis. Coordinate with Range Management via the Plans Officer. The Plans Officer coordinates all specific target requirements for both aviation and ground live fire training during annual Large Force Exercises (LFE’s) and daily squadron/unit level training. Additionally, the Plans Officer is responsible for all coordination between using units, contract support, EOD, and Range Maintenance during Range Sweeps and Target Inserts/Builds.

b. Operational Range Clearance (ORC) projects are planned and coordinated by the Plans Officer. The Plans Officer is responsible for ORC proposed target plans, storage and processing of range debris, and contract oversight.

c. Using units will submit target plans, including mounting materials, to the Plans Officer when submitting their range requests to Range Scheduling. Using units will be responsible for supplying, retrieving, and disposing of all target debris.

d. The use of Steel Reactive Targets (SRT) will be conducted as outlined in Training and Education Command (TECOM) Safety Of Use Memorandum (SOUM) 2-02 and [reference (b)]. It is incumbent on the using unit to familiarize personnel with the above SOUM prior to execution of training. Using units are required to submit training plans to the Range Safety Office prior to approval of SRT training.

6001. RANGE OFFICER-IN-CHARGE (OIC) OF TRAINING

1. General. The OIC shall be of equivalent or senior rank to the Range Safety Officer (RSO). The OIC maintains surveillance of firing and safety within the entire surface and vertical hazard space of the assigned range; they shall be physically present at live-fire events. The OIC is a supervisory position. The OIC may personally participate in training.

2. Qualifications

a. Must be a commissioned, warrant, or staff noncommissioned officer as outlined in Figure 6-1.

b. See Figures 6-2 and 6-4 for a detailed description of the Range OIC/RSO certification process at MCAS Yuma. Briefly, the certification process entails that the:

(1) OIC must complete the Marine Corps Range Safety (Basic) Distance Learning Course available on MarineNet.

(2) OIC must complete the Marine Corps LASER Range Safety Distance Learning Course available on MarineNet if conducting LASER operations.

(3) OIC must complete the MCAS Yuma Range Safety Certification Program (see Figure 6-4 for details).

(4) OIC must be identified in a “Unit Commander Range OIC/RSO Designation Letter” per [reference (a)]. This letter shall identify the individuals the Commander will use as an OIC on MCAS Yuma RTAs and shall identify all weapon systems/LASER systems these individuals are certified to supervise. The Commander shall E-Mail or FAX a signed copy of this letter to the installation Range Safety Officer prior to the commencement of a training evolution/exercise on MCAS Yuma RTAs. A sample letter can be provided upon request.

c. Shall be certified in the weapon systems for which they are responsible. For weapon systems equipped with or dependent on LASERs, the OIC will be knowledgeable of associated LASER hazards and proper employment. The OIC is responsible and accountable for the conduct of the activity and adherence to governing regulations and guidance. As such, the OIC must be able to fully influence the conduct of the event.

3. Duties

a. Ensure the overall safe conduct of training and proper use of the RTA.

b. Receive a range safety brief from the RSO or a MCAS Yuma Range Safety Inspector on use of the RTA.

c. Ensure the RSO is physically present at the training site during the conduct of the exercise.

d. Determine when it is safe to fire in accordance with applicable regulations and MCAS Yuma range requirements.

e. Ensure receipt of final clearance to fire from LEG IRON.

f. Ensure proper supervision of personnel performing misfire, hang-fire, and cook-off procedures.

g. Ensure required communications are established and maintained.

h. Ensure safe LASER operations.

i. Ensure adequate medical support is available. Medical support requirements are outlined in Figure 6-3.

j. Ensure ammunition and explosives are properly handled, transported, stored, and accounted for within the training complex from the time of receipt to the time of expenditure or turn in.

k. Maintain a written log of pertinent safety and control data concerning the operation of firing ranges, weapons training facilities, maneuver areas, authorized operating times, impact area entries and exits, and cease-fire authorizations.

l. Ensure plans for firing exercises and maneuvers are coordinated with LEG IRON and Range Safety.

m. Ensure control of target areas to prohibit entry by unauthorized personnel.

n. Ensure all ammunition malfunctions and accidents are reported to LEG IRON in accordance with MCO P5102.1 and MCO 8025.1.

o. Ensure coordination and approval has been granted from Range Safety for civilian personnel entering the training site.

p. Brief the RSO on the duties to be performed in support of the training event. Require the RSO to brief the OIC on the safety of the facility and unit, and the readiness to commence live-fire operations.

q. Implement risk management for all phases of the training event. The OIC will have a detailed ORM Worksheet signed by the unit commander covering all phases of training in their possession at all times while training is conducted.

r. Shall be physically present at the training site anytime live-fire (to include Smokey SAMS and SESAMs) or LASER training is taking place.

s. Ensure all personnel wear the appropriate PPE to include helmets, flak jackets, eye protection and hearing protection during all live-fire events. PPE is not required when conducting annual Known Distance (KD) marksmanship training, to include KD battle sight zeroing. Sniper training is also exempt from wearing PPE when conducting training that simulates realistic situations in which PPE would not be worn per [reference (a)]. All military and civilian agencies conducting law enforcement-type training are permitted to wear their equivalent protective equipment.

t. Ensure the RSO is qualified with the weapon systems being used.

u. Ensure the RSO makes provisions or provides for an emergency vehicle and corpsman or qualified medical personnel for all ranges, training areas, and training facilities.

v. Ensure the RSO reports the following information to LEG IRON by VHF FM (primary) or LMR (secondary) prior to commencing training and that hourly communications checks are conducted with LEG IRON during the training evolution:

(1) Unit identification

(2) Training area/range being used (grid if possible)

(3) Type of training/activity

(4) Name and rank of the OIC and RSO where applicable

(5) Number of vehicles and personnel

(6) Type and amount of ordnance to be expended

(7) Department of Defense Identification Code (DODIC)

(8) Time in/expected length of stay

(9) Time out

(10) Weapons used on the range

(11) Corpsmen/qualified medical personnel and emergency vehicle are co-located with the using unit at the training site.

w. In the event of a MEDEVAC, the OIC or an appointed representative will suspend fire and follow procedures as outlined in Paragraph 1010 (page 1-14) of this order.

x. Ensure the environmental requirements in Chapter 2 of this order have been met.

6002. RANGE SAFETY OFFICER OF TRAINING

1. General. The RSO assists in maintaining surveillance of firing and safety within the entire surface and vertical hazard space of the assigned range; he/she shall be physically present at the training site. The RSO is a supervisory position. The RSO shall not personally participate in training. THE RSO WILL NOT BE ASSIGNED OTHER DUTIES NOR FIRE A WEAPON, and will be the last to leave the range following completion of firing and clean-up, ensuring that the range is clear of all personnel and equipment. The RSO will ensure that all trash and brass are removed from the range after completion of training.

2. Qualifications

a. The RSO must be a commissioned officer, warrant officer, staff noncommissioned officer, sergeant or civilian (see Figure 6-1). For field artillery applications, the position commander or OIC may assume RSO duties. Personnel assigned as RSO will have no other duties during that period of training. The only exception is for aviation weapons systems training where instructor pilots

(IPs) may assume RSO duties. See Figure 6-4 for a detailed description of the Range OIC/RSO certification process described below.

(1) RSO must complete the Marine Corps Range Safety (Basic) Distance Learning Course available on MarineNet.

(2) RSO must complete the Marine Corps LASER Range Safety Distance Learning Course available on MarineNet if conducting LASER operations.

(3) RSO must complete the MCAS Yuma Range Safety Certification Program (see Figure 6-4 for details).

(4) RSO must be identified in a “Unit Commander Range OIC/RSO Designation Letter” per [reference (a)]. This letter will identify the individuals the Commander will use as an RSO on MCAS Yuma RTAs and will identify all weapon systems/LASER systems these individuals are certified to supervise. The Commander will E-Mail or FAX a signed copy of this letter to the installation Range Safety Officer prior to the commencement of a training evolution/exercise on MCAS Yuma RTAs. A sample letter can be provided upon request from the unit to the installation Range Safety Officer.

b. RSO must be qualified/certified on the weapon systems being operated. For weapon systems equipped with or dependent on LASERs, the RSO will be knowledgeable of associated LASER hazards and proper employment. As such, the RSO must be able to fully influence the conduct of the event. To use aviation weapon systems, the RSO must fully understand the capabilities of the weapon systems

3. Duties

a. The RSO is responsible for the enforcement of applicable safety regulations contained in this order, [reference (a)], and other applicable field, technical, and ordnance publications.

b. The RSO must be able to identify the right and left lateral limits for all live-fire ranges, and that each firing position observes the proper left and right limits for each firing lane. The RSO will ensure that no cross firing between firing lanes occurs.

c. RSOs will be responsible for the check-in/check-out process in the RTA as outlined in Paragraph 6006 (page 6-19) of this chapter.

d. The RSO will be issued a red range flag and a copy of the Range SOP. The range flag and/or range light for night fire will be raised/turned on prior to commencement of firing and lowered/turned off after informing LEG IRON of the intent to cease live-fire.

e. The RSO ensures that medical support and dedicated emergency vehicle with driver are present at the firing position. Medical support requirements are outlined in Figure 6-3.

f. The RSO shall be familiar with MEDEVAC procedures found in Paragraph 1010 (page 1-14) of this order.

g. The RSO ensures the following before obtaining and subsequently granting clearance to fire:

(1) Proper coordination, instruction, and positioning of road guards assigned throughout the RTA. At a minimum, road guards will

(a) Be posted in pairs.

(b) Have positive two-way communications with the RSO.

(c) Have their positions recorded by grid location with the RSO.

(d) Have a five-gallon water can if separated from other personnel conducting training.

(e) Restrict access to RTA by unauthorized personnel.

(f) Clear the access of personnel into the RTA with the RSO.

(g) When assigned, ensure the entire range is clear of unauthorized personnel and equipment prior to firing and maintain clearance throughout the entire firing sequence.

(2) Maintain two positive means (primary and alternate) of two-way communications with MCAS Yuma Range Control Facility (call-sign “LEG IRON”).

(3) Maintain proper positioning of weapons and personnel.

(4) Use only authorized ammunition and explosives to include proper charge, fuse, and fuse settings.

(5) Ensure firing settings and weapons systems are within prescribed safety limits and verified.

(6) Ensure SDZ is clear of all unauthorized personnel.

(7) Ensure proper hearing protection is worn by personnel within noise hazard areas.

(8) Ensure proper eye protection is worn by personnel within eye hazard area.

(9) Ensure permission is received from LEG IRON to commence training and live-fire operations.

h. During Air Defense Artillery range firing with crew-served guided missiles and rockets, road guards will:

(1) Receive missile and rocket firing advisory information from the RSO and advise the OIC accordingly.

(2) Ensure the entire range is clear of unauthorized personnel and equipment prior to firing and maintain clearance throughout the entire firing sequence.

i. Prior to commencing live-fire operations, the RSO conducts final coordination with the OIC. This coordination will include: a summary of checks, inspections, and actions that the RSO has completed; verification that required communications has been established; and, that a “hot status” has been received from LEG IRON.

j. RSO is responsible for the following:

(1) Maintain communication with LEG IRON at all times. When the range is active and communication is lost, the RSO will order a cease-fire until communication is re-established.

(2) Order immediate “cease-fire” or “check-fire” when any unsafe condition should occur.

(3) In the event of an emergency situation/accident, the RSO will immediately notify LEG IRON, regardless of severity.

(4) Be physically present at the training site.

(5) Be responsible for ammunition accountability. The RSO will also have a copy of the applicable portions of this

order in his/her possession at all times. The RSO is responsible for personnel shakedown and police call.

(6) Report all accidents and ammunition malfunctions to the Range OIC.

(7) Upon completion of firing or firing order, verify to the OIC that all weapons and weapons systems are clear and safe before allowing the removal of weapons from the firing area.

(8) Report to LEG IRON the number and type of munitions expended by Department of Defense Identification Code (DODIC).

(9) The RSO/Drop Zone Safety Officer (DZSO)/Drop Zone Safety Team Leader (DZSTL) for drop zones will be a certified jumpmaster per MCWP 3-1 and must be present during drop operations.

k. A detailed RSO checklist is provided in Appendix E of this order to assist the RSO. Please note this detailed checklist is a guide; detailed checklist is included in the SPINS for each range RTA.

6003. RANGE CONTROL FEATURES

1. Range Signs. Range signs are placed on all ranges to indicate lateral limits, range numbers, and other information. Firing lines and lateral limits are not indicated at Artillery Firing Areas (AFAs). The signs and markers are described below.

a. Surveyed Monuments are depicted by a brass casing embedded in a concrete slab positioned near the center of AFAs.

b. Range Name Signs. A sign bearing the range name is located at the entrance to each small arms range complex.

c. Lateral Limit Signs

(1) Left. White and black striped post

(2) Right. Red and black striped post

d. LASER Hazard Signs. Warning users of LASER operations and hazards.

e. Off-Limits Signs. Warning the area is off-limits by order of the CO, MCAS Yuma, unless scheduled through the Range Scheduling Office.

f. Additional signs, self-explanatory in nature, announcing specific instructions or precautionary measures, will be posted on certain ranges, as deemed necessary by the Director, Range Management Department.

2. Barricades and Range Guards. Either barricades or road guards will block normal approaches to danger areas created by firing. Barricades when combined with appropriate warning signs are adequate and road guards are not required except in special cases.

a. Barricades. The use of barricades will be coordinated with the YRMD for use on roads leading into RTA. There are two types of barricades:

(1) Portable barricades are those consisting of a sawhorse-like structure, at least 24 inches high, placed directly across the road. A sign with letters three inches high stating, “Live-Firing in Progress, Keep Out” will be attached to the cross member. The sign will be clearly visible to anyone attempting to enter the range area.

(2) Permanent barricades are gate-like structures located at Camp Billy Machen (CBM) and MCAS Yuma’s Rifle Range.

(3) Units conducting training will ensure barricades are in place prior to firing. Specific requirements for each range are listed in the special instructions associated with each range.

b. Road Guards

(1) Road guards, when directed by Range Safety, will be posted to prevent entry into the danger areas that cannot be observed, or which do not lie within the established impact areas. Normally, range access roads are not within this category and do not require a road guard, except as described in special instructions associated with individual ranges.

(2) Artillery firing units will post road guards on established roads when the area “E” or any portion of the surface danger zone diagram (refer to directives in the MCO 3570 series) actually covers the road involved or any portion of the surface danger zone. Traffic on these roads will be halted during actual firing.

(3) OICs/RSOs may post additional road guards, as necessary, to ensure safety. The arbitrary blocking of roads or

the denial of access to other than a danger area is not permitted.

(4) Road guards will be provided with a positive means of communication by the unit posting them.

3. Warning Flags and Warning Lights. During daylight hours, the warning flag will be raised (to a position where it is noticeable to others when approaching the range or firing line) whenever firing is in progress. During hours of darkness, a blinking red light will be in the same place.

4. Securing from Firing

a. The unit will notify LEG IRON at a predetermined time prior to departing the RTA. LEG IRON will dispatch a representative from the Range Safety Office to the RTA to ensure proper policing of the range is accomplished. The RSO is not released from his/her responsibilities until cleared by a range safety representative.

b. Ranges will be inspected the morning following night Firing Exercises (FIREXs). The RSO is not released from his responsibilities until cleared by the Range Inspector.

c. The RSO will ensure all ammunition found on a range, prior to beginning an evolution or at any time during training, is reported to LEG IRON immediately.

6004. BMGR HAZARD AREAS

1. General. Four hazard areas exist on the western half of the BMGR. All hazard areas are located within the “No Public Access” area of the BMGR. Recreational activity (defined by individuals possessing current range permits) is not authorized within the “No Public Access” area.

2. Hazard areas are defined as such due to the activity contained within them. Each hazard area supports small arms ranges and/or aviation ordnance/LASER operations. **Unauthorized entry into a hazard area represents a significant safety risk.** Accordingly, access to the hazard areas is strictly prohibited without prior coordination with Range Scheduling and real-time access coordination with LEG IRON.

3. The hazard areas are individually defined below. They are numbered I-IV from west to east. See Figure 6-5 for a map of

the associated hazard areas and facilities. Specific Hazard Area coordinates are contained in Figure 6-6.

a. **Hazard Area I**: This hazard area is located just inside the ground range boundary and north of the County Road 19 extension. This area contains the following ground range facilities:

(1) MCAS Yuma Known-Distance Rifle Range – is the qualification range used primarily by the MCAS Yuma Marksmanship Training Unit (MTU).

(2) MCAS Yuma Known-Distance Pistol Range - is the qualification range used primarily by the MCAS Yuma MTU.

(3) Range 01 and 01A – these are small arms ranges that support live-fire static and maneuver training. See Range SPINS for details.

(4) AUX-II Field Ammunition Supply Point (FASP) – used primarily during semi-annual WTI events, this area supports ammunition storage for field units during each course.

The facilities listed above can be requested individually via a RFMSS ground request and **DO NOT REQUIRE** the concurrent scheduling of airspace. The known distance ranges above also support ground LASER operations. Since the firing points for the three small arms ranges located here are outside of restricted airspace, using units shall put themselves in a “check-fire” status when aircraft are observed in the immediate area. Hazard Area I may be scheduled in its entirety for activities such as land surveys or other non-live fire operations. Requests will be processed on a “not to interfere with training” basis.

b. **Hazard Area II**: This hazard area is located south of Hazard Area I (and south of AUX-II). Its northern edge abuts the County Road 22 extension and its eastern edge abuts along the west side of the paved road that runs in a southeasterly direction through this range area. This area contains the following ground range facilities:

(1) Panel Stager Range – supports multi-purpose small arms static training (.50 cal and below) and ground LASER training only. Using units shall put themselves in a “check-fire” status when aircraft are observed in the immediate area of this range.

(2) EOD Range – supports MCAS Yuma EOD training objectives. Due to the location of this range (on the boundary of the restricted airspace), a NOTAM and Range Notification shall be published in order to notify affected pilots of the training activity taking place here. Scheduled units shall put themselves in a "check-fire" status when aircraft are observed in the immediate area of this range.

(3) Tower 3 – this tower supports several range capabilities and is routinely accessed for maintenance purposes. Access to this tower site shall be scheduled in advance to resolve conflicts that may exist with the two other range facilities located in this hazard area.

The facilities listed above can be requested individually via a RFMSS ground request and **DO NOT REQUIRE** the concurrent scheduling of airspace. Hazard Area II may be scheduled in its entirety for activities such as land surveys or other non-live fire operations. Requests will be processed on a "not to interfere with training" basis.

c. **Hazard Area III**: This hazard area is located immediately east of Hazard Area II and south of the paved road running through this area. This area contains the following ground range facilities:

(1) Cactus West aviation target complex (see Paragraph 4004.2a on page 4-20 for a detailed description of this target area) – supports air-to-ground inert ordnance, aircraft strafing, and aviation LASER training activity. This target area is scheduled via a RFMSS airspace request for the Cactus West airspace facility. Aviation activity takes precedence over the ground activity scheduled within this hazard area.

(2) Convoy Security Operations Courses (CSOC) 1 & 2 – support .50 cal (and below) convoy training and ground LASER activity (refer to range SPINS for detailed guidance). Vehicles training at this facility perform live-fire operations from the dirt road (which is abuts the south edge and parallels the paved road) while firing in a southerly direction toward fixed targets within the hazard area. Due to the potential impact to aviation activity in this area, units requesting use of CSOC ranges 1 & 2 shall submit **both a RFMSS ground request for the CSOC ranges and a RFMSS airspace request for the Cactus West airspace.** The airspace shall be scheduled concurrently with the ground request (or coordinated co-use with scheduled aviation units) before CSOC operations will be processed.

(3) Tower 2 – this tower supports several range capabilities and is routinely accessed for maintenance purposes. Access to this tower site shall be scheduled in advance in order to resolve conflicts that may exist with the other range facilities located in this hazard area. Scheduling access to this tower area does not conflict with ground operations taking place at the CSOC 1 & 2 ranges. However, access to the tower **DOES** conflict with aviation activity, and requests will be processed only for times outside of scheduled Cactus West airspace times (neither airspace nor ground space scheduling of the Yodaville UTC impact access to Tower 2).

(4) Foothills Boulevard – is a road that runs south from Interstate Highway 8, through the BMGR, to the U.S./Mexico border. Through the hazard area, access on this road is limited to vehicles with 4-wheel drive capability only. Aviation activity taking place at the Cactus West target complex and ground activity taking place within both Hazard Areas III and IV all pose safety risks to personnel desiring access on this road. Transition on this road through Hazard Area III will be approved on a case-by-case basis dependent upon conflicting, scheduled activities. **Accessing this road without LEG IRON approval is strictly prohibited.**

d. **Hazard Area IV**: This hazard area is located immediately east of Hazard Area III and is the easternmost of the four hazard areas. It is predominantly located south of the paved road running through this area, however, the eastern half (east of the primary Yodaville aviation run-in line) extends north of the road in order to encompass small arms surface danger zones originating from Murrayville East. This area contains the following ground range facilities:

(1) Yodaville aviation target complex (see Paragraph 4004.2b on page 4-22 for a detailed description of this target area) – supports air-to-ground light inert ordnance, aircraft strafing, TACP LASER and small arms target marking, and aviation LASER training activity. This target area is scheduled via a RFMSS airspace request for the Cactus West airspace with specific selection of the Yodaville UTC facility. Aviation activity takes precedence over the ground activity scheduled within this hazard area.

(2) CSOC Murrayville West and East ranges – support .50 caliber (and below) on the west range and 7.62mm (and below) on the east range. Both Murrayville training areas support convoy training and/or ground LASER activity (refer to range SPINS for detailed guidance). Vehicles training at this facility perform

live-fire operations from the dirt road (run-in line to the UTC) in a west and/or east direction (dependent on range SPINS) toward surface targets. Due to the potential impact to aviation activity in this area, using units requesting use of the Murrayville West and East ranges shall submit **both a RFMSS ground request for the CSOC Murrayville range(s) and a RFMSS airspace request for the Cactus West airspace.** The airspace shall be scheduled concurrently with the ground request (or coordinated co-use with scheduled aviation units) before CSOC Murrayville operations will be processed.

(3) Tower 1 – this tower supports several range capabilities and is routinely accessed for maintenance purposes. Access to this tower site shall be scheduled in advance in order to resolve conflicts that may exist with the other range facilities located in this hazard area. Access to this tower area **DOES** conflict with ground operations taking place at the Murrayville East range and with aviation activity scheduled at the Yodaville UTC. Requests will be processed only for times outside of scheduled aviation activity at the Yodaville UTC and outside of scheduled Murrayville East ground training times.

6005. SURFACE DANGER ZONE (SDZ) TOOL

1. General. SDZs define the ground and airspace designated within the training complex for vertical and lateral containment of projectiles, fragments, debris, and components resulting from the firing, launching, or detonation of weapons systems. The SDZ Tool generates worst case scenario SDZs in accordance with [reference (a)].

2. Information

a. SDZs are developed by the operating forces and other range users. The SDZ Tool is used in preparation for live-fire ground training exercises. Footprints are required for all non-standard ground live-fire operations in the RTA when not covered in current SPINS for those ranges. Using units shall submit a completed Concept of Operations (CONOPs) for the non-standard operation. SDZs shall be submitted no later than fourteen (14) days in advance to the Range Safety Office. Required SDZ diagrams must be submitted by email, FAX (928) 269-2964, or delivered to the Range Safety Office at Bldg. 151, Room 113, MCAS Yuma. If determined necessary by the Range Safety Office, the unit may be required to submit a request for a local waiver to the parameters contained in this order (or specific Range SPINS). The deviation/waiver process is described in Chapter 1

of this order and requires no less than thirty days notice for processing.

b. SDZs may be developed on the web by using the MCRTAMS website, https://rtam.tecom.usmc.mil/rm/safety or drawn manually. Requests for software licenses and RTAM Division support should be submitted to tecomrtamsupport@usmc.mil. For information regarding the WDZ tool, see Paragraph 4003 and [reference (a)].

6006. PROCEDURES FOR RANGE CHECK-IN/OUT

1. All live fire ranges must be requested in accordance with Chapter 3 of this order.

2. Prior to reporting to LEG IRON, the unit's certified Range OIC and RSO will become completely familiar with the contents of this order. The designated Range OIC/RSO is required to have completed the range certification process described in Chapter 6, which includes the submittal of a letter signed by the Unit's Commander certifying that all individuals training are certified in the weapon system the unit will be utilizing. The Range OIC/RSO of each training event, must report in person on the day of training to Range Control.

3. A Range Training Area may be checked out the day prior if Range personnel are available (if scheduling permits and on a strict not–to-interfere basis with daily Range Control duties). Day prior range check out is a courtesy and will be entirely at the convenience of Range Control.

a. All range access requires clearance from LEG IRON. Using units shall ensure RFMSS requests are submitted and approved prior to gaining access to the ranges. LEG IRON will process same-day requests on a case-by-case basis. Not submitting electronic RFMSS requests prior to attempting range access can result in denied access or delays while LEG IRON coordination is made. At a minimum and **PRIOR** to crossing any range boundary, the requesting unit will coordinate with LEG IRON and provide the following information:

(1) Unit identification

(2) Training area/range being used (grid if possible)

(3) Type of training/activity

(4) Name and rank of the OIC and RSO where applicable

(5) Number of vehicles and personnel

(6) Time in/expected length of stay

(7) Time out

(8) Presence of a appropriate medical support (if applicable)

(9) Presence of a safety vehicle (if applicable)

b. **At no time will any unit proceed onto any facility or RTA without the authorization from LEG IRON.**

c. Units scheduled to use training areas will have a MCAS Yuma-certified and designated Range RSO/OIC, a safety vehicle, and a corpsman or other medical support; and will check in and out by radio with LEG IRON upon commencing and terminating training in their assigned area. Using units/individuals will maintain and monitor the appropriate LEG IRON safety net at all times and make required hourly radio checks to ensure positive two-way communication is constantly maintained.

d. Based on the particular live fire range, the range schedule, and overlays, the using unit’s Range OIC/RSO will notify Range Control prior to commencing training of any special concerns or dangerous situations.

e. The unit’s Range OIC and RSO of any live-fire event (to include Smokey SAMs and SESAMs) shall be physically present at the range or firing position whenever training is in progress. If it becomes necessary to change RSOs, both old and new RSOs must be physically present at the range or firing position to conduct a face-to-face relief. The Range OIC and RSO changes shall be coordinated with LEG IRON for approval.

f. Prior to departing Range Control, the using unit’s Range OIC/RSO will obtain an OIC and RSO Checklist. Prior to firing, a face-to-face inspection will be conducted by Range Safety Specialists. Upon completion of the scheduled training event, an inspection will be conducted by a Range Safety Specialist. Any information not available prior to the training (such as dud count/ammunition expenditure) will be added to the Range Control Checklist at the end of the training.

g. Signing for a range as unit Range OIC/RSO indicates a thorough understanding and responsibility for absolute compliance with all references of this order as they pertain to

the evolution being conducted, individual range regulations, and all weapons/munitions to be utilized during the exercise.

h. If multiple firing points are in use, each firing point will have a Position Safety Officer (PSO) assigned by the OIC/RSO. This may include the section leader of the particular weapons system being fired.

6007. GROUND RANGE VIOLATIONS

1. Infractions will cause a range violation to be issued. Range Operations personnel, primarily Range Safety Inspectors and Range Wardens, are the issuing agents for these violations.

2. In the event of a violation, all training may be halted until corrective action has been taken. Range OIC/RSO privileges may be revoked by the RCO based on the severity of the infraction(s). Qualifying infractions include, but are not limited to

a. Accessing MCAS Yuma RTA without LEG IRON approval.

b. Conducting live fire operations without LEG IRON approval.

c. Differing from RTA SOPs without written approval from the RCO.

6008. OPFOR AND TARGET SUPPORT

The MCAS Yuma Range Management Department offer Units the ability to request specific targets, Battle Field Effects (BES), and various OPFOR capabilities, to include operation, to meet current pre-deployment requirements and Tactics Techniques and Procedures (TTPs) in accordance with Training and Readiness (T&R)/Mission Essential Task Lists (METLs). Targets and OPFOR support available are described below. For more information, contact the Plans Officer (928)269-6488.

1. Targets and Operation. Range Management provides several target options in support of aviation and/or ground training. Advance coordination and funding is required to support non-standard or complex target requests. The following items are available upon request with advance coordination: Wooden 3D Ground and Aviation targets; Steel 3D aviation targets; automated Portable Infantry Targets (PITS); automated Stationary Infantry Targets (SITS); automated Stationary Armored Targets (SATS); and automated Moving Infantry Targets (MITS). Full scale wood or steel targets must be given no less than 15 days

lead time in order to pre-fabricate, transport, and emplace at the desired RTA. For Large Force Exercises (LFEs) which require targets, Exercise Coordinators must submit for proposed Targets and Range Sweeps included in a Feasibility of Support (FOS) request to the Range Plans Officer. Automated target operation can be provided upon request once a unit has properly scheduled the range and has been approved through the Range Safety Office. The Range Support section has the ability to provide automated targets and operation of those targets throughout all MCAS RTAs. All requests for specific targets and target operation shall be coordinated directly with the Plans Officer at (928)269-6488. Automated target and BES requests must be submitted no less than 48 hours prior to an exercise. No change requests will be accepted less than 48 hours prior to an exercise. All requests for specific wood or steel aviation targets must be submitted in a timely manner in order for funding for materials to be processed.

2. OPFOR Support, Smokey Sam, and MLT.

a. Battlefield Effect Simulators (BES). Range Support offers automated OMEGA 36/60 Remote Launchers which use White Star Cluster (LA-44) and Hostile Fire/IED (LA-46) pyrotechnics which provide enhanced combat realism which can work with automated targets or employed separately. Automated Sound Effect Simulators (SES), Remote-Controlled Dust Generators, and automated non-pyrotechnic Small Arms Fire Simulators (SAFIRE) may also be requested upon the scheduling of the range and Range Safety mission approval. All requests for specific BES, pyrotechnics, and operation shall be coordinated directly with the Range Plans Officer at (928)269-6488.

b. Remote and Manual Smokey Surface-to-Air Missile Teams (R-SST). Range Support offers Smokey SAM support throughout the calendar year. Launchers may be employed remotely or manually depending on the unit’s training objective. If it is desired to employ Smokey SAMs within the impact area remotely, an escort by EOD personnel is required. Using units shall consider that an hour of setup time prior to the mission and an hour post-mission for breakdown is required. In addition, it is imperative that this type of support is identified no less than seven business days prior to the mission for planning and logistics. Using units/Squadrons must schedule desired air space/ground space (i.e.: OPs/GSAs) and event/mission must be approved through Range Safety concurrent with requested OPFOR/SST support if training is within a live fire area. Using units shall submit all training requirements and a proposed OPFOR plan using the Smokey SAM Mission Card (See Figures 6-8 and 6-9). All requests

for Smokey SAM Support, Launchers, Rockets (YW-33), locations, and operation shall be coordinated directly with the Plans Officer at (928)269-6488.

c. It is important to note that for specific missions Range Support works with Yuma Tactical Training Ranges (YTTR/TACTS) in order to provide Smokey SAM threats for a complete threat package to include Man Portable Air Defense Systems (MANPADS), and Electronic Warfare (EW) threats. Users who require EW Threats, Radar Acquisition, and MANPADS should schedule through YTTR Mission Coordinator at (928)269-5742 concurrent to requesting SST through the Plans Officer.

d. Moving Land Target (MLT). YRMD Range Support offers Moving Land Target (MLT) support upon request through our YPG element. Range Support offers the MLT currently in two locations: Target 15N (WISS Airfield) in the R-2507N and UTC Yodaville in R-2301W. The MLT shall be requested no less than two weeks prior to the proposed training exercise. This will allow for funding to be provided and processed through Yuma Proving Ground (YPG). MLT Special Instructions (SPINS) and Procedures can be found on the MLT Mission Card (see Figure 6-10). All requests for the Yuma Range Support MLT, locations, and operation shall be coordinated directly with the Plans Officer at (928)269-6488. The Range support MLT is provided through YPG which is separate from the Moving Land Target offered by YTTR/TACTS. Users who desire the YTTR MLT should schedule through YTTR Mission Coordinator at (928)269-5742.

3. Scheduling. Using units desiring specialized target or OPFOR support as described above shall ensure the RTA (to include time for target and OPFOR inserts/emplacement) have been requested and reserved prior to submitting their target(s) request. For priority events, it is crucial that airspace and ground reservations are made in accordance with their assigned RFMSS deadline. This coordination can be initiated by the exercise's Event Coordinator via the event's designated Scheduling Liaison (see Chapter 3 for Event Coordinator and Scheduling Liaison coordination requirements). **Advance coordination for target support must be completed prior to this RFMSS deadline.** The Scheduling Liaison and Plans Officer will coordinate with the Event Coordinator on range availability and associated costs.

6009. BIVOUACKING ON RANGES

1. Permitted Areas

a. Bivouacking is allowed in designated areas only (such as approved bivouacking areas specifically listed in Appendix B "Other Range Areas" and ground support areas or "sites" (also found in Appendix B). These areas shall be properly scheduled prior to occupation. Units shall receive both range safety and environmental briefs prior to occupation.

b. Using units may bivouac prior, during, and after training in other areas, provided they have made the appropriate coordination and received Range Scheduling approval for all activities.

2. Environmental. Units bivouacking on MCAS Yuma's ranges will comply with the provisions of Chapter 2 of this order.

6010. MEDICAL REQUIREMENTS

U.S. Navy Corpsman/Medical Support and Safety Vehicle. A U.S. Navy Corpsman or civilian equivalent with first aid equipment will be on site for any training evolution within MCAS Yuma's RTA. He/she will not be assigned any additional duties when training is in progress and will NOT participate in training. Figure 6-3 outlines medical requirements for range training. Range OICs/RSOs will ensure that the appropriate level of support is on hand prior to commencing training. Additionally, a vehicle designated as a safety vehicle will be located at all ranges during training and will NOT be used for any other purpose. POVs are NOT approved safety vehicles. However, government vehicles (and rental vehicles serving in support of the training activity) are authorized for use. The presence of one U.S. Navy corpsman/qualified medical support and one safety vehicle is the minimum requirement.

6011. CONDUCT OF TRAINING

1. General

a. Assignment to a training area does not include any range, Artillery Firing Area (AFA), Mortar Position (MP), Observation Post (OP), Landing Zone (LZ), Drop Zone (DZ), airspace, or other training facilities (including Combat Village) located within that area unless specifically requested and approved by MCAS Yuma Range Scheduling.

b. Training shall be conducted and supervised in a manner that avoids damage to facilities and utilities located within the training areas. Using units in the vicinity of any aviation training facility shall ensure sites are not disturbed, no obstruction is left in the area, and no fighting positions or other entrenchments are constructed at these locations.

c. Training shall be conducted in a manner that avoids unnecessary damage to or destruction of natural resources (refer to Chapter 2 of this order).

d. Safety precautions must be strictly adhered to as prescribed in the MCO 3570 series. Anyone has the option to call “cease-fire” over his/her respective LEG IRON frequency.

2. LHD/FCLP Deck. Using units training in the vicinity of AUX-II will remain clear of FCLP Deck. Vehicle traffic on these pads is prohibited.

3. Fighting Position. Fighting positions may only be authorized by YRMD. If approved, fighting positions will be filled in upon the completion of each training exercise.

4. Trash. Trash will not be buried/burned or otherwise improperly disposed of anywhere on any MCAS Yuma range. The practice of stockpiling refuse for removal later is not permitted. Policing of training areas is the responsibility of the using unit.

5. Communication Wire. All communication wire laid by using units in training areas shall be retrieved prior to departure.

6. NOTAM Requirements. Some ground events require NOTAMs due to associated impacts beyond the restricted airspace areas. The following ranges/events require a NOTAM to be published no later than 2 hours prior to training unless more restrictive guidance is contained in the SPINS for that particular range. SPINS have precedence when conflicts in NOTAM publication arise. At a minimum, the following range areas require a NOTAM to be published in advance of their use:

a. Munitions Treatment Range (MTR)

b. S-4-1

c. S-4-8

d. UAS training in Class G airspace

6012. FORCE-ON-FORCE TRAINING

1. Using units transitioning from live-fire training to force-on-force training shall observe the control measures listed below.

2. No force-on-force will take place within a 24-hour period from the end of the live-fire event.

3. The RSO for force-on-force shall not be the same RSO from the live-fire event.

4. The RSO for force-on-force will ensure that he/she takes the following steps prior to issuing blank or SESAMS ammunition and conducting the force-on-force event.

a. Obtain the NAVMC 11381, Expenditure Report from the live-fire RSO to ensure all ammunition is accounted for.

b. Conduct a “shake-down” of every participant prior to conducting the force-on-force event. The shake-down shall consist, at a minimum, of the following:

(1) Inspect all weapons to ensure they are in Condition 4.

(2) Inspect all personnel to ensure they do not have any ammunition.

(3) Inspect all magazines and magazine pouches to ensure they are empty.

c. If any live ammunition is discovered during the training, the OIC will cease all activities, recover all ammunition, and conduct another shake down.

6013. LIVE-FIRING IN TRAINING AREAS

Live-firing in training areas is limited to established ranges, AFAs and MPs.

6014. AUTHORIZATION TO FIRE

1. Firing will not be conducted unless it has been scheduled with the Range Scheduling Office and authorized by LEG IRON.

2. Being cleared “HOT” by LEG IRON confirms that any known conflict has been resolved and only authorizes the commencement of fire at the discretion of the OIC and RSO. This clearance

does not relieve the OIC and RSO from their responsibilities of ensuring safety throughout the training evolution.

6015. IMPACT AREAS

Detailed descriptions (coordinates and imagery) of the impact areas are provided in Appendices B and C of this order.

6016. COMBAT VILLAGE

1. General

a. Combat Village (located at 12S TB 21600 02500 or N32°31’28.0”N/W113°57’50.0”W) is restricted from all personnel except those scheduled at this RTA.

b. Only blank munitions are authorized.

c. Pyrotechnics are only authorized in the confines of the Combat Village training area. When using pyrotechnics, exercise extreme caution to prevent fires. Ground signals (launcher-type) shall be aimed away from all buildings, and shall not be fired within two meters of personnel, buildings, or equipment. Burning-type, or smoke-producing grenades, shall be fired at least 10 meters away from personnel. Smoke grenades shall not be ignited within five feet of dry grass or other flammable materials.

d. All training aids, including pyrotechnics, will be cleared upon completion of training.

e. All concertina and barbed wire etc. laid by the using unit will be retrieved prior to departure from this RTA.

6017. CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR (CBRN) CONFIDENCE CHAMBER

This facility is a cinder block building capable of accommodating fifteen (15) personnel and one (1) CBRN instructor. This building is located on the western edge of the Barry M. Goldwater Range (near the KD Rifle and Pistol Ranges) at grid location 11S QS 30089 04282. For scheduling support, contact Range Scheduling.

6018. INFANTRY WEAPONS

1. Small Arms and Machine-guns

a. All weapons will remain in Condition 4 while in a “Cold” status.

b. After completion of each evolution of fire, the RSO will ensure all weapons are clear and in a Condition 4 status.

c. The RSO will ensure proper settings of headspace and timing on all applicable weapons prior to shooting.

d. No one is allowed forward of any gun emplacement, for any purpose, until authorized by the RSO.

2. Mortars/Artillery

a. All indirect fire training shall be conducted in accordance with current MCO and FM directives including and not limited to [references (a), (b), (l), and (m)].

b. Mortar firing over the heads of unprotected troops is strictly prohibited. Refer to [reference (b)] for details.

c. The highest maximum ordinate of the ammunition being used will be reported to LEG IRON, in feet, prior to firing.

d. The highest maximum ordinate will be contained within scheduled airspace.

e. Unused powder increments must be safeguarded and handled in accordance with unit SOP. Contact the Range Safety Office for site approval.

f. All ordnance fired shall be toward designated impact areas only. All SDZs shall depict impact area information with appropriate firing (left and right lateral) limitations. Impact area coordinate information can be found in Appendix B.

3. Ground Rockets and Missiles. The unit RSO will coordinate and provide all safety diagrams/SDZs to the Yuma RSO at least fourteen (14) days prior to firing. Only SDZs approved by the RCO are authorized.

4. Grenades

a. Field-firing of grenades includes the firing of all types of rifle grenades, to include the 40 mm grenade family (MK19, M79, and M203) and throwing of hand grenades [see references (b) and (n)].

b. Fragmentation, offensive, and WP hand grenade duds shall be rendered safe or destroyed by qualified EOD personnel only. If a dud occurs, the RSO shall order “cease fire”, record time dud occurred, keep all troops under cover, and notify LEG IRON which will contact EOD for assistance. EOD support may be limited and most often require a minimum of 3-4 hours to respond. Training will be stopped until EOD can clear the area. If present, EOD will observe a minimum 30-minute waiting period. After the waiting period, the EOD Team will clear the dud and inform the RSO when the range is clear. The RSO will then contact LEG IRON and request to go back into a “Hot” status.

c. Grenade ranges shall cease training one hour prior to sunset. In the event a dud grenade is not cleared before reduced light conditions, the using unit shall provide a guard force until the grenade can be cleared.

d. Only one High Explosive (HE) hand grenade will be thrown at a time. Multiple throwing of HE hand grenades into one throwing bay is strictly prohibited. When training on a range with divided walls and a dud occurs, LEG IRON can approve training to continue on the side opposite of the dud.

e. All personnel engaged in any type of HE hand grenade, rifle, or 40mm grenade training are required to wear helmets, flak jackets, eye protection, and hearing protection at all times during firing. Eye protection is required for all personnel within 150 m from the hand grenade throwing bay. Successful completion of practice grenade training is mandatory prior to live grenade training.

f. Safety precaution shall be strictly adhered to as prescribed by [references (a) and (g)], appropriate field and technical manuals, and this order.

g. Live grenades shall not be thrown into standing water and mud.

6019. MINES, BOOBY TRAPS, AND PYROTECHNICS

1. General

a. The use of explosive devices will be confined to a designated RTA. All personnel will be at a minimum of two meters of the emplaced flare. Helmets, flak jackets, eye protection, and hearing protection must be worn. All personnel will be clear of the SDZ, and located in a safe area during detonation/functioning of mines and booby traps.

b. Detonations in impact areas will have approval from the RCO. Live mines will not be placed under or near any metal object, which could become a missile hazard (e.g. jeeps, 55-gallon drums, etc.).

c. Practice mines and booby traps may be used in all training areas and on all demolition ranges. Their use will be approved through the Range Safety Office.

2. No live/practice mines or booby traps with any type of explosive devices will be left on any range or in any maneuver area. Pyrotechnics may be used in all impact areas, training areas, and firing ranges. Using units will request permission from LEG IRON prior to using any pyrotechnic device.

a. Pyrotechnics will be stored in small amounts, away from any firing points, either right or left of, but not directly behind the firing point. They will be placed to minimize the possibility of ignition or explosion in case of an accident during firing.

b. Use extreme care when handling pyrotechnics so they do not fall onto shooters or other personnel, into boxes of pyrotechnics, or other ammunition. Extreme care will be exercised when firing through trees or other obstructions.

c. Personnel participating in exercises that include the firing of aerial pyrotechnics such as Smokey SAMS, handheld pop-up flares, and 40mm pyrotechnics shall wear Personal Protective Equipment per [reference (a)] and unit SOP.

6020. DEMOLITIONS

1. General. These regulations apply to the use of all types of explosives and demolition equipment used during training. Specific range special instructions outline the level of supportability regarding demolition operations.

2. Munitions Treatment Range (MTR)

a. Station EOD has priority use of the MTR. Due to its location on the western boundary of the R-2301 West (Cactus West sub-range), LEG IRON coordinates its real-time use with YUMA RANGE. The effects of demolition operations can escape the restricted airspace boundary and therefore requires LEG IRON to conduct real-time coordination to ensure safety of flight for area aircraft.

b. Only the MCAS Yuma EOD Officer or EOD SNCOIC can request emergency use of the MTR. All other requests for use of the MTR require a minimum 2-week notice to Range Scheduling and coordination with EOD. In order to allow Range Scheduling time to process the required NOTAM for the area, a minimum of two business days notice is required for confirmation of the range's use. Failure to meet these deadlines will result in disapproval of the request(s) for using this facility.

6021. NON-LETHAL WEAPONS

Contact Range Safety Office for guidance on use of non-lethal weapons.

6022. TRAINING AREA ROADS

The speed limit on all roads throughout Yuma RTA is 25 mph unless otherwise posted, or when conditions dictate a lower speed to ensure safe transit. All vehicles will remain on designated roads. Coordination must be made with CBM following approval from LEG IRON prior to transiting Gasline Road, Commercial (928)269-7326. Coordination needs to be made for transiting the range in both directions via Gasline Road. A gate currently exists at the southern end of the road requiring prior coordination for access.

6023. RESEARCH, DEVELOPMENT, TESTING, AND EVALUATION (RDT&E)

Non-standard and non-certified explosives and ordnance are NOT authorized for use on MCAS Yuma's RTA without a limited safety review and letter of authorization from the requesting activity. All RDT&E requests shall be submitted to United States Marine Corps Systems Command (MARCORSYSCOM), Training and Education Command (TECOM) Range and Training Area Management (RTAM) Division. Requesting units may be required to provide additional data before such requests will be considered. More information regarding RDT&E requests can be found in Paragraph 5005 (page 5-4).

6024. EXPERIMENTAL WEAPONS AND ORDNANCE

Experimental weapons or ordnance will not be fired on ranges or AFAs in the MCAS Yuma RTAs without prior approval from the CO, MCAS Yuma via the RCO. Contact the Installation Range Safety Office at DSN 269-5574 or Commercial (928)269-5574 to initiate scheduling the use of experimental weapons or ordnance on MCAS Yuma RTAs.

6025. PARACHUTE OPERATIONS

1. General. Parachute and paradrop operations include dropping or releasing personnel, cargo, vehicles, illumination, or any item from an aircraft for descent to the ground.

2. Scheduling and Briefing. Prior to conducting any parachute or paradrop operations, the unit desiring to conduct such training shall coordinate and schedule (no less than 14 days in advance) the airspace and appropriate ground requirements needed to support the operation. Scheduling of the airspace and DZ shall be done through the Range Scheduling Office. Due to the complexity and number of conflicts involved, the unit shall coordinate with Range Safety for **initial planning well before the 14-day scheduling deadline**. An Aircrew Range Safety Brief and a Range Safety Brief is mandatory prior to conducting parachute operations aboard MCAS Yuma's RTA.

3. Restrictions. The following restrictions and safety precautions apply to all parachute and para-drop operations in MCAS Yuma RTA.

a. All parachute operations will be conducted in accordance with MCWP 3-15.7, Static Line Parachuting Techniques and Training [reference (p)]. The unit RSO will have the final approval authority for drops based on the wind condition. The RSO will suspend or cancel drop operations if, in his judgment, wind direction or wind gusts in combination with aircraft position make the drop unsafe.

b. During static-line parachute operations, the winds on the surface will not exceed 13 knots, or 30 knots through the jump altitude. When utilizing Ram-Air parachutes, either static-line deployed or manually deployed, the winds on the surface will not exceed 18 knots; the winds through the jump altitude are unlimited.

c. The Drop Zone Safety Officer (DZSO) must maintain two-way radio communication with the drop aircraft, and with LEG IRON. In the event of radio communication failure, operations shall be suspended until communication with LEG IRON is reestablished.

d. No drops will be made from altitudes exceeding the height restrictions of MCAS Yuma Restricted Airspace. If a training requirement exists for parachute/para-drop operations above these altitudes, advanced coordination and approval authority

will be required from the Federal Aviation Administration (FAA). In this case, notification and coordination with the MCAS Yuma CERAP Facility Officer shall be made at least ten (10) business days prior to the desired paradrop operation.

e. Parachute operations within Military Operations Areas (MOAs) require a waiver from the local area Flight Standards District Office (FSDO). A copy of this waiver shall be provided to Range Scheduling before the affected MOA will be scheduled. Once the waiver is received and the MOA successfully reserved, MCAS Yuma Range Control Facility shall ensure that a NOTAM is published for the activity.

f. All High Altitude High Opening/High Altitude Low Opening (HAHO/HALO) paradrops shall be conducted in VFR conditions to include aircraft transit/pattern and jumper descent to DZ.

g. A cold pass is required prior to dropping cargo (CDS/Heavy Bundles).

h. Parachute and paradrop operations shall be conducted in designated DZ areas only as established/approved by the Director, Range Operations Division IAW AFI 13-217 (Drop Zone and Landing Zone Operations). A Tactical DZ survey is required and provided by Range Management upon request. Contact the Plans Officer or Range Scheduling for more information. Requests for parachute/para-drop operations in areas other than routinely used DZs will require advance approval from the RCO via coordination with the Plans Officer.

4. Hazards. The Commander and designated DZSO/Jump Master shall perform the following actions to reduce the risks associated with hazards.

a. The Unit Commander shall:

(1) Ensure a risk assessment analysis has been conducted to determine the risk level for jumpers. If a high risk exists, select (if possible) an alternate DZ that allows mission conduct at a lower risk level.

(2) Ensure a follow-on assessment has been made to determine whether the jumpers’ risk level has changed.

b. The DZSO/Jump Master shall conduct a joint site survey of the DZ with the Plans Officer no less than 24 hours prior to conducting live parachute operations in order to validate the DZ survey and identify any potential hazards in and around the DZ. Subsequent to the site inspection, the specific unit shall sign

the Tactical DZ Survey (AF IMT 3823) which shall be kept on file with the RCO. The results of the DZ assessment shall be included in the ORM prepared by the unit conducting the parachute training.

c. Parachute/para-drop operations will not be approved in impact areas without the appropriate Range Safety review and necessary EOD sweep of the area.

5. Procedures. The following control procedures will apply to all parachute and paradrop operations conducted at MCAS Yuma.

a. The DZSO shall be physically located within the DZ. Prior to occupying the DZ, the DZSO shall contact LEG IRON to receive a safety brief and provide LEG IRON with a brief scenario of the training to be conducted. The scenario shall include type aircraft, proposed start/stop times, and the type of personnel and type of cargo to be dropped.

b. All aircraft entering MCAS Yuma Restricted Airspace for participation in parachute/para-drop operations shall first check-in with YUMA RANGE. After clearance into the airspace, aircraft shall contact LEG IRON for further coordination with the unit’s DZSO.

6. DZs. A listing of previously-used Tactical DZs within the MCAS Yuma RTA can be provided upon request to help facilitate new DZ surveys. Contact the Plans Officer for certification support.

6026. CONVOY SECURITY OPERATIONS COURSE

1. General. The Convoy Security Operations Course (CSOC) is an established convoy course located in the BMGR. Depending on how the course is scheduled, there are up to four separate target engagement areas (CSOC 1, CSOC 2, Murrayville West, and Murrayville East). Refer to Appendix C of this order for specific ordnance information. Contact the Range Safety Office for associated range SPINS, designated routes, recovery procedures, blank and live fires restrictions, interaction with civilians, and vehicle maneuvering.

2. CSOC 1 & 2 General Instructions

a. The Cactus West airspace is required for the safe conduct of live fire CSOC operations. Aviation training takes precedence over requests for live fire training in the CSOC. CSOC operations involving aircraft support shall include both

ground and airspace requests in accordance to scheduling procedures outlined in Chapter 3. Non-live fire (or blank ammunitions) operations that **do not include use of Murrayville** and **remain outside of the applicable Hazard Areas** can be requested without concurrent airspace.

b. All vehicular traffic must stay on designated roads. Contact Range Safety to coordinate Convoy Operations and to receive options for convoy route planning.

c. Washes and trails are not designated as roads. All washes and trails are off limits to vehicular traffic.

d. At no time will vehicles be driven off road. Exception to this policy is confined to recovery efforts which restrict vehicles to no more than 25 ft. off the designated roads.

e. All live and blank fire and maneuver by units will be conducted in designated areas only. Contact Range Safety for specific training area information and to receive the applicable CSOC Range SPINS and required range brief.

3. Murrayville General Instructions

a. Murrayville is an extension of the CSOC and can be scheduled separately or simultaneously with CSOC operations. The Cactus West airspace is required for the safe conduct of Murrayville operations since Murrayville is located within a Hazard Area. Aviation training takes precedence over requests for training in the Murrayville complex. **Murrayville operations shall include both ground and airspace requests** in accordance with scheduling procedures outlined in Chapter 3.

b. All vehicular traffic must stay on designated roads. Contact Range Safety to coordinate Convoy Operations and to receive options for convoy route planning.

c. Washes and trails are not designated as roads. All washes and trails are off limits to vehicular traffic.

d. At no time will vehicles be driven off road.

e. All live and blank firing maneuvers will be conducted in designated areas and in accordance with Murrayville Range SPINS. Contact Range Safety for specific training area information and to receive a copy of the Range SPINS and required range brief.

6027. RANGES RESCUE 01 AND RESCUE 01A

These two ranges offer either static or maneuver training within Hazard Area I. For additional information and for a copy of the SPINS for this range, contact MCAS Yuma Range Scheduling or MCAS Yuma Range Safety Officer.

6028. KNOWN-DISTANCE RANGES

MCAS Yuma supports marksmanship training with two known-distance ranges. For use of either the KD Rifle or KD Pistol ranges, first contact the Marksmanship Training Unit OIC for availability and training requirements.

6029. CAMP BILLY MACHEN DESERT WARFARE TRAINING FACILITY

1. General. Camp Billy Machen (CBM) is located at 11S PS 40421 84619. It is a 12-acre compound serving as a Naval Special Warfare Command (NSWC) base of operations from which NSWC personnel plan, coordinate, and execute training operations in the Desert Warfare Training Facility (DWTF). CBM provides range operations command and control and other associated logistical and operational support for NSWC training activities at the DWTF. Training at DWTF includes unit level, live-fire, ground training and maneuver in support of training primarily conducted during the Sea, Air, and Land (SEAL) Qualification Training (SQT) and Unit Level Training (ULT). Training opportunities include: rifle and pistol marksmanship; land navigation and reconnaissance; surveillance; sniper; direct action; insertion and extraction in hostile territory; combat search and rescue; demolitions and breaching; small unit supporting arms exercises; and desert survival.

2. Range Description. The DWTF contains two distinct training areas, Special Warfare Training Area Four (SWAT-4) and Special Warfare Training Area Five (SWAT-5). SWAT-4 contains 27,046 acres of desert bordering CBM on the northwest, east, and southeast, paralleling the Coachella Canal. SWAT-5 is an adjacent training area containing 5,724 acres of land along the northwestern boundary of the CMAGR. Training areas include: Demolition range, Hand Grenade range, High Explosive (HE) Anti-mechanized Grenade/Rocket range, LFAM Immediate Action Drill, Sniper, Claymore range, Static Small Arms ranges, 60mm Mortar range, Platoon-sized LFAM/Immediate Action Drill ranges, Time on Target Machine Gun ranges, Platoon-sized LFAM Deliberate Assault ranges, and a Tactical Vehicle Patrol range.

3. Scheduling. MCAS Yuma Range Scheduling is responsible for approving requests for scheduling SWAT-4 and SWAT-5 ranges. Using units schedule ranges through RFMSS or Commercial

(928)269-5575. Training on the SWAT-4/5 ranges should be requested no less than 14 days in advance of a training event.

4. Special Instructions.

a. Before occupying a SWAT-4/5 range, the assigned range OIC shall contact CBM Quarterdeck Staff to check out and read the Special Instructions (SPINS) for the range the unit will be utilizing. The OIC must also check out a radio from the CBM Quarterdeck Staff to establish and maintain communication with CBM.

b. Upon arriving at the range, the OIC/RSO will contact LEG IRON via the CBM Quarterdeck to request permission to occupy the range. Once the using unit has occupied the range and is prepared to commence training, the OIC will contact LEG IRON via the CBM Quarterdeck and request to be placed in an operational or “Hot” status. The OIC will maintain communication with LEG IRON via CBM Quarterdeck throughout the training event.

c. Upon completion of training, the OIC shall contact LEG IRON via the CBM Quarterdeck and request to go into a “Cold” status. Once the unit is in a “Cold” status, the OIC will provide an accurate ammunition expenditure report to LEG IRON via the CBM Quarterdeck Staff.

Weapon system	OIC [1]			RSO [1]		
	OFF	WO	NCO	OFF	WO	NCO
Practice hand grenades; sub-caliber training devices; laser devices; firing devices; simulators & trip flares; small arms and machineguns.	X	X	E-6	X	X	E-5
Chemical agents and smokes [2]	X	X	E-6	X	X	E-5
Aerial gunnery & air defense weapons; live grenades, grenade launchers, and grenade machineguns; live mines & demolitions; tank & fighting vehicle cannons.	X	X	E-7	X	X	E-6
Field artillery [3]	X	X	E-7	X	X	E-6
Mortars	X	X	E-6	X	X	E-6[4]
Air Defense Artillery rockets and guided missiles.	X	X		X	X[5]	
Direct fire antitank rockets and missiles	X	X	E-7	X	X	E-6
Live-fire exercises using organic weapons, squad through company, battery, troop.	X	X	E-7	X	X	E-6
CALFEX/CAX using outside fire support, troop, battery, squad, platoon, company; or battalion and larger. [6]	X	X	E-7	X	X	E-6

Notes:

1. Civilians in the grade of GS–07 and above, or equivalent, may act as OIC; GS–05 and above, or equivalent, may act as RSO.
2. For the Marine Corps, OIC and RSO must be E-4 and above and be chemical, biological, radiological, and nuclear (CBRN) MOS 5702/5711 when conducting CBRN or smoke training. For the Army, OIC and RSO must be CBRN qualified when conducting CBRN or smoke training.
3. Use of E-7s as OICs is authorized only when approved by the senior commander (Army)/installation commander (Marine Corps). Duties of the RSO are normally performed by either the battery executive officer or platoon leader.
4. RSO for Marine Corps can be an E-5 for mortar training activities.
5. SRSO will be a CW3, CWO3, or higher or civilian in the grade of GS–12 or above.
6. For battalion or larger CALFEX/CAX, OIC will be a field grade officer; exercise RSO will be E-7 or above.

Source: DA PAM 385-63 dated 30 January 2012

FIGURE 6-1 OFFICER-IN-CHARGE (OIC)/ RANGE SAFETY OFFICER (RSO) APPOINTMENT REQUIREMENTS

MCAS Yuma Range OIC / RSO Requirements

Event			OIC?		RSO?		Proof of Laser Qualification?	Annual Range Brief?	Notes
Ground Activity	Live-Fire	No Live-Fire	MarineNet Cert.?	Yuma Local Training?	MarineNet Cert.?	Yuma Local Training?			
All Small Arms	X		Yes	Yes	Yes	Yes	Yes, If applicable	N/A	
All Indirect Fire	X		Yes	Yes	Yes	Yes	Yes, If applicable	N/A	
FARP		X	No	No	Yes	Yes	N/A	N/A	1
RGR/TBFDS (no refueling)		X	No	No	No	No	N/A	Yes	
FAC/FO/JTAC/TACP	X		Yes	Yes	Yes	Yes	Yes, If applicable	N/A	2,3
SST	X		Yes	Yes	Yes	Yes	N/A	N/A	4
HST		X	Yes	Yes	Yes	Yes	N/A	N/A	4
Gas Chamber		X	Yes	Yes	Yes	Yes	N/A	N/A	5
MMT Ops		X	No	No	Yes	Yes	N/A	N/A	
Patrolling/Hikes		X	No	No	Yes	Yes	N/A	Yes	
Land Navigation		X	No	No	Yes	Yes	N/A	Yes	
Bivouac		X	No	No	Yes	Yes	N/A	N/A	
EOD (non-emergency MTR)	X		Yes	Yes	Yes	Yes	N/A	N/A	
Demolition Training	X		Yes	Yes	Yes	Yes	N/A	N/A	
EOD Operations/Sweeps	X		No	No	No	No	N/A	N/A	6
EW Support		X	No	No	No	No	N/A	Yes	
MLT Support		X	No	No	Yes	Yes	N/A	Yes	
Convoy Driving/Licensing Only		X	No	No	Yes	Yes	N/A	N/A	
Convoy Live-Fire	X		Yes	Yes	Yes	Yes	Yes	N/A	
LAAD	X		Yes	Yes	Yes	Yes	Yes, If applicable	N/A	
Laser Training	X		Yes	Yes	Yes	Yes	Yes	N/A	
MHE Support		X	No	No	Yes	Yes	N/A	Yes	
UAS Flight Operations		X	Yes	Yes	Yes	Yes	Yes, If applicable	N/A	
Maint, RECCE, Surveys, Admin		X	No	No	No	No	N/A	Yes	

Notes:

1 - For FARP operations, the RSO shall be, at a minimum, a SGT.

2 - Proof of FAC/JTAC qualification is required before being certified as a MCAS Yuma Range OIC or RSO.

3 - An aviator for the training event can serve as Range OIC.

4 - For WTI only, SOF Desk can serve as Range OIC.

5 - OIC and RSO must be E-4 and above and be chemical, biological, radiological, and nuclear (CBRN) MOS 5702/5711 when conducting CBRN or smoke training.

6 - EOD Technician SHALL act as the RSO.

FIGURE 6-2 MCAS YUMA RANGE OIC/RSO REQUIREMENTS

MEDICAL SUPPORT REQUIREMENTS FOR LIVE-FIRE AND TRAINING AREAS			
CATEGORY	**DESCRIPTION**	**MINIMUM CAPABILITIES**	**ALLOWED TRAINING COVERAGE**
1	Combat Life Saver	• Patient assessment • Basic First Aid • Basic Airway Management • Cardiopulmonary resuscitation	Any training not involving ordnance Exceptions: Dive Ops, Para Ops, HRST Ops
2	EMT-I All Corpsmen or Medics	• Patient assessment • Advanced first aid • Use of adjunctive breathing aid & administration of oxygen • Automated External Defibrillator • Cardiopulmonary resuscitation • Transportation of ill & injured persons • Manual Defibrillation • Endotracheal (ET) intubation • Esophageal-trachea airway device (combitube) • Endotracheal (ET) intubation	Cat-1 Coverage Dive Ops, Para Ops, HRST Ops Static Fire of Small Arms (.50 caliber & below)
3	EMT-II All Corpsmen or Medics	• All EMT-I skills • EKG monitoring • Defibrillation & Cardioversion • Antishock trousers • Intravenous infusion • Esophageal airway • Obtain venous blood • 9 medications • Laryngoscope • Gastric suction	Cat-2 Coverage Any High Explosives or Demolitions Any Fire & Movement/Maneuver Any CQB/IBT Training
	Paramedic Special Ops Corpsmen Medics IDTs	• All EMT-I and IIs skills and medications • Laryngoscope • Endotracheal (ET) intubation (adults, oral) • Glucose measuring • Valsalva’s Maneuver • Needle thoracostomy and cricothyroidotomy • Nasogastric intubation (adult) • 21 medications	

FIGURE 6-3 MEDICAL SUPPORT REQUIREMENTS FOR LIVE-FIRE AND TRAINING AREA

RANGE OIC/RSO CERTIFICATION REQUIREMENTS

ALL LIVE FIRE TRAINING EVENTS REQUIRE (1) RANGE OIC AND (1) RSO. THE RSO SHALL BE AN OBSERVER ONLY AND CANNOT PARTICIPATE IN THE TRAINING EVENT. ALL THREE STEPS MUST BE COMPLETED BEFORE TRAINING CAN BE APPROVED ON MCAS YUMA'S RANGES.

1. **MarineNet Range Safety Course:**

a. IAW MARADMIN 214-06, to become certified as a Range OIC/RSO, personnel must complete the MarineNet Range Safety Officers Course located at https://www.marinenet.usmc.mil/marinenet/, course number CI060120CA. Fax the completion certificate to Range Safety at (928)269-2216.

b. IAW MARADMIN 436-12, to become certified as a LASER Range Safety Officer (LRSO), personnel must complete the MarineNet Range LASER Safety Officers Course located at https://www.marinenet.usmc.mil/marinenet/, course number RTAMLRSOAA. Fax the completion certificate to Range Safety at (928)269-2216.

c. Individuals shall call the Range Safety Officer (928)269-5574 in advance in order to receive the fax. Review the applicable MARADMIN for specific instructions regarding this course and its associated examination. For non-Marine personnel requiring certification, contact the Range Safety Officer for other Range Safety Course completion options.

2. **MCAS Yuma Local Range Safety Class:** IAW MCO 3570.1C/DA PAM 385-63, all personnel desiring to become certified as a Range OIC/RSO shall complete the MCAS Yuma Range Safety Course. There are two ways to complete this requirement:

a. Go to the following link: (http://www.yuma.usmc.mil/range/safety/login.asp). Register, log-in, and complete the training and the test. Once complete, the individual's information will be added to the website's database. The Range Safety Officer will process new certifications within two business days of completion.

b. If internet access is unavailable, contact the MCAS Yuma Range Safety Officer to schedule a Yuma Range Safety class to be given at MCAS Yuma, AZ. At least two weeks advance notice is required for classes.

3. **Unit Commander Range OIC/RSO Designation Letter**: IAW MCO 3570.1C/DA PAM 385-63 and before training can be authorized on MCAS Yuma RTAs, all units shall provide a Unit Commander Range OIC/RSO designation letter. This designation letter should annotate all weapon systems qualifications (to include LASER certifications) for individuals the unit wishes to use for Range OIC/RSO purposes. The signed letter can be E-Mailed or sent via fax to the Range Safety Office. A sample letter can be provided upon request.

***Designation as a Range OIC and/or a Range Safety Officer for unit training is dependent upon rank and weapon systems qualifications. Refer to MCO 3570.1C/DA PAM 385-63 Table 1-1 on page 2 for OIC/RSO appointment requirements.

FIGURE 6-4 RANGE OIC/RSO CERTIFICATION PROCESS

BMGR HAZARD AREAS

1:150,000

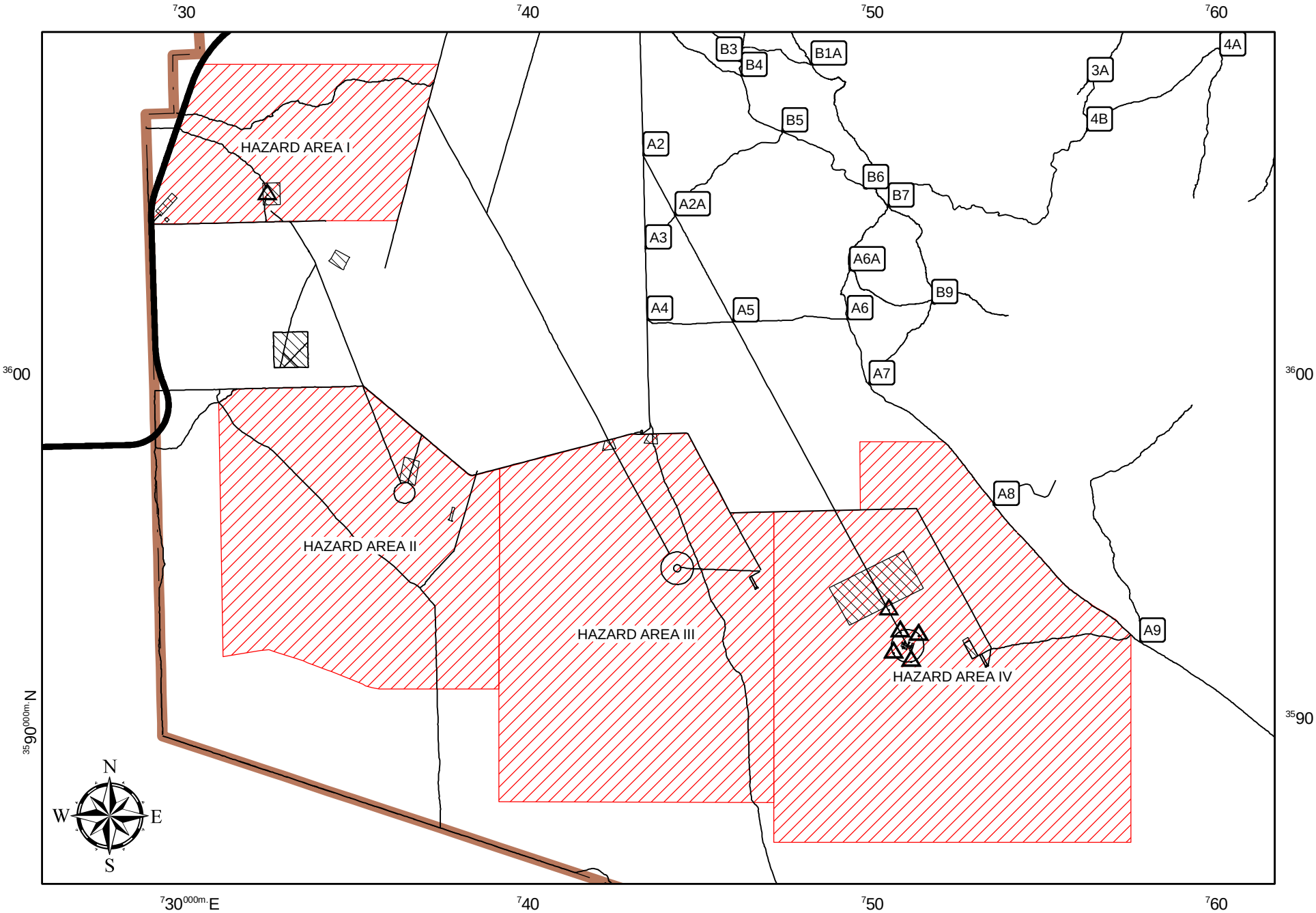

FIGURE 6-5 HAZARD AREA MAP

BMGR HAZARD AREAS

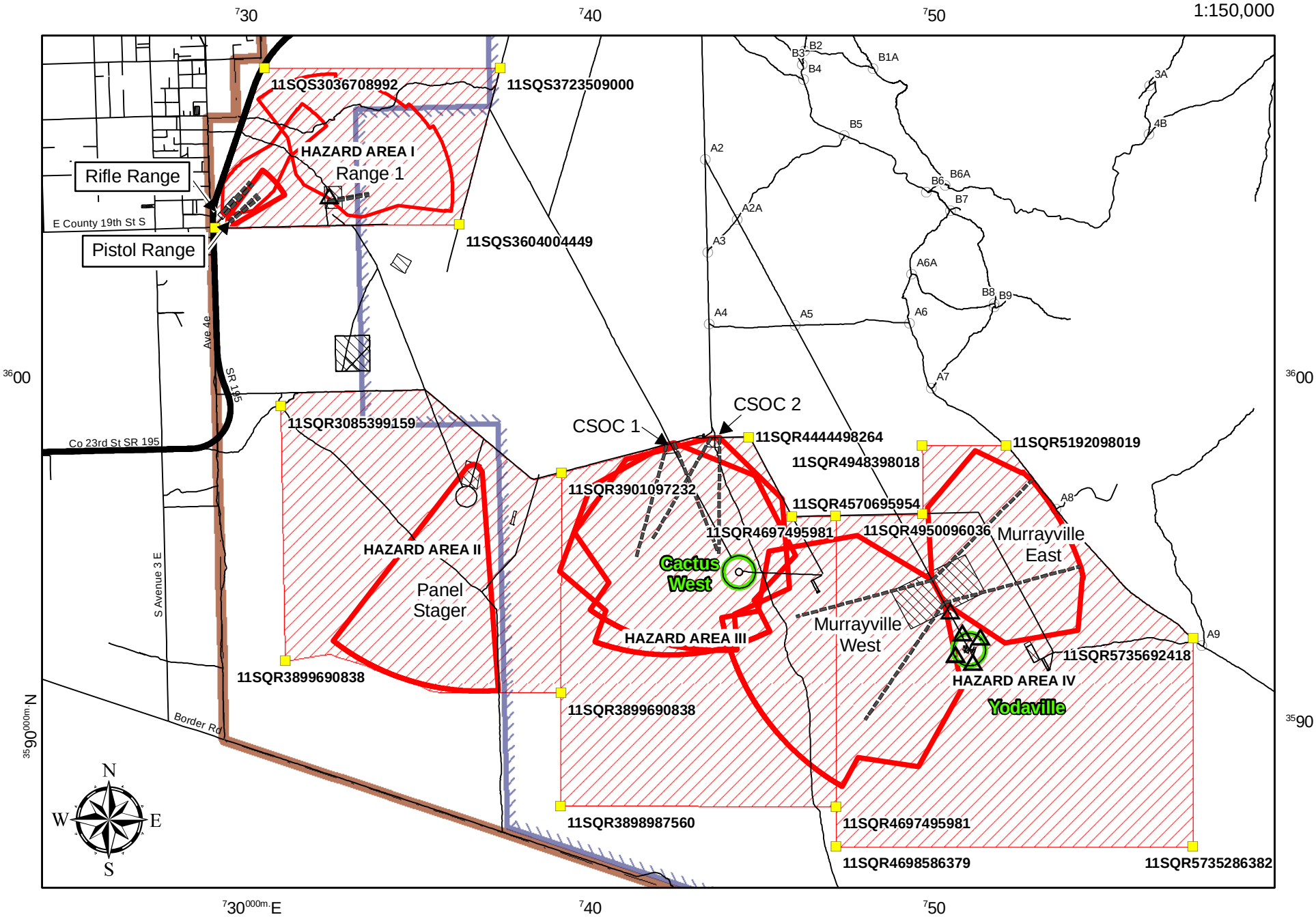

FIGURE 6-6 HAZARD AREA MAP WITH MGRS GRID COORDINATES

HAZARD AREAS
ASSOCIATED FACILITIES MATRIX

Hazard Area I			
Associated Facilities:	**RFMSS Ground Request Required?**	**RFMSS Air Request Required?**	**NOTES**
KD Rifle Range	Yes	No	Units training on these ranges shall put themselves in a "CHECK FIRE" status when aircraft are observed in the immediate area.
KD Pistol Range	Yes	No	
Range 01	Yes	No	
Range 01A	Yes	No	
AUX-II FASP	Yes	No	
Hazard Area II			
Associated Facilities:			
Panel Stager 2	Yes	No	Units training on Panel Stager 2 shall put themselves in a "CHECK FIRE" status when aircraft are observed in the immediate area.
EOD Range (near entrance of Panel Stager)	Yes	No	NOTAM Required due to range effects outside restricted airspace
IDS Tower 3	Yes	No	This tower cannot be occupied when Panel Stager 2 or the EOD Range are being used
Hazard Area III			
Associated Facilities:			
Cactus West Target Complex	Yes - if accessing via ground	Yes - for aviation activity	
CSOC 1 & 2	Yes	Yes	These ranges require concurrent scheduling of the Cactus West airspace
Cactus West North Tower	Yes	No	This tower's location is safe for ground access without an airspace request
Tower 2 (also called Cactus West South Tower)	Yes	Yes	This tower cannot be accessed/occupied when the Cactus West airspace is scheduled for ordnance employment, laser operations, or when strafing berms are in use
Foothills Boulevard (that portion within Hazard Area III only)	Yes	Yes	This portion of the road cannot be accessed when Cactus West airspace or Murrayville West is scheduled
Hazard Area IV			
Associated Facilities:			
Yodaville UTC Target Complex	Yes - if accessing via ground	Yes - for aviation activity	
CSOC Murrayville West & East	Yes	Yes	These ranges require concurrent scheduling of the Cactus West (select Yodaville UTC) airspace. Murrayville West closes Foothills Blvd.
Yodaville North Tower	Yes	Yes	This tower cannot be accessed/occupied when Murrayville East or Cactus West Airspace (with Yodaville UTC ordnance and laser operations) are occupied
IDS Tower 1 (also called Yodaville South Tower)	Yes	Yes	This tower cannot be accessed/occupied when Murrayville East or Cactus West Airspace (with Yodaville UTC scheduled) are being used. This tower cannot be accessed when the Yodaville strafing berms are being used. When Yodaville is unscheduled advise ATC Range "No ordnance or laser operations authorized on Yodaville" prior to clearing personnel to the site.

FIGURE 6-7 HAZARD AREAS FACILITIES MATRIX

Smokey SAM Mission Card (Sample)

Date	7 April 2012
# of Launchers	2 or more
Range(s)	R-2301W Yodaville
Grid	11S QR 508 920
Insert Method	Drive w/ AOD

Active Times	1600-2200
# of Rockets	12 total
Frequency	290.1
A/C Callsign	Venom

Summary of Request: AH Urban Close Air Support in Yodaville, six elements of 2 to 3 AH-1 (Day TOSs: 1600-1700, 1700-1800, 1800-1900 // Night TOSs: 1930-2030, 2015-2115, 2100-2200).

Air Officer Department and their students at the 300 m and 1000 m Ops (SST meet with them in front of Hangar 220 NLT 1200/7 Apr 12 for drive to Yodaville). Air Officer will control rocket firings; request at least two rockets per Time on Station or each element, to be timed with SA-16/18 gunners' shots (rear-aspect shot, blue sky background on dash last aircraft egressing target area – or highest chance of success).

POC: Capt I. M. Marine in the AH-1 Division at (123) 456-7890 or cell (908) 765-4321.

Diagram of request (either a drawing or graphic, preferably, a graphic)

FIGURE 6-8 SMOKEY SAM MISSION CARD (SAMPLE)

Smokey SAM Mission Card

Date	
# of Launchers	
Range(s)	
Grid	
Insert Method	

Active Times	
# of Rockets	
Frequency	
A/C Callsign	

Summary of Request:

Diagram of request (either a drawing or graphic, preferably, a graphic)

FIGURE 6-9 SMOKEY SAM MISSION CARD (BLANK)

- SCHEDULING WILL BE DONE VIA THE RANGE MANAGEMENT PLANS OFFICER AND RANGE SCHEDULING.
- MLT USE SHALL BE ANNOTATED IN THE NOTES SECTION WITH THE APPLICABLE RANGE TIME SCHEDULED. (E.G. “MLT R2507N 1000-1100”)
- THE USE OF THE MLT WILL BE INCLUDED IN THE FLIGHT NOTES WITH TIMES SCHEDULE. (E.G. “MLT RESERVED IN R2507N FROM 2000-2200.”)
  - **AIRCRAFT WILL MAKE AN ATTEMPT TO CONTACT “RIVET 01” ON DECK PRIOR TO TAKEOFF ON 323.750 TO ALLOW OPERATORS TIME TO SET-UP.**
  - **AFTER CLEARANCE INTO THE RESTRICTED AIRSPACE BY “YUMA RANGE”, FLIGHT WILL CONTACT "RIVET 01" AND PASS "START EX."**
  - **ONCE COMPLETE WITH MLT, FLIGHT WILL PASS "END EX" ON 323.750 TO “RIVET 01.”**
  - **PASS OFFLOADS TO RIVET 01 UPON EXITING MLT OPERATIONAL AREA**
  - **AIRCRAFT SHALL REMAIN IN THE RESTRICTED AREA UNTIL GIVEN CLEARANCE BY “YUMA RANGE” TO DEPART**
- IF UNABLE TO COMMUNICATE WITH MLT OPERATORS:
  - **FLIGHT WILL PASS CALLS TO “RIVET 01” ON 323.750 "IN THE BLIND".**
  - **IF THE MLT IS MOVING THEN “RIVET 01” HAS ACKNOWLEDGED THE CALLS AND CLEARANCE HAS BEEN GIVEN TO SHOOT THE MLT.**
  - **IF THE MLT IS NOT MOVING, CLEARANCE HAS NOT BEEN GIVEN TO SHOOT.**
  - **AMBER BEACON FROM SIPHON 8 BIVOUAC = “KNOCK-IT-OFF” (SIPHON 8 IS LOCATED S/W OF WISS AF)**
- IN THE EVENT OF MISSION ROLEX OR CANX, MISSION AIRCRAFT AIRCREW SHALL CONTACT LEG IRON AT (928)269-7080.
- **YUMA RANGE MLT & OPFOR MISSION COORDINATOR:** (928)269-6488/(928) 750-4899

FIGURE 6-10 SPECIAL INSTRUCTIONS FOR MLT AT TARGET 15 NORTH (WISS AIRFIELD)

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CHAPTER 7

AMMUNITION AND EXPLOSIVES

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CHAPTER 7

AMMUNITION AND EXPLOSIVES

7000. PURPOSE AND SCOPE

1. General. The mission of Explosive Ordnance Disposal (EOD) is to locate, identify, and neutralize explosive ordnance hazards posing a threat to personnel, equipment, material, and the installation, which are beyond the capability of other MOS's in the Marine Corps. If personnel are available, EOD will provide appropriate technical assistance to units requesting assistance. EOD is not available or responsible for the routine transportation of ammunition and explosives. MCAS EOD assistance is normally available on a 24-hour basis, however, if USMC EOD personnel cannot support requests for assistance, contracted civilian EOD personnel can be utilized if they meet the requirements of Department of Defense Explosives Safety Board-Technical Paper 18 (DDESB TP 18) which outlines the minimum qualifications for unexploded ordnance technicians and personnel. The EOD office is located in the Bldg. 328 East; and can be contacted via (928)269-2303/2560/2788.

2. Hand Grenade. Due to the distance between MCAS Yuma and the grenade range located at Camp Billy Machen, the MCAS Yuma EOD Team may take at least three hours to respond to requests for support to this particular range area. Refer to the SPINS for this and other range training areas for further guidance.

3. Impact Areas

a. All personnel, prior to entering any MCAS Yuma impact area, shall receive an Unexploded Ordnance (UXO) brief. All briefs will be scheduled through EOD via (928)269-2788. Briefs should be scheduled no less than one week in advance. If units are unsure whether a brief is required or whether the ground area being requested is within an impact area, contact the Range Safety Office for more information.

b. In certain areas of the ranges, personnel entering the impact area must be escorted by EOD-qualified personnel. **A corpsman and safety vehicle must be present while down range operations occur. EOD or the Range OIC/RSO of the training unit must call LEG IRON prior to down range movement**. When EOD escort is required, it will be scheduled at the same time as the range activity is scheduled, or earlier. Merely scheduling the range is no guarantee of EOD support. All EOD support for range escort is prioritized, and dependent on availability. If USMC

EOD support is not available, contracted civilian UXO personnel can be utilized if they meet the requirements of DDESB TP 18 (Minimum Qualifications for UXO Technicians and Personnel).

7001. TRANSPORTATION, HANDLING, AND STORAGE OF AMMUNITION AND EXPLOSIVES

1. General. NAVSEA OP 5, Volume 1, Seventh Revision (Ammunition and Explosives Safety Ashore) governs policies and procedures associated with the use, storage and accountability of Class V "A" ammunition and explosives. MCO P8020.10 [reference (q)], Marine Corps Ammunition Management and Explosive Safety governs policies and procedures associated with the use, storage and accountability of Class V "W" ammunition and explosives. NAVSEA SW020-AG-SAF-010 (Transportation Safety Handbook for Ammunition Explosives and Related Hazardous Material) governs the transport of Ammunition Explosives and Related Hazardous Material.

2. Qualified Drivers. Drivers of any vehicle transporting ammunition or explosives aboard MCAS Yuma and to/from the RTA will meet specific administrative and medical criteria, per 49 CFR 391.41 – 391.49, and NAVSEA SWO20-AF-HBK-010. A driver can obtain an Explosive Driver stamp by completing MCAS Yuma's 12 Hour Explosives Driver Course. Contact MCAS Yuma's Department of Safety Standards (DSS) for specific requirements via DSN 269-3611 or Commercial (928)269-3611.

3. POVs. Using POVs within MCAS Yuma RTA to load, store, or transport ammunition, pyrotechnics, or explosives of any kind, for military training is absolutely prohibited.

4. Ammunition Handling.

a. Station Ordnance/Ammunition Supply Point (ASP) is located at Bldg 1700. MCAS Yuma POCs for Facilities Ordnance Manager can be contacted via DSN 269-2003/4 or Commercial (928)269-2003/4, or via Fax (928)269-5291.

b. Blank and live ammunition shall never be co-located on any range together. A minimum of 24 hours shall pass before a unit can transition from live to blank ammo training.

c. Issuing blank and live ammunition at the same time is prohibited.

d. Storing ammunition in a billeting area is prohibited.

5. FASPs. Field Ammunition Supply Points (FASPs) are located in both the CMAGR and BMGR. All FASPs require armed guards while ammunition and ordnance are present. A list of approved FASP locations can be found in Appendix B of this order in the section titled "Other Range Areas". Off-duty guards will not bivouac within the Explosive Quantity Safety Distance Arc. An MCAS inspector must be present at the time of delivery. For inspector coordination contact Range Safety.

7002. DUDS

A dud is ammunition, of any caliber or weight, that has been fired, placed, dropped, thrown or launched, but which fails to function as designed. Duds (with the exception of hand grenade ranges) occurring within a dedicated impact area do not normally require an EOD response, but will be reported to LEG IRON with the approximate location. Exceptions to this are short rounds, which place the firing unit within the fragmentation range of the fired munitions. All duds found shall be reported to LEG IRON immediately. An exact, clearly marked location of the dud is required, a guide made available, and all personnel cleared of the immediate area. Do not disturb a dud in any manner.

Note:

Line charges and demolition material like C4 or TNT which fail to function are misfires, not duds.

7003. MISFIRES AND HANG FIRES

A misfire is defined as the failure of a primer or the projectile propelling charge to function, a line charge or demolition material which fails to function, a JAVELIN or TOW weapon system that fails to launch and that no internal components have initiated, or a failure of a man-portable rocket (such as the SMAW) to launch. Misfires will be handled as follows:

a. The firing unit will immediately advise LEG IRON of the situation and request EOD support when they are unable to perform the prescribed misfire procedures, or when the misfire procedures direct notification of EOD. Misfires will be removed per the provisions of the appropriate weapons technical manual.

b. In the interest of safety, all misfire procedures will be completed on the range.

1. Unserviceable Ammunition. Unserviceable ammunition removed from the range, as a result of misfires, including small arms

ammunition, will be returned to the ASP by the using unit and processed similarly to other Condition Code H material.

2. Hang Fire. A hang fire occurs when a JAVELIN or TOW fails to launch, but internal components of the missile, such as batteries and gyros, are initiated. If a JAVELIN or TOW hang fire occurs, contact LEG IRON to request EOD assistance. A JAVELIN or TOW hang fire will not be transported off the range.

7004. IMPROVED CONVENTIONAL MUNITIONS (ICM)

Refer to Paragraph 4005.4.g (page 4-40) and Appendix C of this order for ICM Box SPINS, coordinates, and authorized ordnance. The ICM Box is located in the R-2507 North Low. Ground-fired ICM ammunition is not permitted on any Yuma range. Additionally, Wind Corrected Munitions Dispensers (WCMD) are not authorized in MCAS Yuma's ranges.

7005. CHEMICAL MUNITIONS

1. General. Chemical munitions are defined as agents or munitions, which, through its chemical properties, produce lethal or other damaging effects on human beings. The term does not include riot agents, chemical herbicides, smoke, and other obscuration materials.

2. Approval. Live chemical munitions will not be used for training purposes, unless the Commander, MCI West grants special approval.

7006. RIOT AGENTS, SMOKE, AND OTHER OBSCURATION MATERIALS

1. General. Riot agents, smoke, and other obscuration materials will be used only during scheduled training, per the provisions in applicable technical manuals and directives. Since improper use may result in serious injury, fatalities, or fires, units will use appropriate caution.

2. 2-chlorobenzalmalononitrile (CS) Gas. Coordinate all requests to use CS gas within MCAS Yuma Ranges with the Range Safety Office.

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CHAPTER 8

LASER OPERATIONS

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CHAPTER 8

LASER OPERATIONS

8000. PURPOSE AND SCOPE

This chapter prescribes the operating procedures and precautions to prevent injury to personnel and material damage from exposure to LASER radiation. The sources of aerial and ground LASER radiation include LASER rangefinders, target designators, and other military systems. Ranges are only certified for the specific activities as outlined in the LASER range certification. LASER ranges may only be certified by a qualified Range LASER Safety Specialist (RLSS). Only areas certified as LASER Target Areas (LTA) may be used for LASER operations.

8001. DISCLAIMER

1. The safe lasing profiles discussed in this order are not to be construed as mandated aircraft flight paths, but rather as boundary limits at a given location that distinguish between safe and unsafe LASER use conditions.

2. This chapter addresses only those systems approved for general training scenarios by the Navy LASER Safety Review Board (LSRB). A separate evaluation shall be done on a case-by-case basis by a qualified RLSS for LASER systems used in non-traditional modes, research & development applications, and prototype systems.

3. Force-on-force scenarios are not allowed without the expressed consent of the Range LASER Systems Safety Officer (LSSO) using safety measures established by the LSRB.

8002. BACKGROUND

1. The word LASER is an acronym derived from a description of the physical process: Light Amplification by Stimulated Emission of Radiation. The LASER generates a beam of intense, monochromatic light that is usually invisible under normal operating conditions. The basic hazard associated with LASER light is eye damage. This damage can vary from a small burn, undetectable by the injured person, to severe vision impairment. Eye damage by LASER light occurs three ways:

a. Intrabeam or direct viewing

b. Diffuse reflection

c. Specular reflection

2. Direct viewing is the most hazardous form of damage, as the light beam is focused directly on the retina. Diffuse reflections occur when the LASER beam intercepts a rough surface and is reflected in a scattered pattern. Specular (mirror-like) reflections redirect the light beam and cause the same eye damage as direct viewing. The use of appropriate eyewear (goggles or visors) with the correct Optical Density (OD) for the frequency of the LASER will eliminate the ocular hazards associated with LASERs.

8003. DEFINITION OF TERMS

1. Diffuse Reflection. The scattering of LASER light as it reflects off of a rough surface.

2. Divergence. The increase in the diameter of the LASER beam as the distance from the aperture of the LASER increases.

3. Maximum Permissible Exposure (MPE). The level of radiation a person may be exposed to without hazardous effect.

4. Normal Ocular Hazard Distance (NOHD). The distance from the LASER to the human eye, where LASER exposure does not pose a hazard.

5. Optical Density (OD). Refers to the density of the eyewear (goggles or visors) required to protect the eye from LASER radiation.

6. Specular Hazard. A shiny or mirror-like surface. Examples are vehicle windows, polished metals, standing water, plexiglass, and chrome bumpers, etc.

8004. LASER SAFETY PROGRAM

1. Prior to conducting any LASER operations, units must establish a local LASER safety program. This program shall be established as directed by [reference (f)]. A certified Administrative LASER Systems Safety Officer (ALSO) will manage this program. At a minimum, the program will include:

a. A local LASER safety organization

b. Local LASER safety regulations (LASER SOP)

c. Activity audit of the LASERs

d. LASER safety training program

e. LASER protective goggles/equipment program

f. Medical surveillance program

g. Accident investigation/reporting procedures

h. Record keeping/documentation file

i. Reporting of annual inventories

2. In addition to the above, the Commanding Officer/Officer In Charge of the lasing unit shall:

a. Select, train, and certify safety personnel as necessary to assist in complying with the provisions of [references (a), (b), and (f)] and all other applicable LASER regulations. All LASER Range Safety Officers training at MCAS Yuma shall be qualified ALSOs.

b. Provide adequate control of the target area to prohibit entry of unauthorized personnel into the LASER hazard area.

c. Designate a LASER Range Safety Officer (LRSO) for each lasing site. The LRSO can be the Range OIC/RSO of firing provided they are present at the lasing site and is LASER safety certified. The LRSO must have experience appropriate to the exercise or operation being conducted and shall be present during all LASER operations.

8005. LASER RANGE SAFETY OFFICER (LRSO)

1. The following section outlines the duties of the LRSO. LRSO duties shall NOT be delegated.

2. LRSOs will be familiar with the MCAS Yuma LASER Range Certification Report and physically possess the appropriate LASER Special Instructions associated with the range upon which they are conducting LASER operations.

3. LRSOs shall:

a. Conduct a face-to-face LRSO Brief with the Installation Range Safety Office prior to the exercise.

b. Be knowledgeable of (and ensure compliance with) this order, [references (a), (d), (e), and (f)] SECNAVINST 5100.14D, applicable FMs/TMs, and other applicable LASER references.

c. Brief personnel working with LASER devices and any LASER range support personnel on LASER related hazards and safety devices, procedures, and measures.

d. Know the azimuths, elevations, and lateral limits of each LASER range, each firing position, and targets to be used.

e. Ensure protective eyewear is used when required. Be sure that unprotected personnel are not exposed to either direct beam or a beam reflected from a specular (reflective) surface. In the event personnel are inadvertently exposed to LASER energy, a LASER incident report (per references MCO 5104.1 and SSIC 8140.1) shall be submitted by the command’s designated LSSO (copy to the MCAS Yuma LSSO) to BUMED within 30 days of the incident and shall include:

(1) List of personnel involved;

(2) Estimation of LASER exposure received to the eyes or skin as related to the applicable MPE per reference ANSI Z136.1, Safe Use of LASERs (NOTAL);

(3) The examining medical officer’s immediate and subsequent medical findings (if applicable);

(4) A detailed account of the LASER exposure incident. Include the LASER’s parameters as applicable: wavelength, power or energy, pulse repetition frequency, pulse length, beam size, and divergence;

(5) A detailed account of safety procedures and personal protective equipment used at the time of the LASER exposure incident;

(6) Lessons learned and actions completed to prevent another LASER exposure incident. A safety investigation report may be required per references OPNAVINST 5100.23G (Chapter 22), OPNAVINST 5100.19E (Chapter B9), and OPNAVINST 5102.1D/MCO P5102.1B if the incident meets the safety investigation thresholds in these references.

f. Maintain continuous communication with LEG IRON and any personnel in the target area. Receive LEG IRON approval prior to commencing LASER operations. Notify LEG IRON when LASER operations have ended. Lasing shall be stopped immediately if communications with LEG IRON are lost.

g. Stop lasing immediately if positive control of the LASER beam is lost.

h. Approve each specific LASER firing for the approved training evolution.

i. Ensure no specular surfaces are within 30 meters of the target area and only diffuse reflectors are located along the LASER line of sight.

j. Record all LASER firings (time, location of LASER, location of target, azimuth to target, and type of LASER) for unit records in accordance with [reference (e)]. Unit LASER firing logs will be maintained for five years.

k. Submit a LASER Firing Report to MCAS Yuma Range Scheduling no later than the next working day of the training activity. LASER Report Forms are located in Appendix E.

l. Ensure only those systems approved by the Navy LASER Systems Review Board (LSRB) and reviewed by the Installation LSSO are authorized for use at MCAS Yuma. Units are responsible for ensuring that the system(s) to be used meet(s) the allowable platform, maximum allowable buffer and/or maximum allowable NOHD authorized for selected LASER range.

m. Ensure the LASER exit port (aperture) is covered whenever the LASER is not engaged in tactical operations.

n. Comply with applicable duties of the Range OIC/RSO as listed in Chapter 6 of this SOP.

o. During LASER operations, the RSO will:

(1) Ensure unit personnel employing LASERs receive thorough safety briefings including explanations of specific LASER-related hazards, safety equipment, and detailed range safety procedures. Ensure unit personnel comply with the procedures outlined in [reference (a)].

(2) Know and observe horizontal and vertical safety limits of the LASER range.

(3) Conduct LASER operations in only those areas certified as LASER Training Areas (LTA).

(4) Ensure unit SOPs comply with range safety procedures, [reference (a)] and follow unit SOPs for LASER operations and training exercises.

(5) Ensure all personnel engaged in LASER operations, including personnel in target areas, maintain continuous communications.

(6) Cease LASER operations immediately if communications or positive control of the LASER beam is lost.

(7) Ensure a qualified LASER System Safety Officer (LSSO) is present (RSO may serve as both if qualified).

8006. AIRBORNE/GROUND LASER FIRING OPERATIONS

1. The MCAS Yuma LASER Range Certification Report contains the guidance for all approved LASER training areas within the R-2507 North, R-2507 South, and R-2301 West. For airborne LASER operations, users shall refer to the LASER Range Certification Report for approved aviation parameters. For ground LASER operations, FACs, JTACs, and TACPs will utilize the LASER Report's parameters for all designated OPs for controlling aircraft. The LASER Range Certification Report can be accessed by going online at the link below. If you have trouble viewing this site, contact Range Scheduling, and the appropriate computer settings for viewing this page can be provided. Other users will need to request this information by contacting Range Scheduling or Range Safety directly.

https://intranet.mciwest.usmc.mil/yuma/rng/roc/default.aspx

Note:

Information regarding ground and aerial laser training areas and their specific parameters can also be obtained at Range Safety (Bldg. 151) via DSN 269-5574 or Commercial (928)269-5574.

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APPENDIX A

TERMS AND DEFINITIONS

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TERMS

AA	Air-to-Air
AAR	Air-to-Air Refueling
ACM	Air Combat Maneuver
AD	Air Defense
AD	Aerial Delivery
AFA	Artillery Firing Area
AFLD	Airfield
AG	Air-to-Ground
AGL	Above Ground Level
AGM	Air-to-Ground Missile
ALSO	Advanced Laser Safety Officer
ALT	Altitude
ALZ	Assault Landing Zone
APF	Aircraft Parachute Flare
ARFF	Aircraft Rescue and Fire Fighting
ARPA	Archeological Resources Protection Act
Arty	Artillery
ASP	Ammunition Supply Point
ATC	Air Traffic Control
ATCAA	Air Traffic Control Assigned Airspace
ATV	All-Terrain Vehicle
AUX	Auxiliary Airfield
AZ	Arizona

BDU	Bomb Dummy Unit
BI	Battlefield Illumination
BLDG	Building
BLU	Bomb Live Unit
BMC	Branch Medical Clinic
BMGR	Barry M. Goldwater Aerial Gunnery Range
BP	Battle Position
BSTRC	Bob Stump Training Range Complex
CAA	Clean Air Act
CALA	Combat/Cargo Aircraft Loading Area
CAS	Close Air Support
CASEVAC	Casualty Evacuation
CBM	Camp Billy Machen
CBU	Cluster Bomb Unit
CERCLA	Comprehensive Environmental Response Compensation and Liabilities Act
CFA	Controlled Firing Area
CMAGR	Chocolate Mountain Aerial Gunnery Range
CO	Commanding Officer
COMM	Commercial
COMPTUEX	Composite Training Unit Exercise
CONOPS	Concept of Operations
CP	Control Point
CP&L	Community Plans & Liaison

CPNWR	Cabeza Prieta National Wildlife Refuge
CS	Chlorobenzalmalononitrile Gas
CSOC	Convoy Security Operations Course
CTAF	Common Traffic Advisory Frequency
CWA	Clean Water Act
DISN	Defense Integrated Switching Network
DME	Distance Measuring Equipment
DOD	Department of Defense
DODIC	Department of Defense Identification Code
DON	Department of Navy
DSS	Department of Safety Standardization
DWTF	Desert Warfare Training Facility
DZ	Drop Zone
EA	Electronic Attack
EC	Exercise Coordinator
ECM	Electronic Counter Measures
EIS	Environmental Impact Statement
EOD	Explosive Ordnance Disposal
ESA	Endangered Species Act
ESG-EX	Expeditionary Strike Group-Exercise
EW	Electronic Warfare
FAA	Federal Aviation Administration
FAC	Forward Air Controller
FAC/A	Forward Air Controller/Airborne

FM	Field Manual
FMS	Foreign Military Sales
FARP	Forward Arming and Refueling Point
FASP	Field Ammunition Supply Point
FAX	Facsimile
FCLP	Field Carrier Landing Practice
FFCA	Federal Facilities Compliance Act
FIREX	Fire Exercise
FL	Flight Level
FLEETEX	Fleet Exercise
FOD	Foreign Object Damage
ft.	Foot/Feet
FW	Fixed Wing
GP	Gun Position
GPLI	Ground Position Location Indicator
GPS	Global Positioning System
GTS	Ground Tracking System
HE	High Explosive
HLZ	Helicopter Landing Zone
HMMWV	High Mobility Multi-Purpose Wheeled Vehicle
HST	Helicopter Support Team
I&L	Installation & Logistics
IAW	In Accordance With

ICM	Improved Conventional Munitions
ID	Identification
IFR	Instrument Flight Rules
INLMA	Island Night Lizard Management Area
INRMP	Integrated Natural Resources Management Plan
IVAN	Target Personnel Size Target
JDAM	Joint Direct Attack Munitions
JTAC	Joint Terminal Aircraft Controller
KD	Known Distance
LA	Los Angeles
LATT	Low Altitude Tactics Training
LASER	Light Amplification by Stimulated Emission of Radiation
LDSS	Laser Designator/Simulator System
LES	Laser Evaluator System
LFAM	Live Firing and Maneuver
LGTR	Laser Guided Training Range
LHD Deck	Landing Deck Helicopter
LSO	Landing Signal Officer
LSSO	Laser System Safety Officer
LTA	Laser Target Area
LSSO	Laser System Safety Officer
LZ	Landing Zone
m	Meter(s)

MAG	Marine Air Group
MAGTF	Marine Air Ground Task Force
MARSA	Military Assumes Responsibility for Separation of Aircraft
MAW	Marine Aircraft Wing
MAWTS-1	Marine Aviation Weapons and Tactics Squadron - One
MEF	Marine Expeditionary Force
MEU(SOC) Eval	Marine Expeditionary Unit (Special Operations Capable) Evaluation
MCAS	Marine Corps Air Station
MCO	Marine Corps Order
MCWP	Marine Corps Warfighting Publication
MEDEVAC	Medical Evacuation
MGRS	Military Grid Reference System
MHz	Megahertz
MLT	Moving Land Target
MLWA	Military Lands Withdrawal Act
MMT	Marine Air Traffic Control Mobile Team
MOA	Military Operations Area
MSL	Mean Sea Level
MTR	Munitions Training Range
MPH	Miles Per Hour
MST	Mountain Standard Time
NAD	North American Datum

NAF	Naval Air Facility
NAGPRA	Native American Graves, Protection and Repatriation Act
NEPA	National Environmental Policy Act
NDBS	No Drop Bomb Scoring
NDWT	No Drop Weapons Training Range
NFA	No Firing Area
NHPA	National Historic Preservation Act
NM	Nautical Mile
NOTAM	Notice To Airman
NBC	Nuclear, Biological, Chemical
NPL	National Priority List
NSWC	Naval Surface Warfare Command
OCE	Officer Conducting Exercise
OIC	Officer-in-Charge
OP	Observation Post
OPAREA	Operation Area
ODR	Operational Discrepancy Report
ORM	Operational Risk Management
PDT	Pacific Daylight Time
PIC	Pilot in Command
PITS	Portable Infantry Target System
PMO	Provost Marshals Office
POL	Petroleum, Oil, and Lubricants

POV	Privately Owned Vehicle
PST	Pacific Standard Time
PT	Pacific Time
RCRA	Resource Conservation and Recovery Act
RDT&E	Research Development Training and Testing
RF	Radio Frequency
RFMSS	Range Facility Management Support System
RGR	Rapid Ground Refueling
RIMPAC	Rim of the Pacific
RCF	Range Control Facility
ROE	Rules of Engagement
RSO	Range Safety Officer
RTA	Range and Training Area
RW	Rotary Wing
SAR	Search and Rescue
SAM	Surface to Air Missile
SATS	Stationary Armored Targets System
SDZ	Surface Danger Zone
SEAL	Sea, Air, and Land
SESAMS	Special Effects Small Arms Marking System
SM	Statute Mile
SOP	Standard Operating Procedure
SRT	Steel Reactive Targets
SOUM	Safety of Use Memorandum

SITS	Stationary Infantry Target System
SPINS	Special Instructions
SQT	SEAL Qualification Training
SST	Smokey SAMs Team
StaO	Station Order
SUA	Special Use Airspace
SRSMS	Strafe Range Scoring Management System
SWAT	Special Warfare Training Area
TACTS	Tactical Aircrew Combat Training System
TAC/A	Tactical Air Coordinator (Airborne)
TACAN	Tactical Aid to Navigation
TACP	Tactical Air Control Party
TECOM	Training and Education Command
TM	Technical Manual
TP	Technicians and Personnel
TSR	Training Support Request
TSTA	Tailored Ship Training Availability
UHF	Ultra High Frequency
ULT	Unit Level Training
USCBP	United States Customs and Border Protection
UTC	Urban Target Complex
UTC	Universal Time Coordinated
UTV	Utility Vehicle

UXO	Unexpended Ordnance
VFR	Visual Flight Rules
VHF	Very High Frequency
V/STOL	Vertical/Short Takeoff and Landing
WGS	World Geodetic System
WISS	Weapons Impact Scoring Set
WTI	Weapons and Tactics Instructor
WTI	Weapons and Tactics Instructor Course
YPG	Yuma Proving Ground
YRMC	Yuma Regional Medical Center
YRMD	Yuma Range Management Department
YTRC	Yuma Training Range Complex
YTTR	Yuma Tactical Training Ranges

DEFINITIONS

Air and Ground Range Control Facility: This facility provides safety, control, maintenance, and administrative functions for aviation, ground, and combined-arms training activities within the RTA, to include both live-fire and non-live-fire events. Services can include SUA surveillance. Ground functions for this facility encompass land RTA. Leg Iron is this type of facility.

Air Sentry: An individual designated by the Officer in Charge (OIC) of Firing to maintain surveillance of an assigned sector of airspace to warn of the approach of aircraft.

Artillery Firing Area (AFA): Area established to support artillery firing activities.

Bivouac Area: An area assigned for administrative and logistical functions, such as troop billeting. Field training and live-firing are not conducted within bivouac areas.

Bivouac Operations: Those operations involving troop administrative and logistical functions; troop field billeting.

Cabeza Prieta National Wildlife Refuge: An area of protected lands located in the southeastern corner of the R-2301W.

Controlled Firing Area (CFA): Airspace established to conduct activities that would be hazardous to nonparticipating aircraft if not conducted in a controlled environment. It is the range user’s responsibility to provide for the safety of persons and property on the surface and to cease firing when aircraft transit the CFA.

Deviation: A departure from the regulatory standards contained in the MCO 3570.1/DA PAM 385-63.

Drop Zone (DZ): A tactical landing zone in which personnel or cargo paradrops are authorized. All DZs must be approved in advance of use.

Dud: Ammunition of any caliber or weight that has been fired, placed, dropped, thrown or launched but which fails to function as designed.

Earthwork: A construction formed chiefly of earth for protection against enemy fire, used in both offensive and defensive operations.

Fire and Maneuver Range: Range on which troop movement and live-firing may be conducted simultaneously.

Firing Lane: The area within which a weapon system is fired. It consists of a start firing line, cease-firing disarm line, and left and right limits of fire.

Firing Line or Point: The location from which a weapon is fired at a target or into an impact area.

Forward Air Controller (FAC): A Naval Aviator designated to serve in the same capacity as an OIC of Firing and/or RSO, but specifically for control of aircraft in support of ground troops.

Forward Air Controller/Airborne (FAC/A): A Naval Aviator/Flight Officer aboard an aircraft designated to serve in the same capacity as an OIC of Firing and/or RSO, but specifically for control of aircraft in support of ground troops while airborne. On board MCB, Camp Pendleton, only rotary-wing FAC (A)s is authorized.

Fouled Range: The result of any event that precludes the expenditure of ordnance or munitions.

Grey Water: Wastewater produced from field baths and showers.

Hang Fire: An undesired delay in the functioning of a firing system. A hang fire for a rocket occurs if the rocket propellant is ignited by the firing impulse, but the rocket fails to exit the launcher within the expected time frame.

HE Inert Line: A line defined within the R-2507 North where no high explosive ordnance is authorized South and West of that line.

Impact Area: The ground and associated airspace within the training complex used to contain fired or launched ammunition and explosives, and the resulting fragments, debris, and components from various weapon systems.

LASER: A device emitting a focused beam of light.

Landing Zone (LZ): A pre-designated, numbered helicopter landing zone, which provides major commands ready access to air transportation and medical evacuation.

Late Cancellation: A scheduled range event that was cancelled later than 1500L the day prior to the event.

Live-Fire Range: A range on which live-fire exercises, including the use of some types of practice ammunition, may be conducted.

LEG IRON: Communication call sign for MCAS Yuma's Range Control Facility (non-ATC).

Maneuver Area: Two or more contiguous training areas designated and scheduled by a using unit for tactical exercises of battalion level or higher.

Military Operations Area (MOA): An airspace assignment established to separate or segregate certain military aircraft activities from IFR traffic and to identify for VFR traffic where these activities are occurring.

Net Explosive Weight (NEW): The actual weight of explosive mixture of compound in pounds, including the TNT equivalent of other energetic material, which is used in the determination of explosive limits and ESQD arcs.

No Fire Area (NFA): A designated area into which neither live-fires nor effects of live-fire will occur. NFAs are designated by a six-digit grid with a radius in meters.

Non-Lethal: Also known as less than lethal. Pertains to training conducted with munitions not intended to be lethal.

No Show: A scheduled range event where the range time was not cancelled and went unused.

Notice To Airmen (NOTAM): A message to aircraft pilots in a specific area warning of airspace restrictions, equipment outages, or other factors which may affect flight activities.

Observation Post (OP): A point from which impacting ordnance may be observed.

Officer in Charge (OIC): An individual designated by the Commanding Officer of the training unit who assumes

responsibility for all aspects of training to include but not limited to live-fire, paradrops, or air exercises.

Paradrop: The controlled aerial delivery of personnel or equipment by parachute.

Pyrotechnics: Non-injury causing smoke or signals, either flares or grenades. White phosphorous is not considered a pyrotechnic.

Range: A training facility designated for live-fire, practice firing of weapons, demolitions, flame weapons, or fire and maneuver exercises.

Range Guard: An individual designated to maintain surveillance over an assigned locale to prohibit unauthorized entry into a surface danger area, and to give the alarm in the event that entry is detected.

Restricted Airspace/Area: Airspace designated under Federal Aviation Regulations, Part 73, within which the flight of non-participating aircraft, while not wholly prohibited is subject to restriction.

Range Safety Officer (RSO): A designated individual who has attended the MCAS Yuma Range Safety Officer Course and completed the Distance Learning Course (CI060120CA).

Scrapper: Any individual who trespasses onto the Yuma Training Range Complex for the purpose of collecting range debris without the expressed permission from MCAS Yuma’s Range Management Department.

See and Avoid: A visual procedure wherein pilots of aircraft flying in Visual Meteorological Conditions (VMC) are charged with the responsibility to observe the presence of other aircraft and to maneuver their aircraft as required to avoid the other aircraft.

Standard Altitudes: Regularly scheduled effective altitudes pertaining to Special Use Airspace (SUA) that are not necessarily the published effective altitudes (see Figure 3-2, Standard Scheduled Altitudes).

Surface Danger Zone (SDZ): The ground and airspace designated within the training complex (to include associated safety areas) for vertical and lateral containment of projectiles, fragments,

debris, and components resulting from the firing, launching, or detonation of weapons systems to include explosives and demolitions.

Special Use Airspace (SUA): Airspace in which aviation activities must be confined because of their nature and where limitations may be imposed on aircraft operations that are not a part of those activities. Types of SUA include Restricted Areas, CFAs, MOAs, and Warning Areas.

TERF Route: Terrain Flight route used for helicopter low altitude navigation training.

Visual Flight Rules (VFR): Aircraft operations conducted under visual flight rules.

Waiver: A departure from the requirements and/or procedures of this regulation (MCAS Yuma Station Order 3710.6_, Range Regulations).

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APPENDIX B

COORDINATES FOR RESTRICTED AREAS, TARGET AREAS, AND POINTS OF INTEREST

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AIRSPACE BOUNDARY COORDINATES

R-2301W Ajo West, AZ
Boundaries. Beginning at the intersection of the United States-Mexican Border and long. 113°30'33"W.; thence along the United States-Mexican Border to lat. 32°23'45"N., long. 114°28'33"W.; to lat. 32°30'00"N., long. 114°28'33"W.; to lat. 32°30'00"N., long. 114°31'03"W.; to lat. 32°35'00"N., long. 114°31'03"W.; to lat. 32°35'00"N., long. 114°28'33"W.; to lat. 32°39'40"N., long. 114°28'33"W.; to lat. 32°40'45"N., long. 114°18'32"W.; thence along the Southern Pacific Railroad and U.S. Highway to lat. 32°44'15"N., long. 113°41'08"W.; to the point of beginning; excluding that airspace below 3,000 feet MSL, N of a line beginning at lat. 32°40'45"N., long. 114°18'32"W.; to lat. 32°37'40"N., long. 114°12'43"W.; to lat. 32°37'40"N., long. 114°09'03"W.; to lat. 32°42'30"N., long. 113°45'03"W.; to lat. 32°44'15"N., long. 113°41'08"W.

R-2507E Chocolate Mountains, CA
Boundaries. Beginning at lat. 33°17'06”N., long. 115°04'35”W., to lat. 33°14'26”N., long. 114°59'00”W., to lat. 33°14'26”N., long. 114°56'35”W., to lat. 33°10'21”N., long. 114°56'26”W., to lat. 33°08'45”N., long. 114°56'43”W.

R-2507N North Chocolate Mountains, CA
Boundaries. Beginning at lat. 33°32'40"N., long. 115°33'53"W.; to lat. 33°31'30"N., long. 115°32'03"W.; to lat. 33°31'15"N., long. 115°26'48"W.; to lat. 33°29'00"N., long. 115°20'03"W.; to lat. 33°25'50"N., long. 115°14'33"W.; to lat. 33°24'15"N., long. 115°17'03"W.; to lat. 33°23'00"N., long. 115°14'33"W.; to lat. 33°14'00"N., long. 115°22'33"W.; to lat. 33°21'30"N., long. 115°32'58"W.; to lat. 33°23'40"N., long. 115°33'23"W.; to lat. 33°28'30"N., long. 115°42'13"W.; to the point of beginning.

R-2507S South Chocolate Mountains, CA
Boundaries. Beginning at lat. 33°23'00"N., long. 115°14'33"W.; to lat. 33°21'40"N., long. 115°12'03"W.; to lat. 33°22'50"N., long. 115°10'01"W.; to lat. 33°08'45"N., long. 114°56'43"W.; to lat. 33°01'00"N., long. 115°06'03"W.; to lat. 33°14'00"N., long. 115°22'33"W.; thence to the point of beginning.

Abel Bravo MOA/ATCAA, CA
Boundaries. Beginning at lat. 32°56'30"N., long. 115°27'03"W.; to lat. 32°57'00"N., long. 115°10'53"W.; to lat. 32°51'00"N., long. 115°05'33"W.; to lat. 32°51'00"N., long. 115°26'03"W.; to the point of beginning, excluding R-2512.

Abel North MOA/ATCAA, CA
Boundaries. Beginning at lat. 33°32'40"N., long. 115°33'53"W.; to lat. 33°31'00"N., long. 115°04'03"W.; to lat. 33°15'30"N., long. 114°55'33"W.; to lat. 33°08'45"N., long. 114°56'43"W.; to lat. 33°01'00"N., long. 115°06'03"W.; to lat. 33°14'00"N., long. 115°22'33"W.; to lat. 33°21'30"N., long. 115°32'58"W.; to lat. 33°23'40"N., long. 115°33'23"W.; to lat. 33°28'30"N., long. 115°42'13"W.; to the point of beginning, excluding R-2507N, R-2507S and R-2507E.

Abel East MOA, CA
Boundaries. Beginning at lat. 33°15'30"N., long. 114°55'33"W. to lat. 33°03'00"N., long. 114°45'03"W.; to lat. 32°51'00"N., long. 114°45'03"W.; to lat. 32°51'00"N., long. 115°05'33"W.; to lat. 32°57'00"N., long. 115°10'53"W.; to lat. 33°08'45"N., long. 114°56'43"W.; to the point of beginning.

Abel South MOA/ATCAA, CA
Boundaries. Beginning at lat. 33°21'30"N., long. 115°32'58"W.; to lat. 33°01'00"N., long. 115°06'03"W.; to lat. 32°57'00"N., long. 115°10'53"W.; to lat. 32°56'30"N., long. 115°27'03"W.; to the point of beginning, excluding R-2512.

Dome MOA/ATCAA, AZ
Boundaries. Beginning at lat. 32°39'40"N., long. 114°45'20"W.; to lat. 32°39'40"N., long. 114°28'30"W.; to lat. 32°35'00"N., long. 114°28'30"W.; to lat. 32°35'00"N., long. 114°31'00"W.; to lat. 32°30'00"N., long. 114°31'00"W.; to lat. 32°30'00"N., long. 114°28'30"W.; to lat. 32°23'45"N., long. 114°28'30"W.; then along U.S./Mexican border to the point of origin.

Imperial North ATCAA, CA
Boundaries. Beginning at lat. 33°31'00"N., long. 115°04'00"W.; to lat. 33°28'00"N., long. 114°28'00"W.; to lat. 33°23'00"N., long. 114°35'00"W.; to lat. 33°21'00"N., long. 114°35'00"W.; to lat. 33°23'00"N., long. 115°00'00"W.; to the point of origin.

Imperial South ATCAA, CA
Boundaries. Beginning at lat. 33°23'00"N., long. 115°00'00"W.; to lat. 33°21'00"N., long. 114°35'00"W.; to lat. 33°03'00"N., long. 114°34'00"W.; to lat. 33°03'00"N., long. 114°30'00"W.; to lat. 32°58'00"N., long. 114°30'00"W.; to lat. 32°57'00"N., long. 115°10'50"W.; to lat. 33°08'45"N., long. 114°56'40"W.; to lat. 33°15'30"N., long. 114°55'30"W.; to the point of origin.

Kane East MOA/ATCAA, CA
Boundaries. Beginning at lat. 33°28'30"N., long. 115°42'13"W.; to lat. 33°23'00"N., long. 115°51'03"W.; to lat. 33°07'00"N., long. 115°51'03"W.; to lat. 32°56'00"N., long. 115°40'03"W.; to lat. 32°56'30"N., long. 115°27'03"W.; to lat. 33°23'40"N., long. 115°33'23"W.; to the point of beginning.

Kane South MOA, CA
Boundaries. Beginning at lat. 32°56'00"N., long. 115°40'03"W.; to lat. 32°56'30"N., long. 115°27'03"W.; to lat. 32°51'00"N., long. 115°26'03"W.; to lat. 32°50'28"N., long. 115°45'13"W.; thence clockwise along the arc of a 4.3 NM radius circle centered at lat. 32°49'20"N., long. 115°40'18"W.; to lat. 32°53'45"N., long. 115°40'18"W.; to the point of beginning.

Kane West MOA, CA
Boundaries. Beginning at lat. 33°28'30"N., long. 115°42'13"W.; to lat. 33°23'00"N., long. 115°51'03"W.; to lat. 33°07'00"N., long. 115°51'03"W.; to lat. 32°56'00"N., long. 115°40'03"W.; to lat. 32°53'45"N., long. 115°40'18"W.; thence counterclockwise along the arc of a 4.3 NM radius circle centered at lat. 32°49'20"N., long. 115°40'18"W.; to lat. 32°50'28"N., long. 115°45'13"W.; to lat. 32°50'00"N., long. 116°01'03"W.; to lat. 32°57'00"N., long. 116°10'03"W.; to lat. 33°18'00"N., long. 116°10'03"W.; to lat. 33°28'30"N., long. 115°51'33"W.; to the point of beginning excluding R-2510.

Quail MOA/ATCAA, CA
Boundaries. Beginning at lat. 33°55'00"N., long. 115°00'00"W.; to lat. 34°12'00"N., long. 114°00'00"W.; to lat. 33°38'00"N., long. 114°00'00"W.; to lat. 33°44'00"N., long. 114°30'00"W.; to lat. 33°44'00"N., long. 114°00'00"W.; to the point of origin.

Turtle MOA/ATCAA, CA
Boundaries. Beginning at lat. 34°42'00"N., long. 115°16'00"W.; to lat. 34°40'00"N., long. 114°00'00"W.; to lat. 34°23'00"N., long. 114°00'00"W.; to lat. 34°14'00"N., long. 114°30'00"W.; to lat. 34°14'00"N., long. 115°30'00"W.; to lat. 34°19'00"N., long. 115°25'00"W.; to the point of origin.

OBSERVATION POSTS (OPs)

ID	MGRS	Geodetic Latitude	Geodetic Longitude
R-2507:			
North:			
OP 1	11S PS 36401 97904	33°24′42.5″N	115°31′59.1″W
OP 2	11S PS 38000 93006	33°22′02.8″N	115°30′59.6″W
OP 3	11S PS 43801 93300	33°22′09.3″N	115°27′15.3″W
OP 4 **	11S PS 48608 91322	33°21′08.7″N	115°24′02.9″W
OP 5	11S PS 51235 97200	33°24′12.5″N	115°22′26.7″W
OP 6	11S PT 38735 07012	33°29′37.1″N	115°30′23.4″W
OP 9	11S PT 48300 02900	33°27′19.0″N	115°24′15.5″W
OP SLATS**	11S PT 40089 05080	33°28′33.7″N	115°29′32.2″W
OP Crush**	11S PS 46749 97244	33°24′16.3″N	115°25′18.8″W
South:			
OP 7	11S PS 74800 76900	33°13′00.8″N	115°07′27.6″W
OP 8	11S PS 76300 86900	33°18′24.5″N	115°06′22.7″W
OP FEETS**	11S PS 76141 81368	33°15′24.7″N	115°06′32.5″W
OP Phantom**	11S PS 89107 70520	33°09′25.3″N	114°58′19.7″W

** Denotes those OPs that are vehicle-accessible. All other OPs in the R-2507 are accessible via helo only.

R-2301 West:

Cactus West Airspace:

Yodaville Target:

1000m OP - Bldg 1 (Level 1)	11S QR 50303 93130	32°26′50.0″N	114°20′14.8″W
1000m OP - Bldg 1 (Level 2)	11S QR 50313 93136	32°26′50.2″N	114°20′14.4″W
1000m OP - Bldg 1 (Level 3)	11S QR 50314 93137	32°26′50.2″N	114°20′14.4″W
OP1	11S QR 50298 93141	32°26′50.1″N	114°20′14.9″W
OP Northwest	11S QR 50663 92492	32°26′29.0″N	114°20′01.6″W
OP Northeast	11S QR 51180 92398	32°26′25.5″N	114°19′41.9″W
OP Southwest	11S QR 50460 91891	32°26′09.7″N	114°20′10.0″W
OP Southeast	11S QR 50957 91644	32°26′01.3″N	114°19′03.4″W

FORWARD ARMING REFUELING POINTS (FARPs)

ID	MGRS	Geodetic Latitude	Geodetic Longitude
R-2507:			
North:			
Siphon 8*	11S PS 43547 82449	33°16′17.50″N	115°27′31.28″W
Snake**	11S PS 35502 91142	33°21′03.40″N	115°32′37.48″W
South:			
Star (Assault)***	11S PS 62715 68398	33°08′31.66″N	115°15′19.69″W
Star (Attack)***	11S PS 64256 67562	33°08′03.60″N	115°14′20.70″W
Bull (Assault)***	11S PS 80200 60100	33°03′52.39″N	115°04′11.30″W
Bull (Attack)***	11S PS 79600 61200	33°04′28.45″N	115°04′33.38″W
R-2301 West:			
Cactus West Airspace:			
AUX-II	11S QS 33809 03859	32°32′51.0″N	114°30′36.0″W

Notes:

***** Siphon 8 FARP is located outside of restricted airspace (R-2507 North) but within the ground range boundary west of the Siphon 8 bivouac area. Use of this FARP area by aviation (and/or ground) assets will require a RFMSS ground request. A Range Notification will be published by Range Scheduling when this area is properly scheduled.

****** The Snake FARP area is located on the R-2507 North boundary line (and completely within the CMAGR ground area). Accordingly, aviation assets using this area are required to submit an airspace request (or coordinate co-use with units already scheduled in the R-2507 North Low). Additionally, a ground request shall be submitted for Snake FARP when being used by aviation units in order to reserve the landing zone from other potential ground activities.

******* Aviation assets are required to schedule the airspace (R-2507 South Low at a minimum) when conducting FARP Bull and/or Star operations. Ground units shall submit ground RFMSS requests when desiring to access FARP Bull and/or Star. (Full scale FARP operations in either of these areas require both airspace and ground requests via RFMSS). Airspace requests are not required when ground-based units desire to operate at FARP Bull or Star for the purpose of setup/teardown of equipment or other ground-only activity.

ARTILLERY FIRING AREAS (AFAs)

ID	MGRS	Geodetic Latitude	Geodetic Longitude
R-2507:			
North:			
AFA 1	11S PS 47000 83799	33°16′59.7″N	115°25′16.0″W
AFA 2	11S PS 42000 97100	33°24′16.3″N	115°28′26.4″W
AFA 4	11S PS 41900 86999	33°18′46.0″N	115°28′31.3″W
AFA 6	11S PS 44600 86999	33°18′44.7″N	115°26′47.9″W
AFA 7	11S PS 39100 88299	33°19′29.5″N	115°30′19.8″W
AFA 8	11S PS 55917 92199	33°21′27.8″N	115°19′27.2″W
AFA 9	11S PS 57000 95699	33°23′20.8″N	115°18′43.1″W
AFA 10	11S PS 47100 92199	33°21′32.3″N	115°25′08.2″W
AFA 11	11S PS 44100 92899	33°21′56.4″N	115°27′03.9″W
AFA 15 (HIMARS ONLY)	11S PS 39912 94851	33°23′01.8″N	115°29′44.8″W
South:			
AFA BURT	11S PS 79900 83899	33°16′44.9″N	115°04′1.0″W

MORTAR POSITIONS (MPs)

ID	MGRS	Geodetic Latitude	Geodetic Longitude
R-2507:			
North:			
MP SLATS	11S PT 39996 05320	33°28′41.59″N	115°29′35.70″W
South:			
MP FEETS	11S PS 76286 80863	33°15′08.56″N	115°06′27.40″W

GROUND SUPPORT AREAS (SITES)

Grid location (approximate center point):

GROUND SUPPORT AREA	MGRS	LAT/LONG DD:MM:SS
SITE 50	11S QS 61488 11376	N32° 36’ 32” / W114° 12’ 48”
SITE 51	11S QS 68003 01626	N32° 31’ 10” / W114° 08’ 48”
SITE 52	11S QR 66567 97907	N32° 29’ 11” / W114° 09’ 47”
SITE 53	11S QR 69821 99089	N32° 29’ 46” / W114° 07’ 42”
SITE 54	11S QR 70840 97177	N32° 28’ 43” / W114° 07’ 04”
SITE 55	11S QR 70884 95607	N32° 27’ 52” / W114° 07’ 04”
SITE 56	11S QR 69330 93419	N32° 26’ 43” / W114° 08’ 06”
SITE 57	11S QR 73090 94792	N32° 27’ 24” / W114° 05’ 41”
SITE 58	11S QR 73695 93583	N32° 26’ 44” / W114° 05’ 19”
SITE 59	11S QR 74216 92457	N32° 26’ 07” / W114° 05’ 00”
SITE 60	11S QR 73309 91960	N32° 25’ 52” / W114° 05’ 35”
SITE 61	11S QR 75071 90622	N32° 25’ 07” / W114° 04’ 29”
SITE 62	11S QR 74175 90192	N32° 24’ 54” / W114° 05’ 04”
SITE 63	11S QR 72561 88168	N32° 23’ 50” / W114° 06’ 08”
SITE 64	Not Authorized for Use	
SITE 65	12S TA 18685 81335	N32° 20’ 00” / W113° 59’ 18”
SITE 66	11S QS 69119 10806	N32° 36’ 07” / W114° 07’ 56”
SITE 67	12S TA 18021 94072	N32° 26’ 53” / W113° 59’ 58”
SITE 68	12S TA 20153 92606	N32° 26’ 07” / W113° 58’ 34”
SITE 69	11S QS 79217 14290	N32° 37’ 51” / W114° 01’ 26”
SITE 70	12S TB 24043 17266	N32° 39’ 30” / W113° 56’ 32”
SITE 71	12S TB 21482 14048	N32° 37’ 44” / W113° 58’ 06”
SITE 72	12S TB 20084 14531	N32° 37’ 58” / W113° 59’ 00”
SITE 73	12S TB 19622 13306	N32° 37’ 18” / W113° 59’ 17”
SITE 74	12S TB 21287 11077	N32° 36’ 07” / W113° 58’ 11”
SITE 75	Not Authorized for Use	
SITE 76	12S TB 22263 08832	N32° 34’ 55” / W113° 57’ 31”
SITE 77	12S TB 22744 03476	N32:32’ 02” / W113° 57’ 07”
SITE 78	12S TB 22937 01104	N32:30’ 45” / W113° 56’ 57”
SITE 79	12S TB 26961 02840	N32° 31’ 45” / W113° 54’ 25”
SITE 80	12S TB 27970 01739	N32° 31’ 10” / W113° 53’ 45”
SITE 81	12S TB 29371 00073	N32° 30’ 18” / W113° 52’ 49”
SITE 82	12S TA 36444 98654	N32° 29’ 38” / W113° 48’ 17”
SITE 83	12S TB 47179 00643	N32° 30’ 51” / W113° 41’ 28”

*** Ground Support areas 79 thru 83 (highlighted in red), are NOT authorized for aircraft landings as they are located east of the 113° 53’ longitude line established to minimize effects to the Sonoran pronghorn.

OTHER RANGE AREAS

ID (Paragraph Reference)	MGRS	Geodetic Latitude	Geodetic Longitude
R-2507:			
North:			
Siphon 8 Bivouac Area	11S PS 45458 82879	33°16’28.0”N	115°26’17.0”W
Siphon 8 Field ASP	11S PS 48276 83118	33°16’36.9”N	115°24’27.7”W
Speed Bag UAS Strip	11S PS 47872 82708	33°16’24.0”N	115°24’44.2”W
South:			
Firebase Burt Staging Area	11S PS 80225 82705	33°16’05.9”N	115°03’53.9”W
Outside of the R-2507 South airspace but within the CMAGR Range Boundary:			
HST Bull	11S PS 60114 84576	33°03’50.2”N	115°01’22.3”W
R-2301 West:			
Cactus West Airspace:			
AUX-II Bivouac Area	11S QS 34125 03831	32°32’49.0”N	114°30’24.0”W
AUX-II Field ASP	11S QS 31323 04938	32°33’27.9”N	114°32’10.6”W
Combat Village	12S TB 21600 02500	32°31’28.0”N	113°57’50.0”W

TARGET AREAS

TARGET DESIGNATIOR	TARGET AREA CORNERS			
R-2507 N				
ICM BOX	11S PS50000 96000	11S PS52000 96000	11S PS52000 95000	11S PS50000 95000
TARGET 1N	11S PS48430 94607	11S PS49534 93631	11S PS49439 93533	11S PS48328 94401
TARGET 2N	11S PT46775 03122	11S PT46981 01836	11S PT46786 01840	11S PT46706 02444
TARGET 3N	11S PT38911 05109	11S PT39948 04408	11S PT40029 03860	11S PT39329 03907
-	11S PT37578 04073			
TARGET 6N	11S PS45029 93894	11S PS45730 94285	11S PS45810 94138	11S PS45113 93776
TARGET 7N	11S PS46938 96380	11S PS47046 96345	11S PS47123 96350	11S PS47077 94911
-	11S PS46727 94471	11S PS46599 94661	11S PS46708 95763	
TARGET 8N	11S PS39241 97002	11S PS38985 97052	11S PS39168 96255	11S PS38995 96284
TARGET 9N	11S PT44716 06465	11S PT45149 06535	11S PT45153 06165	11S PT44731 06097
TARGET 10N	11S PT45075 02273	11S PT45562 01211	11S PT44511 01017	11S PT44386 01477
TARGET 11N	11S PT43986 03984	11S PT44291 03044		
TARGET 12N	11S PS40212 95011	11S PS38958 91671	11S PS38611 91335	11S PS38068 91493
-	11S PS37377 91577	11S PS38018 93729		
TARGET 13N	11S PT50686 00140	11S PT50989 00057	11S PS50646 99332	11S PS49780 99224
-	11S PS49485 99529	11S PS49742 99815		
TARGET 14N	11S PT47275 00103	11S PT47462 00181	11S PS47574 99646	11S PS47431 99607
TARGET 15N	11S PS48465 88229	11S PS49210 88029	11S PS49321 87495	11S PS50135 87426
	11S PS50156 87280	11S PS49400 87144	11S PS48564 86313	11S PS48164 86414
R-2507S				
MT BARROW	11S PS89956 72089	11S PS90347 72080	11S PS90338 71341	11S PS89893 70870
-	11S PS88901 70260	11S PS88407 70687	11S PS88817 71221	
TARGET 1S	11S PS69481 84262	11S PS69622 84177	11S PS69145 82962	11S PS68947 82989
TARGET 2S	11S PS73736 79536	11S PS73884 79516	11S PS73888 78862	11S PS73806 78865
-	11S PS73740 78866			
TARGET 3S	11S PS68654 80584	11S PS67456 79379		
TARGET 4S	11S PS73083 83943	11S PS73303 83728	11S PS72967 83395	11S PS72732 83460
TARGET 5S	11S PS73873 83167	11S PS74093 82943	11S PS73673 82497	11S PS73453 82639
TARGET 6S	11S PS75526 80095	11S PS75946 79584	11S PS75476 79267	11S PS75306 79815
TARGET 7S	11S PS78325 78873	11S PS78730 78794	11S PS78445 78241	11S PS78038 78263
-	11S PS78077 78397			
TARGET 8S	11S PS72491 80090	11S PS72635 79992	11S PS72426 79726	11S PS72258 79766
TARGET 10S	11S PS76461 82035	11S PS77174 82469	11S PS77262 82254	11S PS77022 82082
-	11S PS76520 81951			
TARGET 11S	11S PS77329 81945	11S PS77403 81851	11S PS77186 81504	11S PS77021 81442
-	11S PS76915 81557	11S PS77086 81684		
TARGET 12S	11S PS73503 81809	11S PS73858 81636	11S PS74205 81463	11S PS73499 80589
-	11S PS73407 80606	11S PS72894 80706	11S PS72782 80726	
TARGET 13S	11S PS71703 80586	11S PS71901 80517	11S PS71671 80063	11S PS71491 80108
TARGET 14S	11S PS77183 77482	11S PS77278 77476	11S PS77394 77183	11S PS77156 77017
-	11S PS77021 76993	11S PS77058 77309		
TARGET 15S	11S PS74528 83210	11S PS75110 83050	11S PS74670 81879	11S PS74974 81386
-	11S PS74824 80989	11S PS74205 81463	11S PS73858 81636	

TARGET AREA POLYGONS

R-2507 NORTH

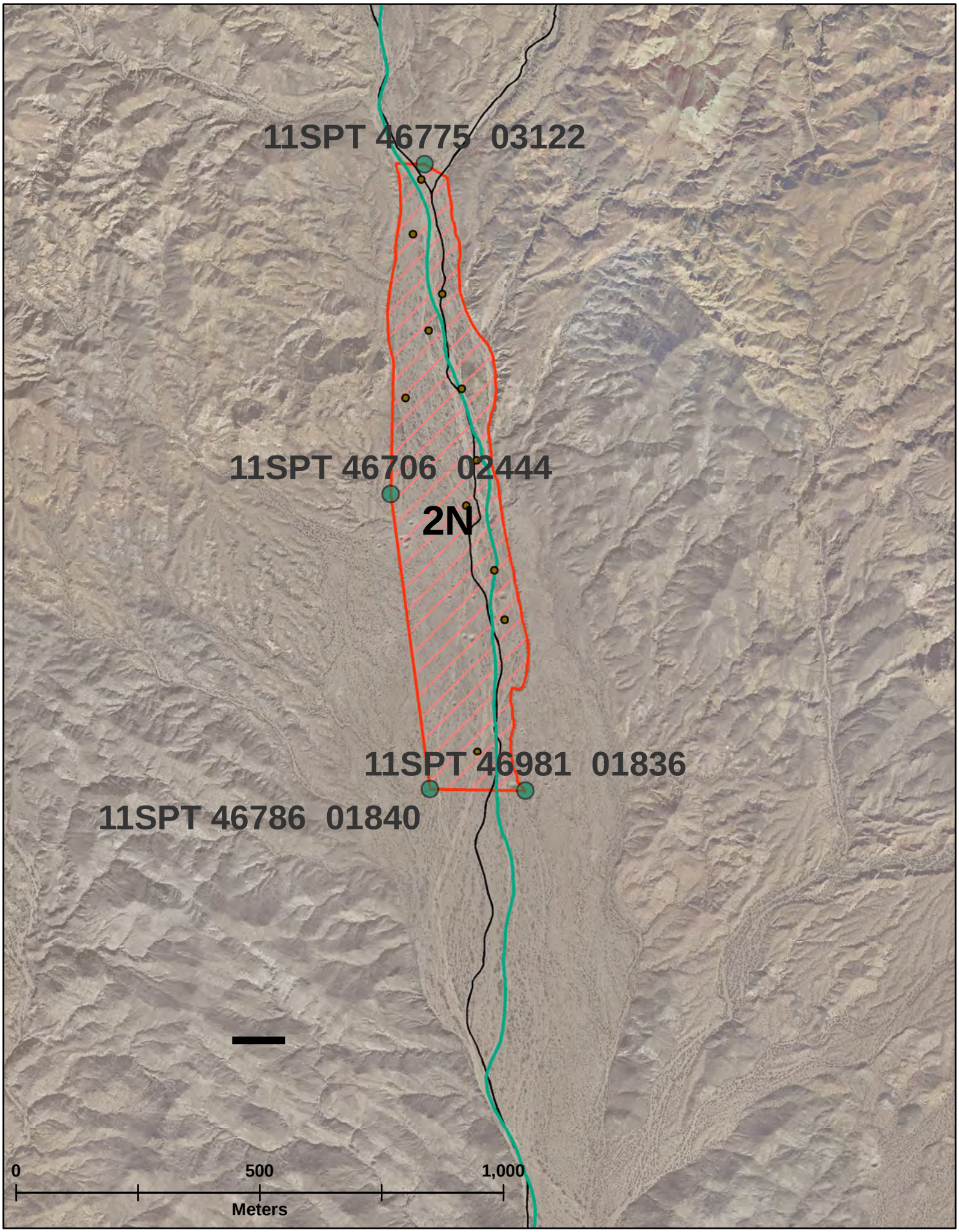
(SEE APPENDIX C FOR AUTHORIZED ORDNANCE)

TARGET	2 NORTH	HE / INERT
TARGET	3 NORTH	HE / INERT
TARGET	9 NORTH	HE / INERT
TARGET	10 NORTH	HE / INERT
TARGET	11 NORTH	HE / INERT
TARGET	13 NORTH	HE / INERT
TARGET	14 NORTH	HE / INERT

INERT LINE

TARGET	ICM BOX	ICM ONLY
TARGET	1 NORTH	INERT ONLY
TARGET	6 NORTH	INERT ONLY
TARGET	7 NORTH	INERT ONLY
TARGET	8 NORTH	INERT ONLY
TARGET	12 NORTH	INERT ONLY
TARGET	15 NORTH	INERT ONLY

TARGET 2N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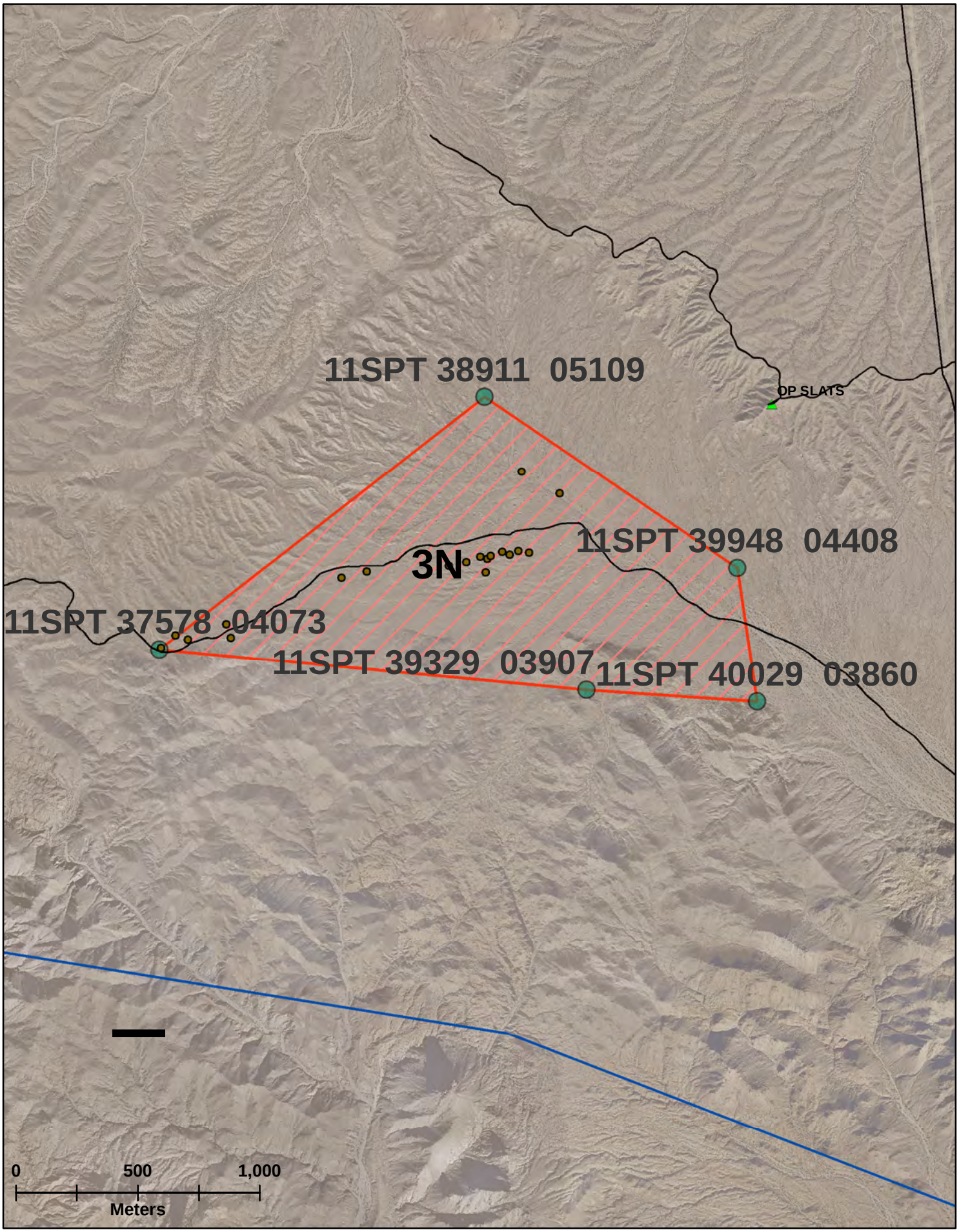
Meters

TARGET 3N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OP SLATS
11SPT 39948 04408
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11SPT 37578 04073
11SPT 39329 03907
11SPT 40029 03860
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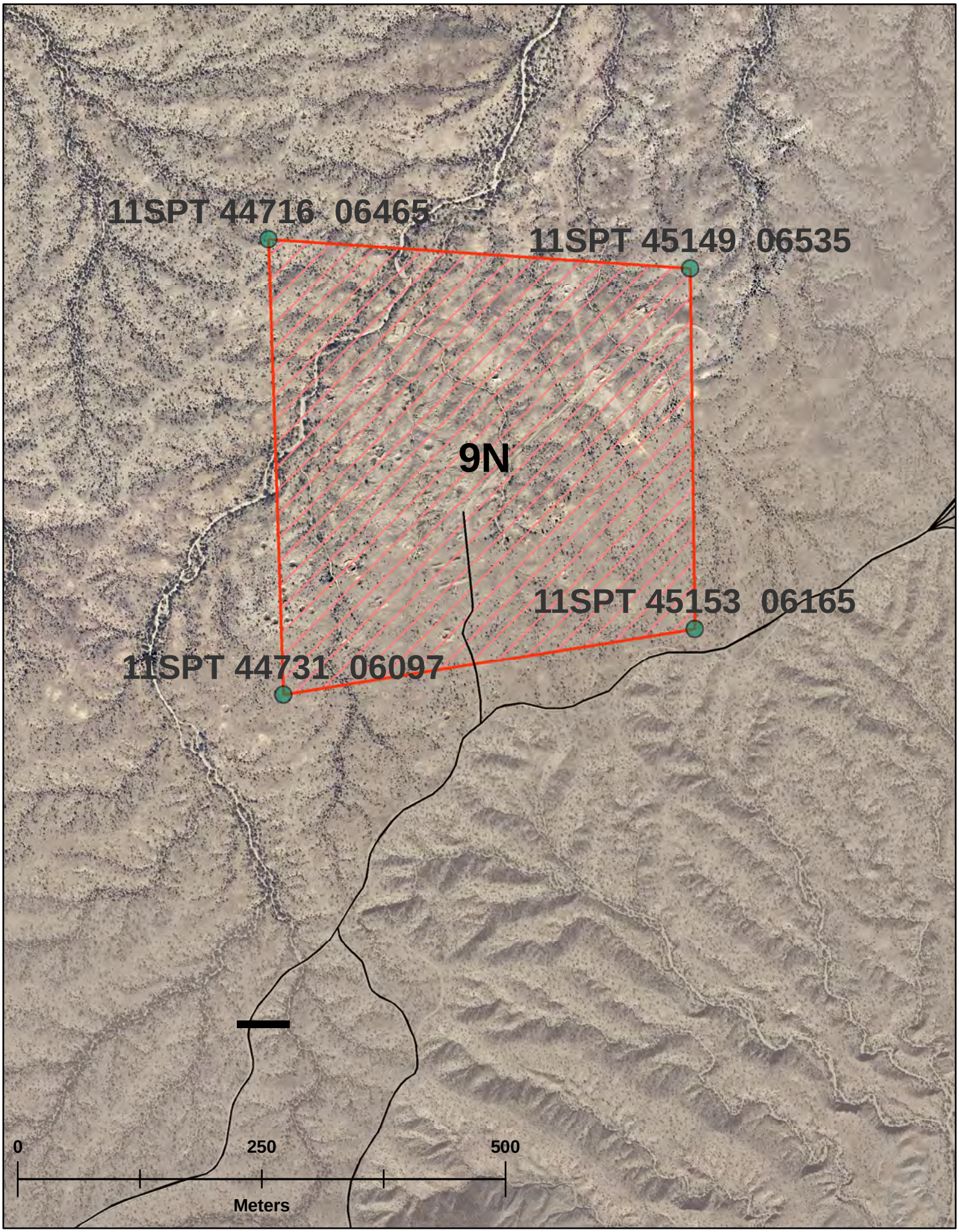
500
1,000
Meters

TARGET 9N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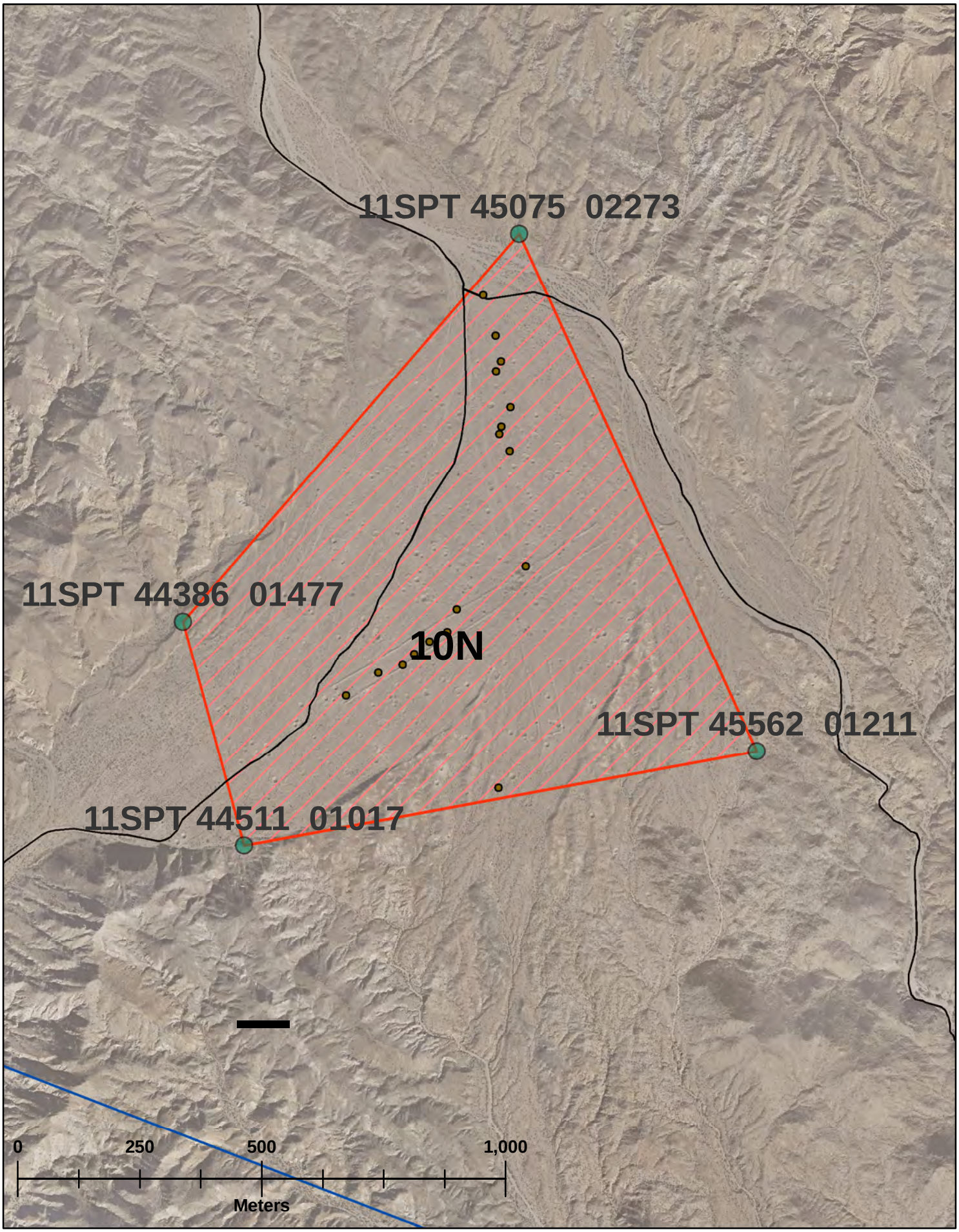
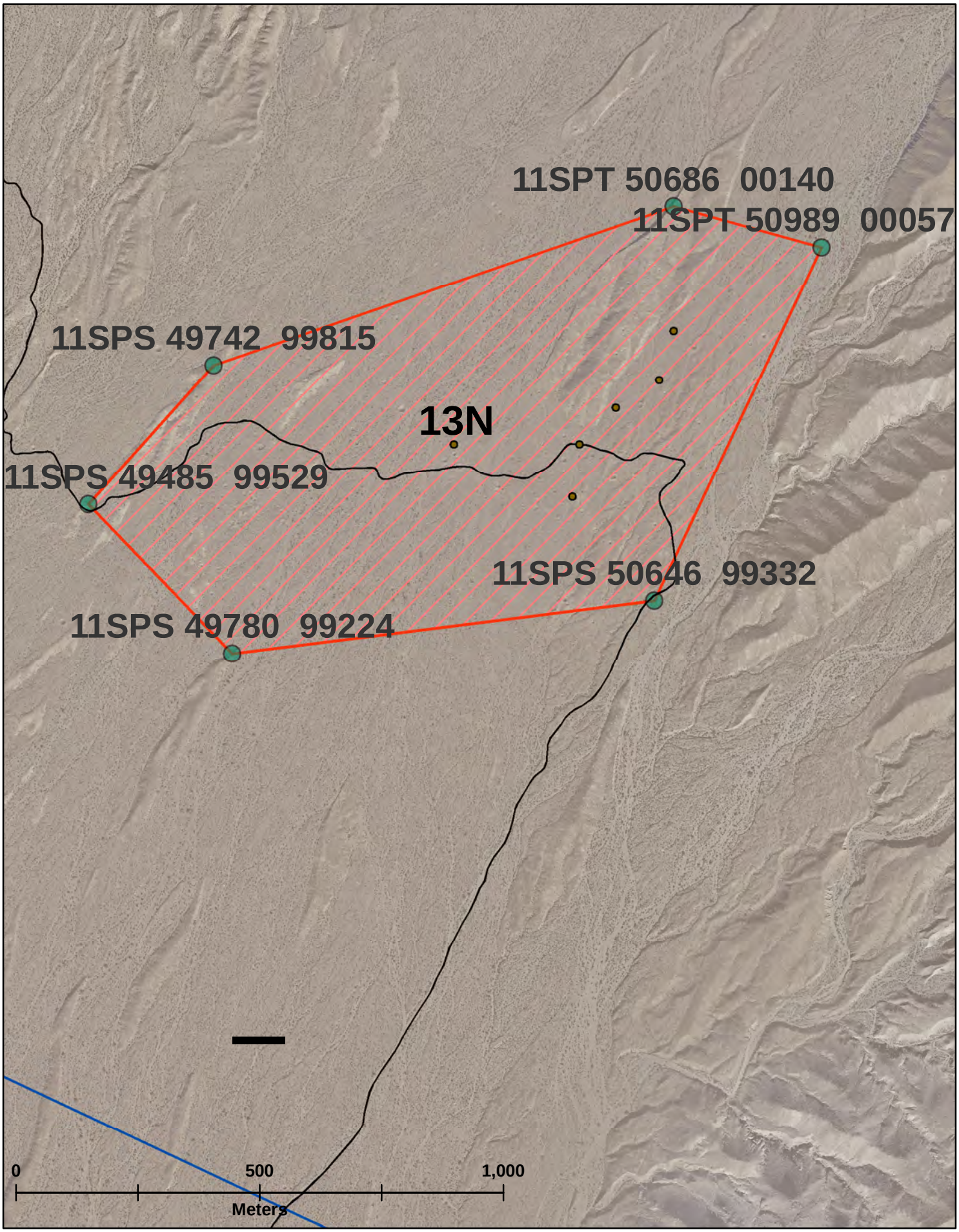
9N
11SPT 45153 06165
11SPT 44731 06097
0
250
500
Meters

TARGET 10N


11SPT 45075 02273
11SPT 44386 01477
10N
11SPT 45562 01211
11SPT 44511 01017
0
250
500
1,000
Meters

TARGET 11N

TARGET 13N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11SPT 50989 00057
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13N
11SPS 49485 99529
11SPS 50646 99332
11SPS 49780 99224
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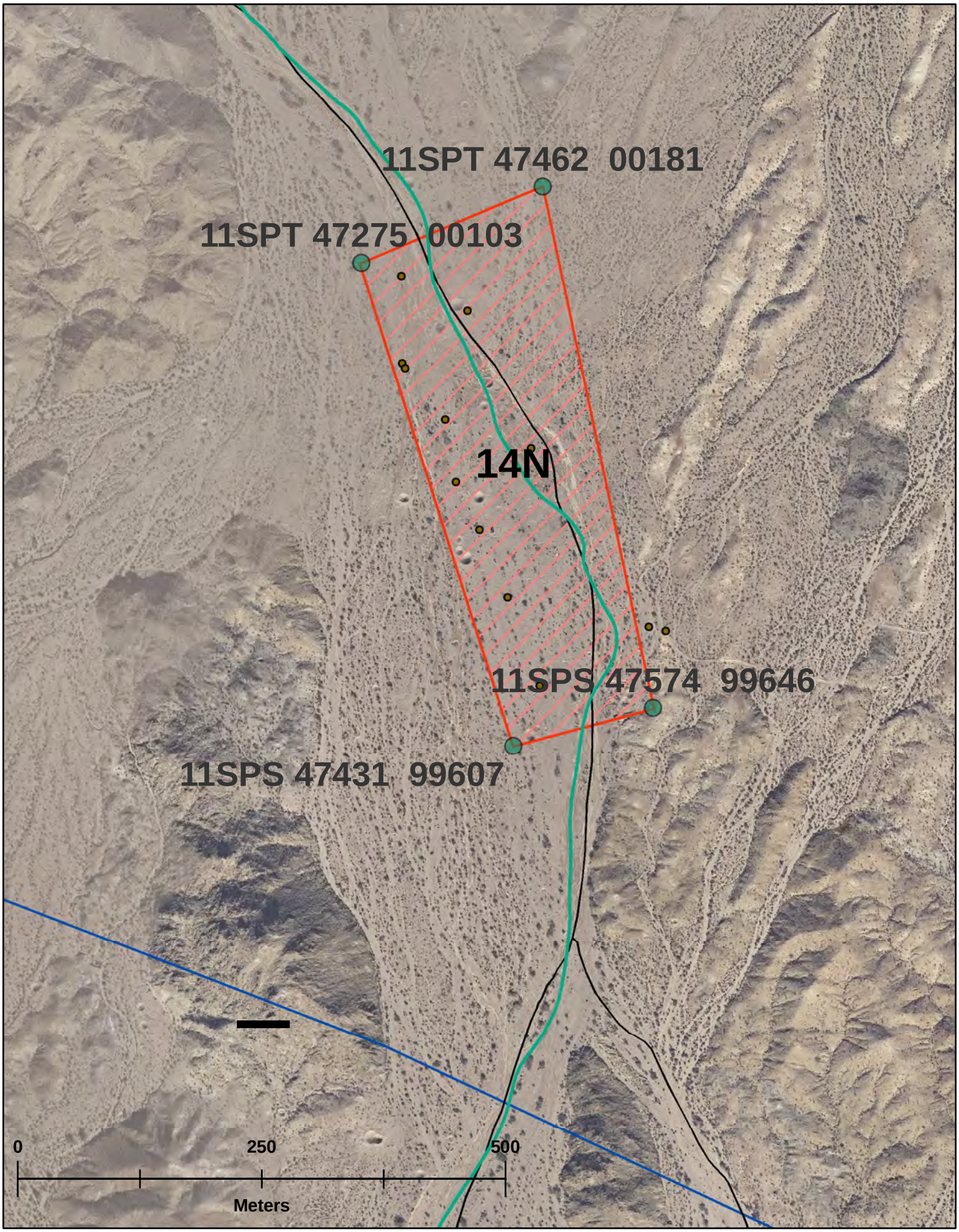
500
1,000
Meters

TARGET 14N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11SPT 47275 00103
14N
11SPS 47574 99646
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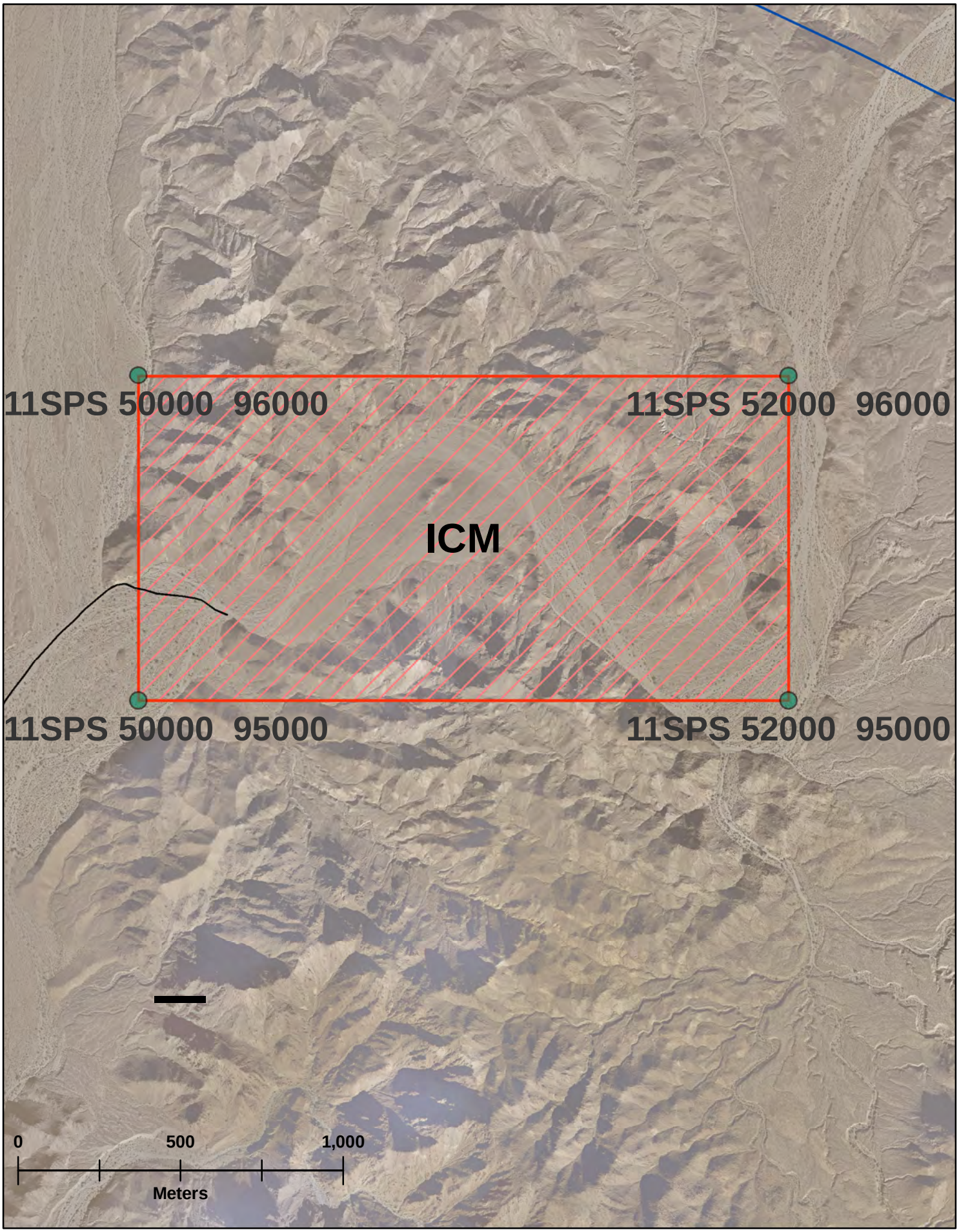
0
250
500
Meters

ICM BOX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ICM
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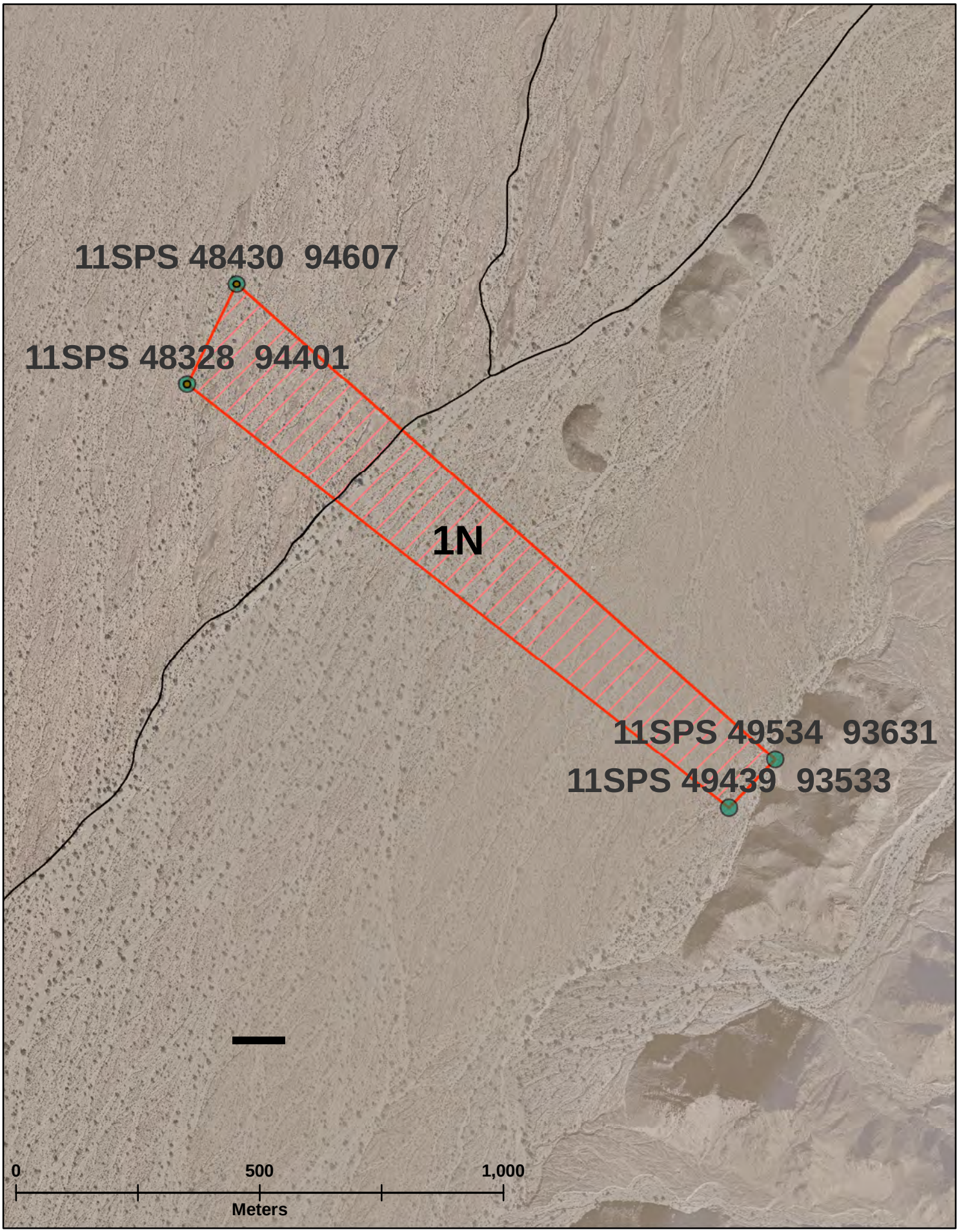
Meters

TARGET 1N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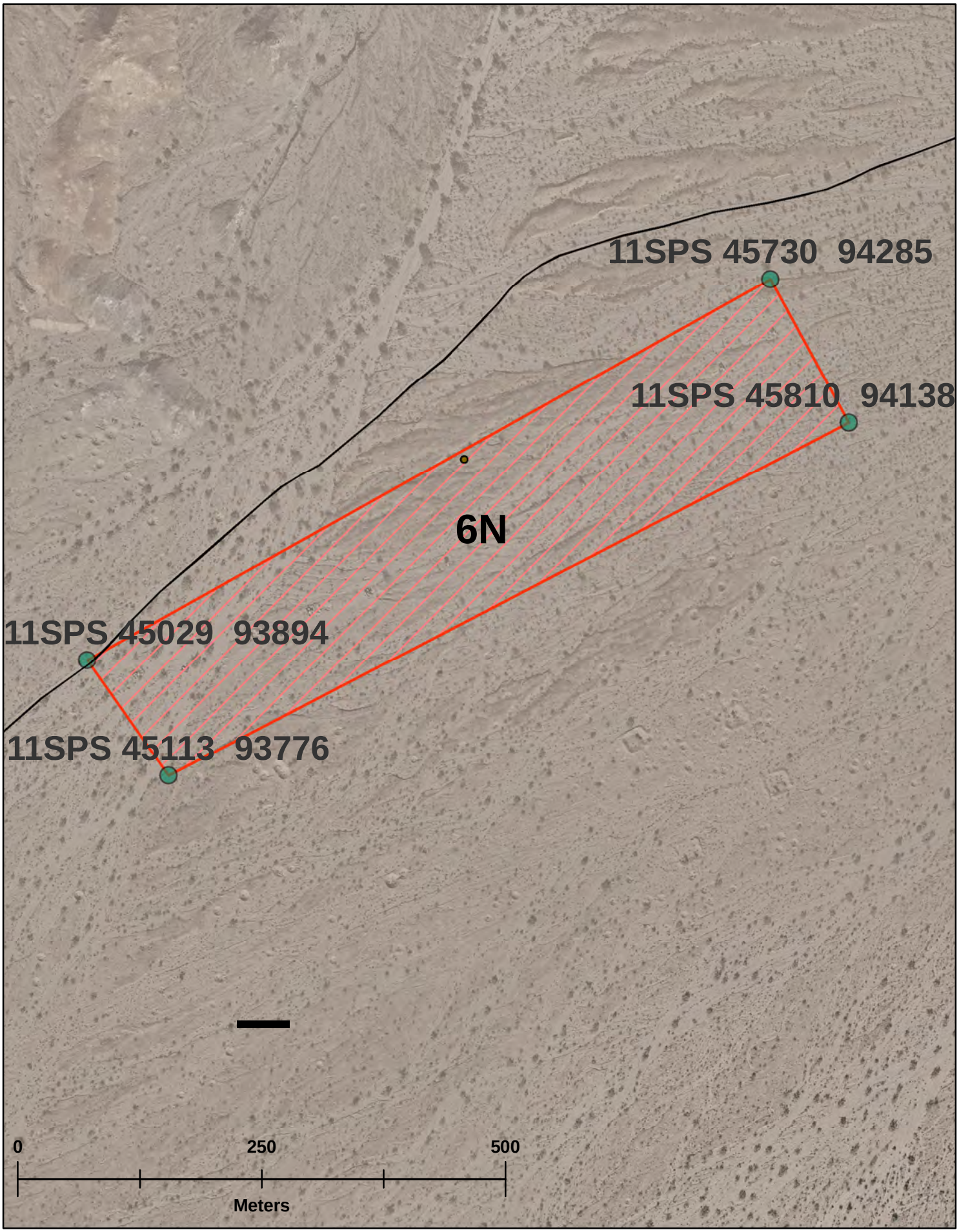
500
1,000
Meters

TARGET 6N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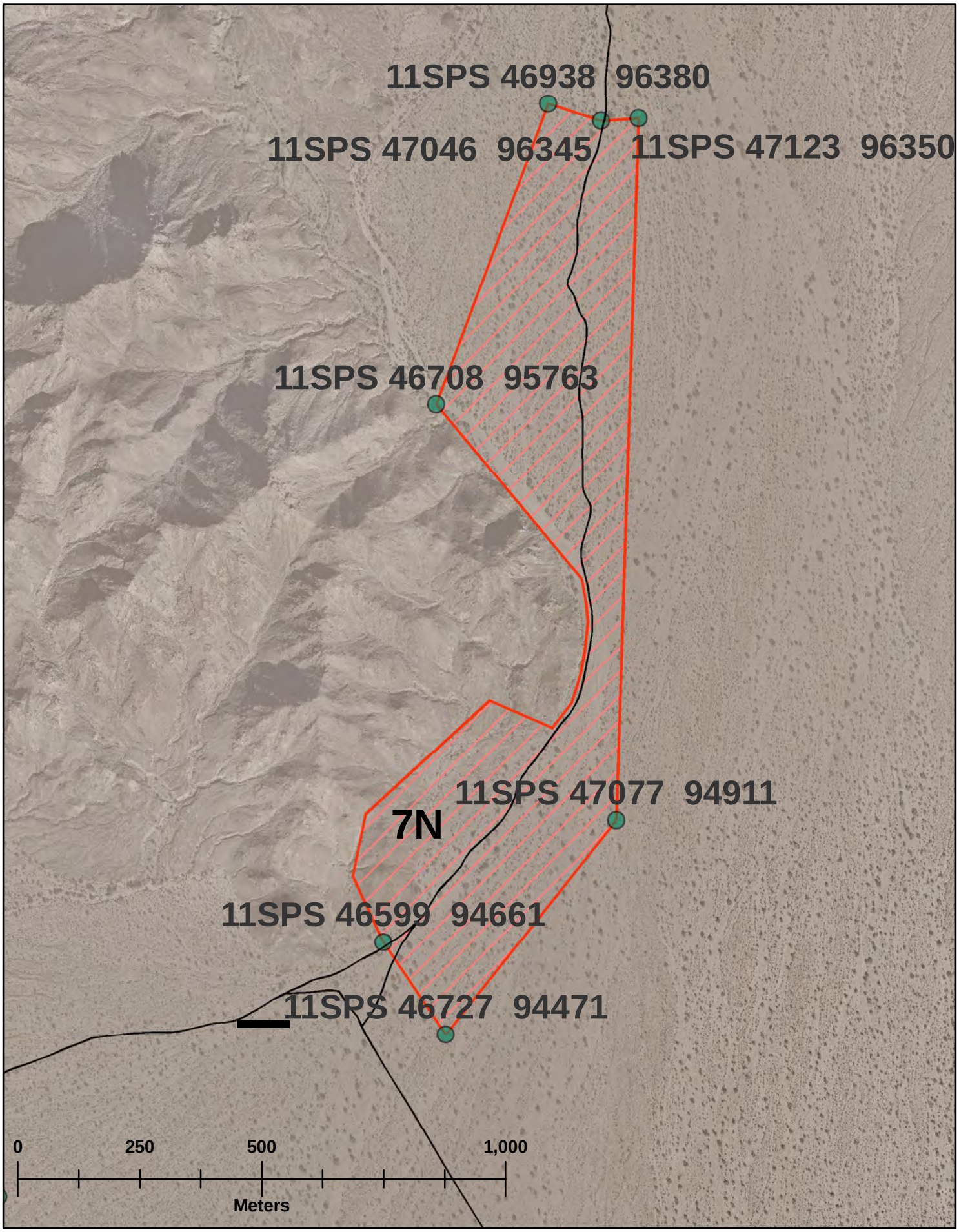
500
Meters

TARGET 7N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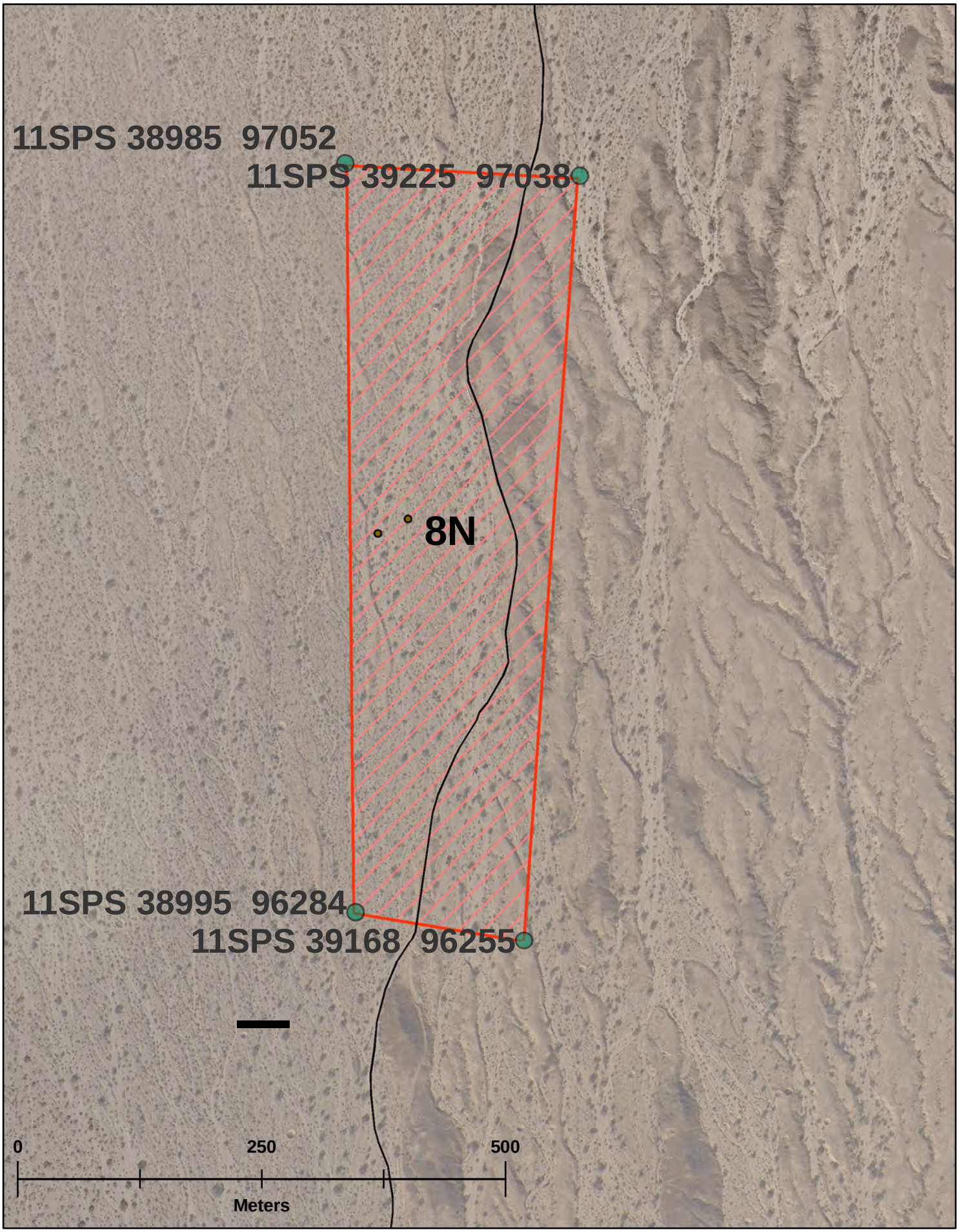
500
1,000
Meters

TARGET 8N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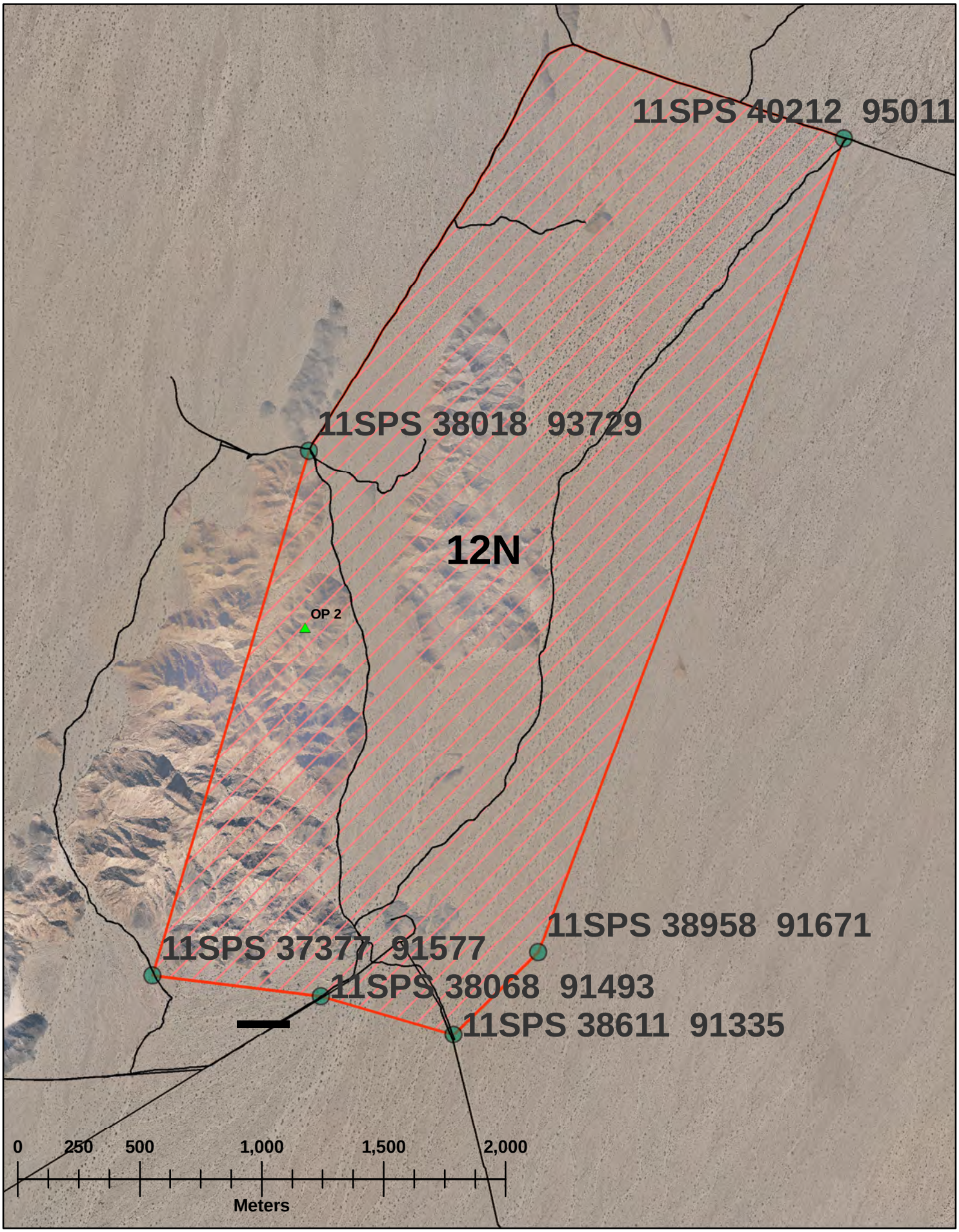
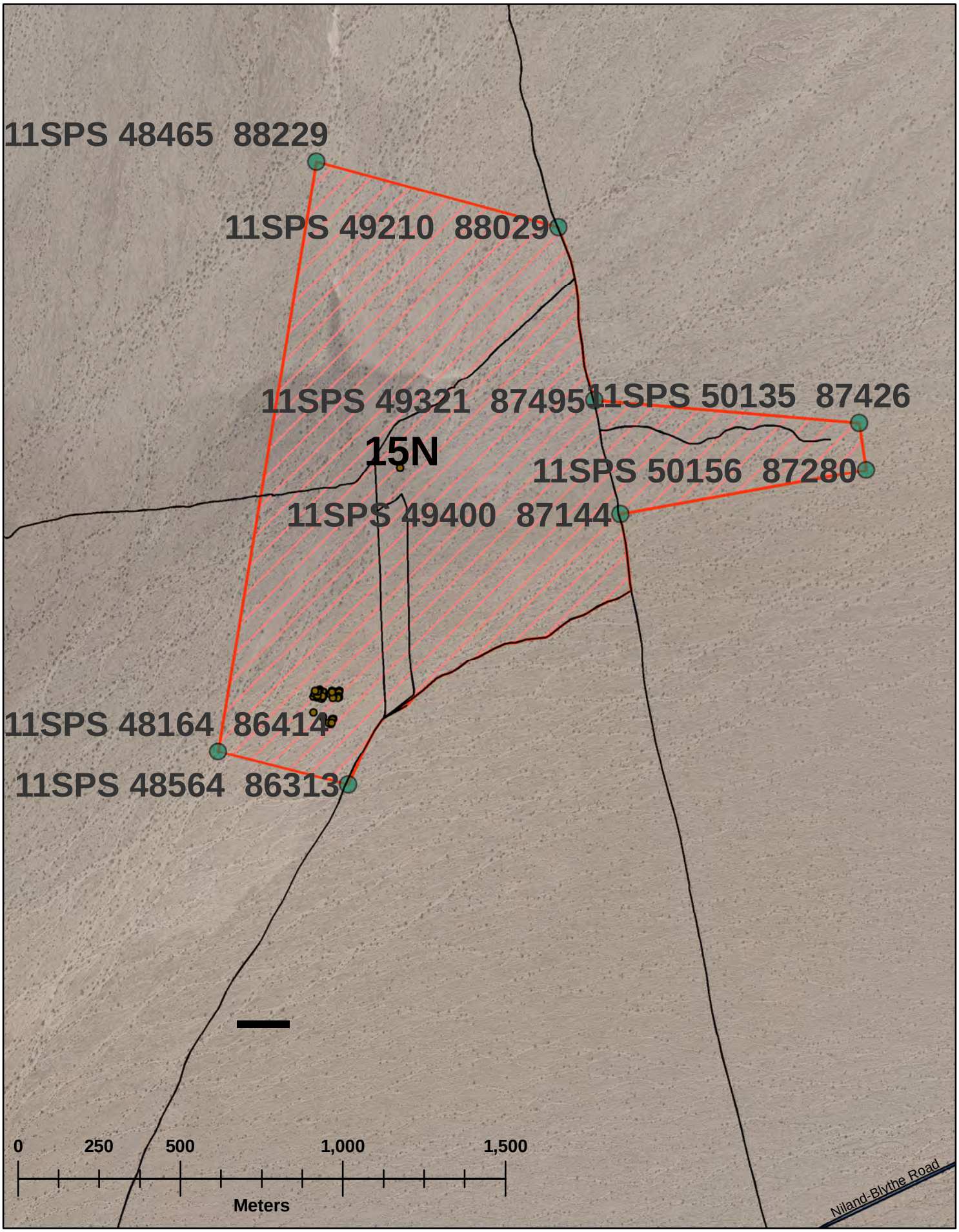
500
Meters

TARGET 12N


11SPS 40212 95011
11SPS 38018 93729
12N
OP 2
11SPS 38958 91671
11SPS 37377 91577
11SPS 38068 91493
11SPS 38611 91335
0
250
500
1,000
1,500
2,000
Meters

TARGET 15N


11SPS 48465 88229
11SPS 49210 88029
11SPS 49321 87495
11SPS 50135 87426
15N
11SPS 50156 87280
11SPS 49400 87144
11SPS 48164 86414
11SPS 48564 86313
0
250
500
1,000
1,500
Meters
Niland-Blythe Road

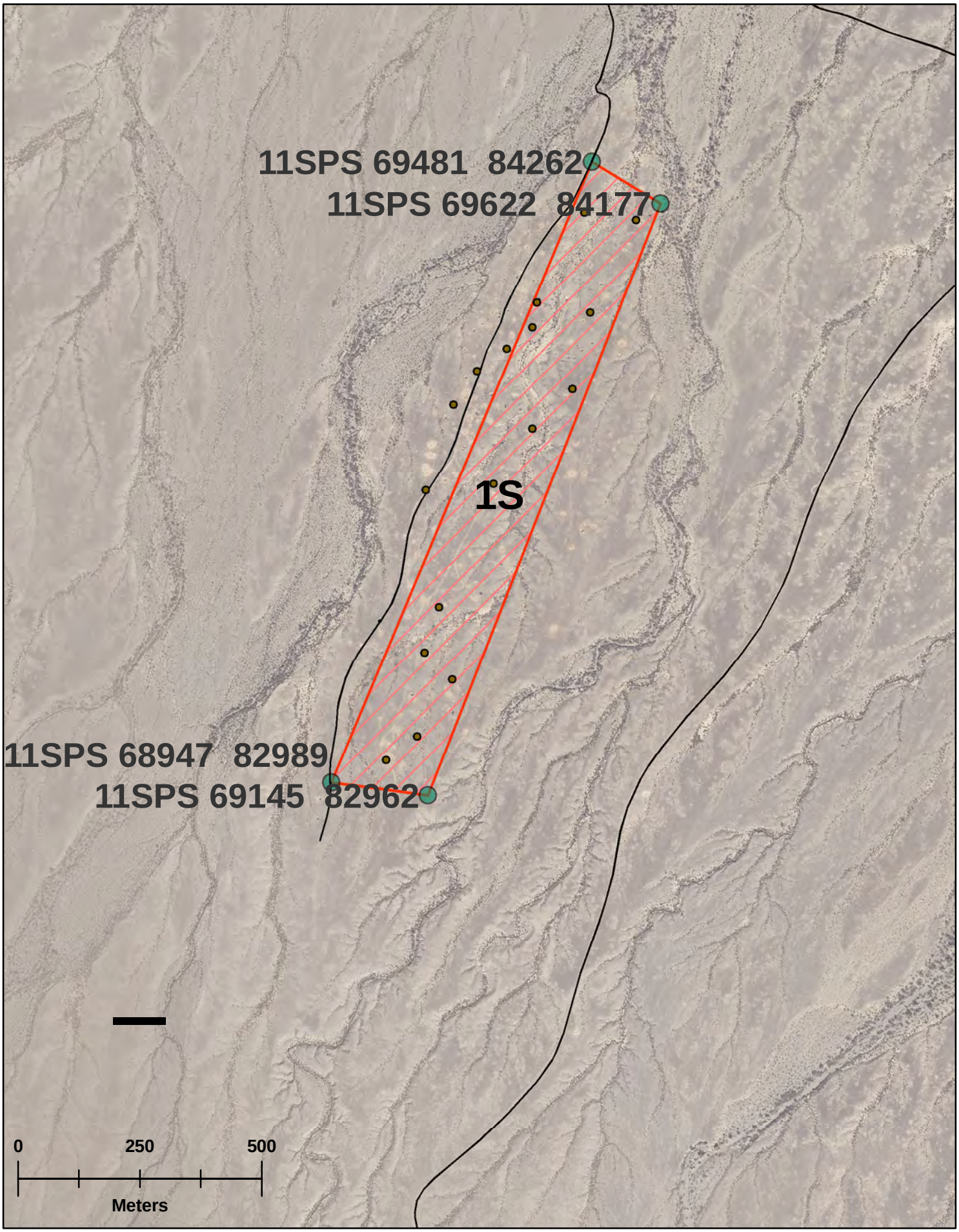
TARGET AREA POLYGONS

R-2507 SOUTH

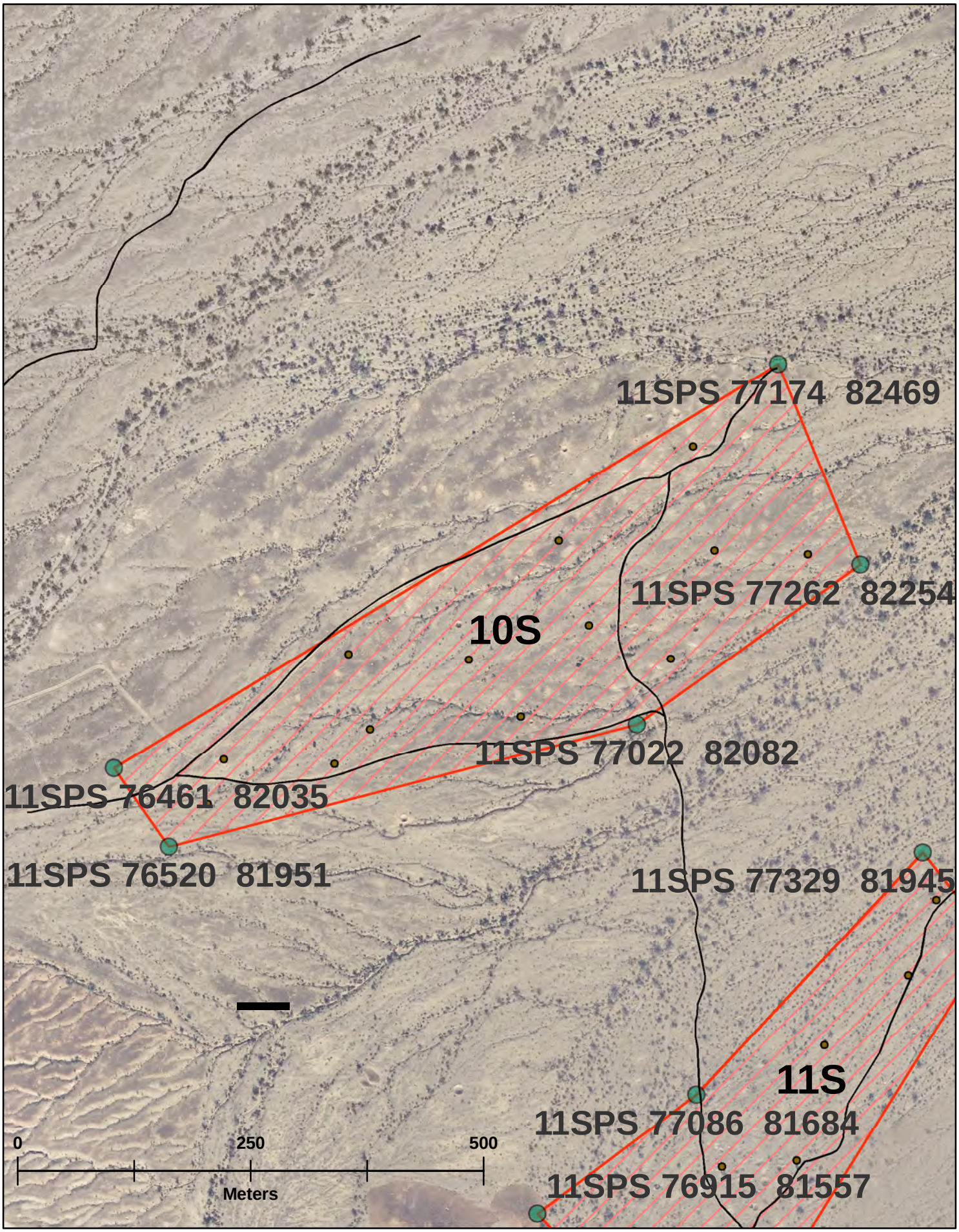
(SEE APPENDIX C FOR AUTHORIZED ORDNANCE)

TARGET	1 SOUTH	HE / INERT
TARGET	2 SOUTH	HE / INERT
TARGET	3 SOUTH	HE / INERT
TARGET	4 SOUTH	HE / INERT
TARGET	5 SOUTH	HE / INERT
TARGET	6 SOUTH	HE / INERT
TARGET	7 SOUTH	HE / INERT
TARGET	8 SOUTH	HE / INERT
TARGET	10 SOUTH	HE / INERT
TARGET	11 SOUTH	HE / INERT
TARGET	12 SOUTH	HE / INERT
TARGET	13 SOUTH	HE / INERT
TARGET	14 SOUTH	HE / INERT
TARGET	15 SOUTH	HE / INERT
TARGET	MOUNT BARROW	HELO ONLY

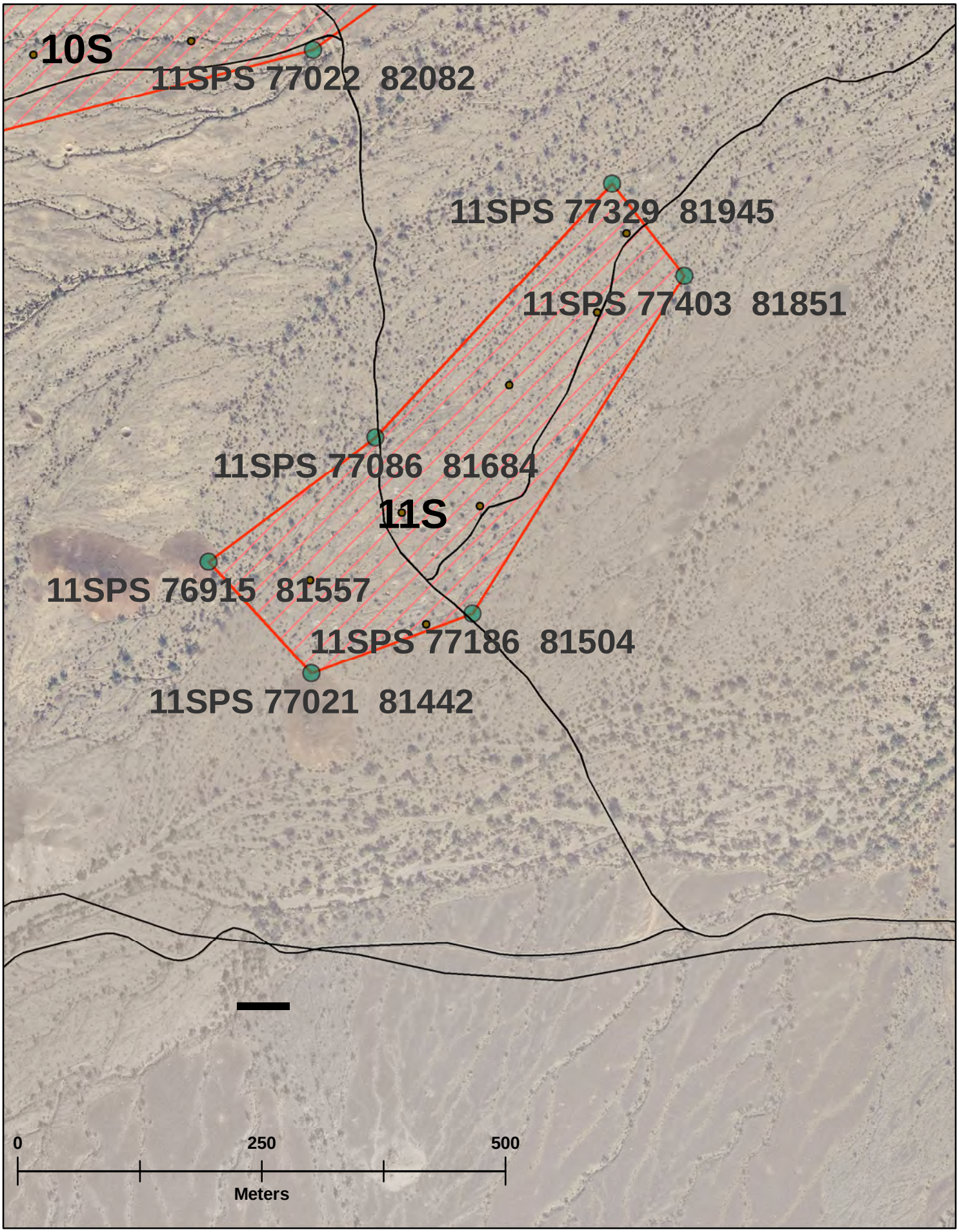
TARGET 1S


11SPS 69481 84262
11SPS 69622 84177
1S
11SPS 68947 82989
11SPS 69145 82962
0
250
500
Meters

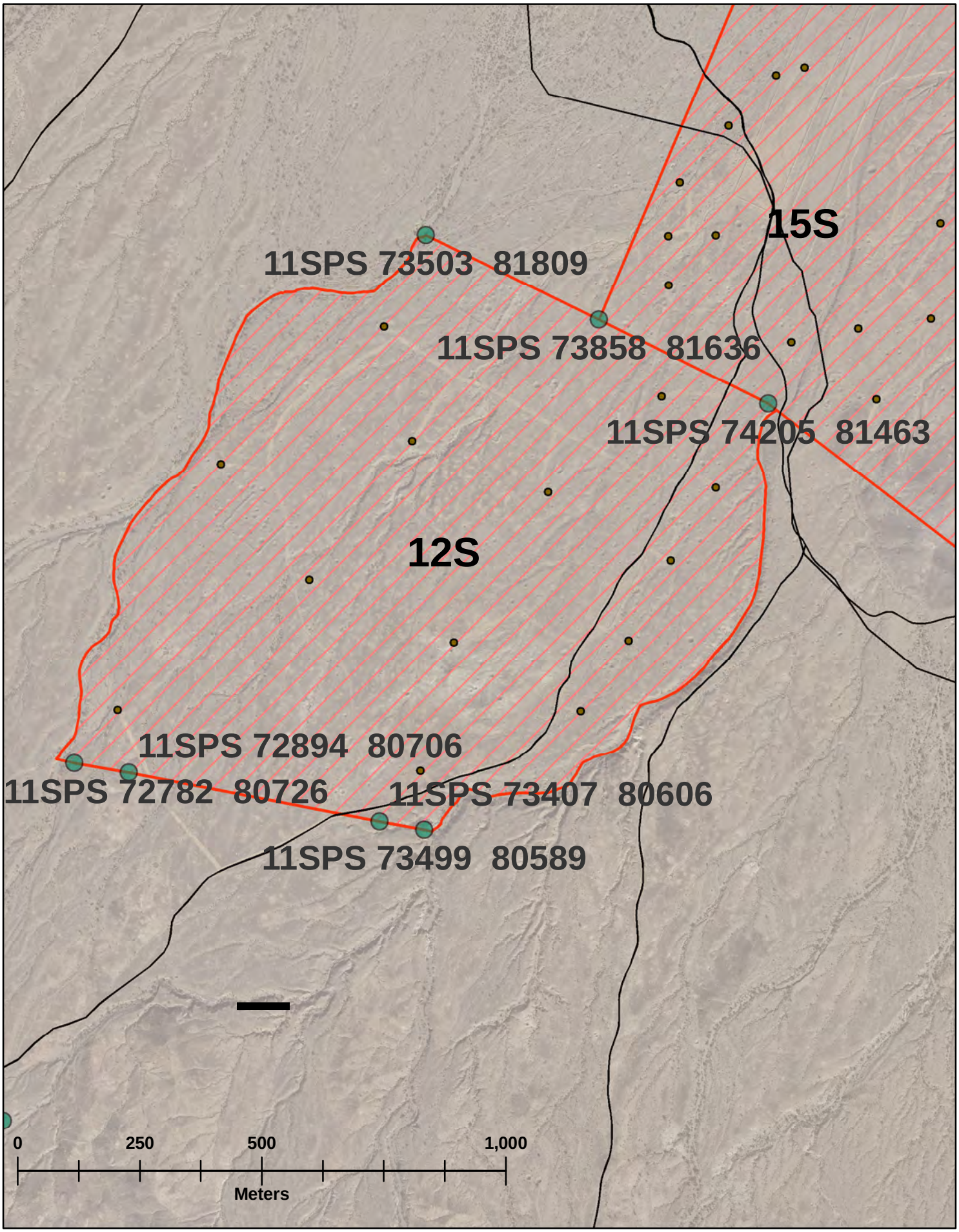
TARGET 10S


11SPS 77174 82469
11SPS 77262 82254
10S
11SPS 77022 82082
11SPS 76461 82035
11SPS 76520 81951
11SPS 77329 81945
11S
11SPS 77086 81684
11SPS 76915 81557
0
250
500
Meters

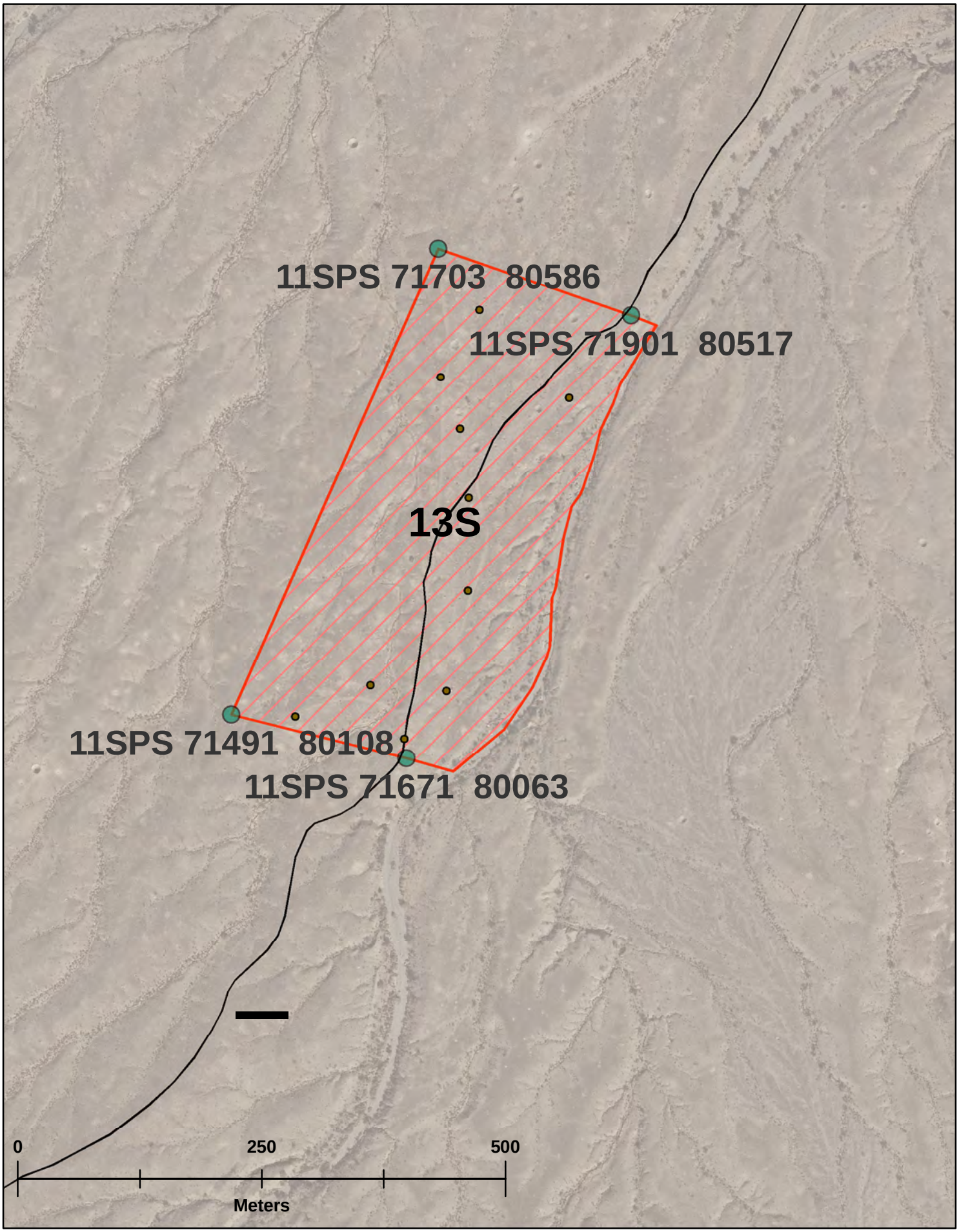
TARGET 11S


10S
11SPS 77022 82082
11SPS 77329 81945
11SPS 77403 81851
11SPS 77086 81684
11S
11SPS 76915 81557
11SPS 77186 81504
11SPS 77021 81442
0
250
500
Meters

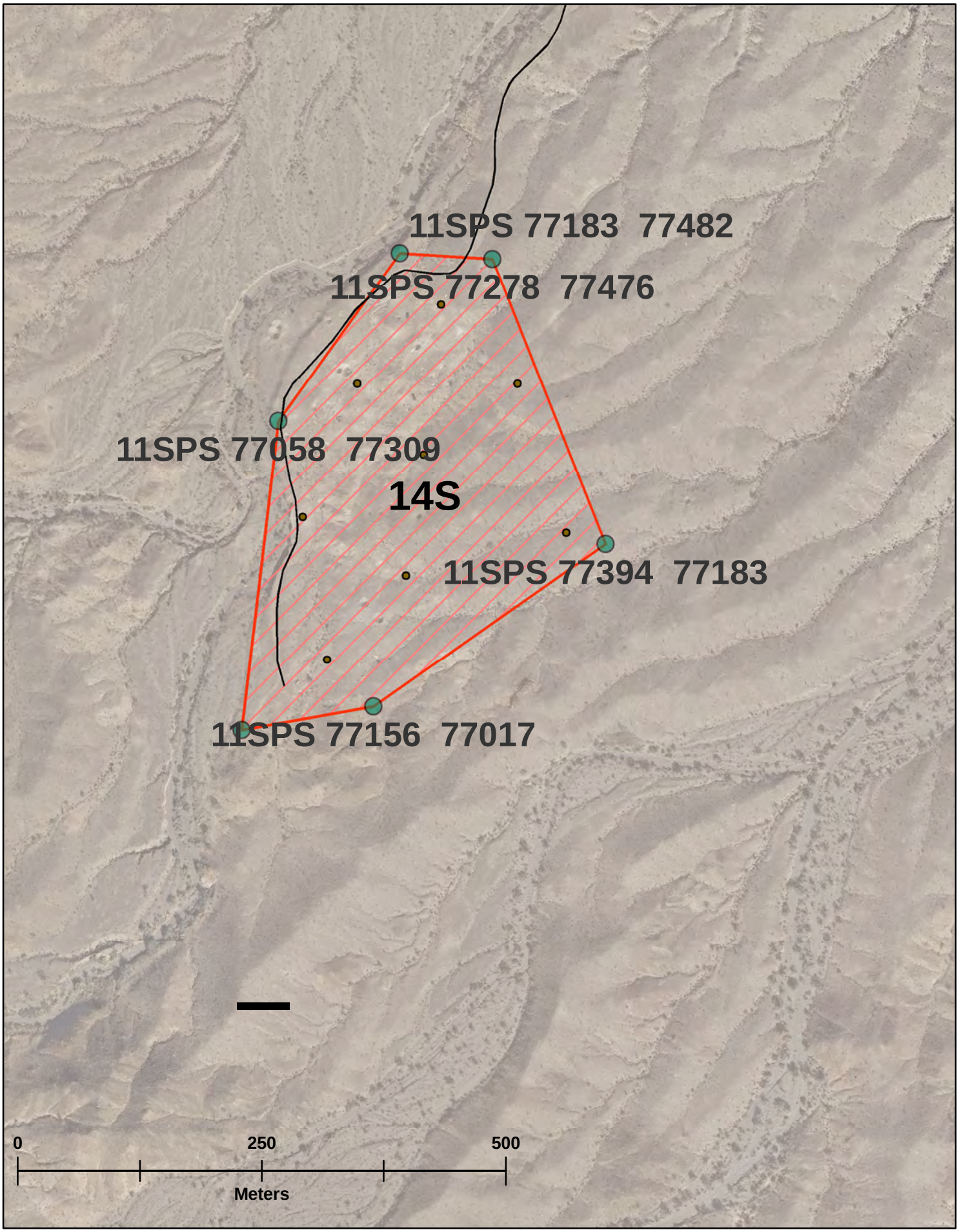
TARGET 12S


15S
11SPS 73503 81809
11SPS 73858 81636
11SPS 74205 81463
12S
11SPS 72894 80706
11SPS 72782 80726
11SPS 73407 80606
11SPS 73499 80589
0
250
500
1,000
Meters

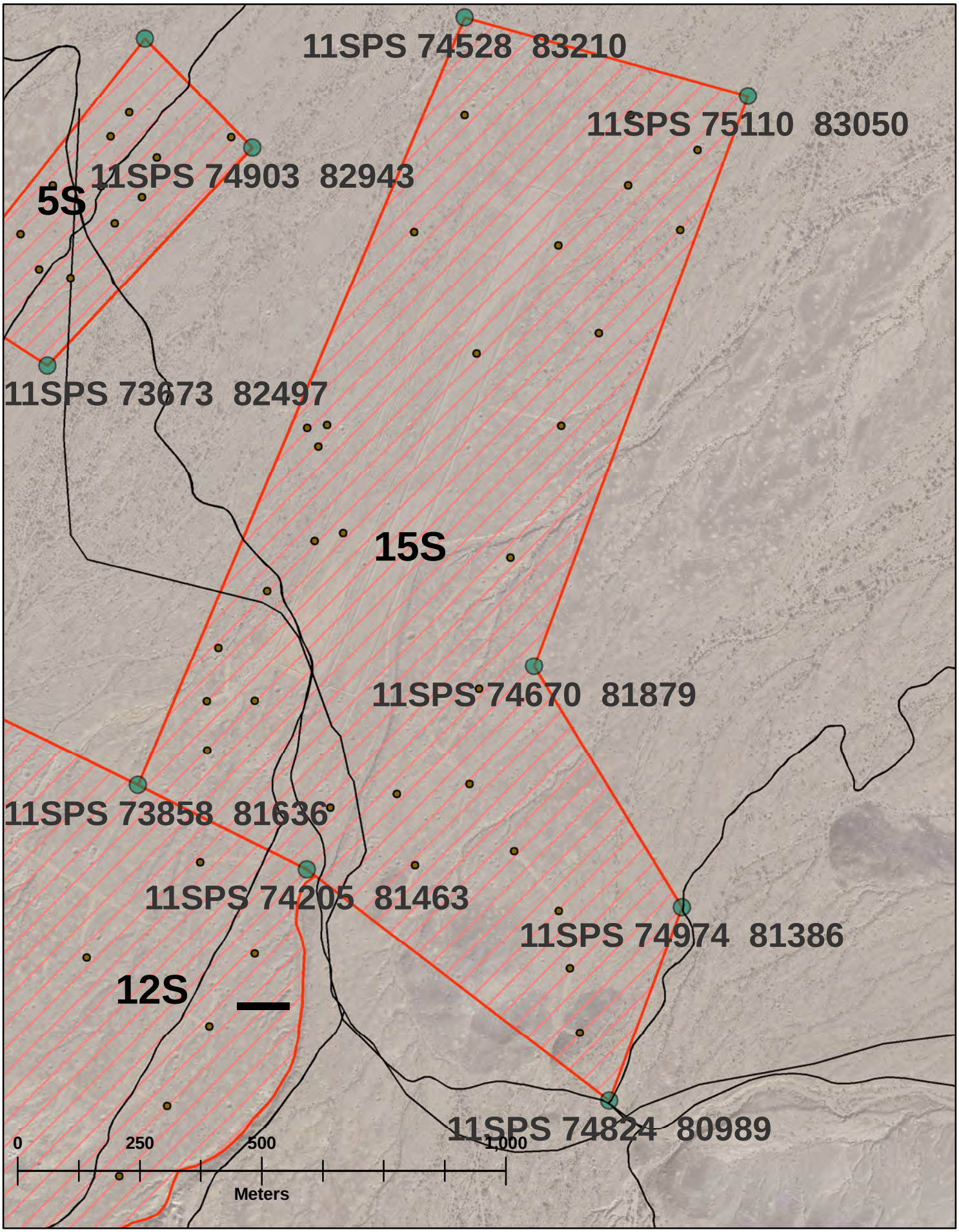
TARGET 13S


11SPS 71703 80586
11SPS 71901 80517
13S
11SPS 71491 80108
11SPS 71671 80063
0
250
500
Meters

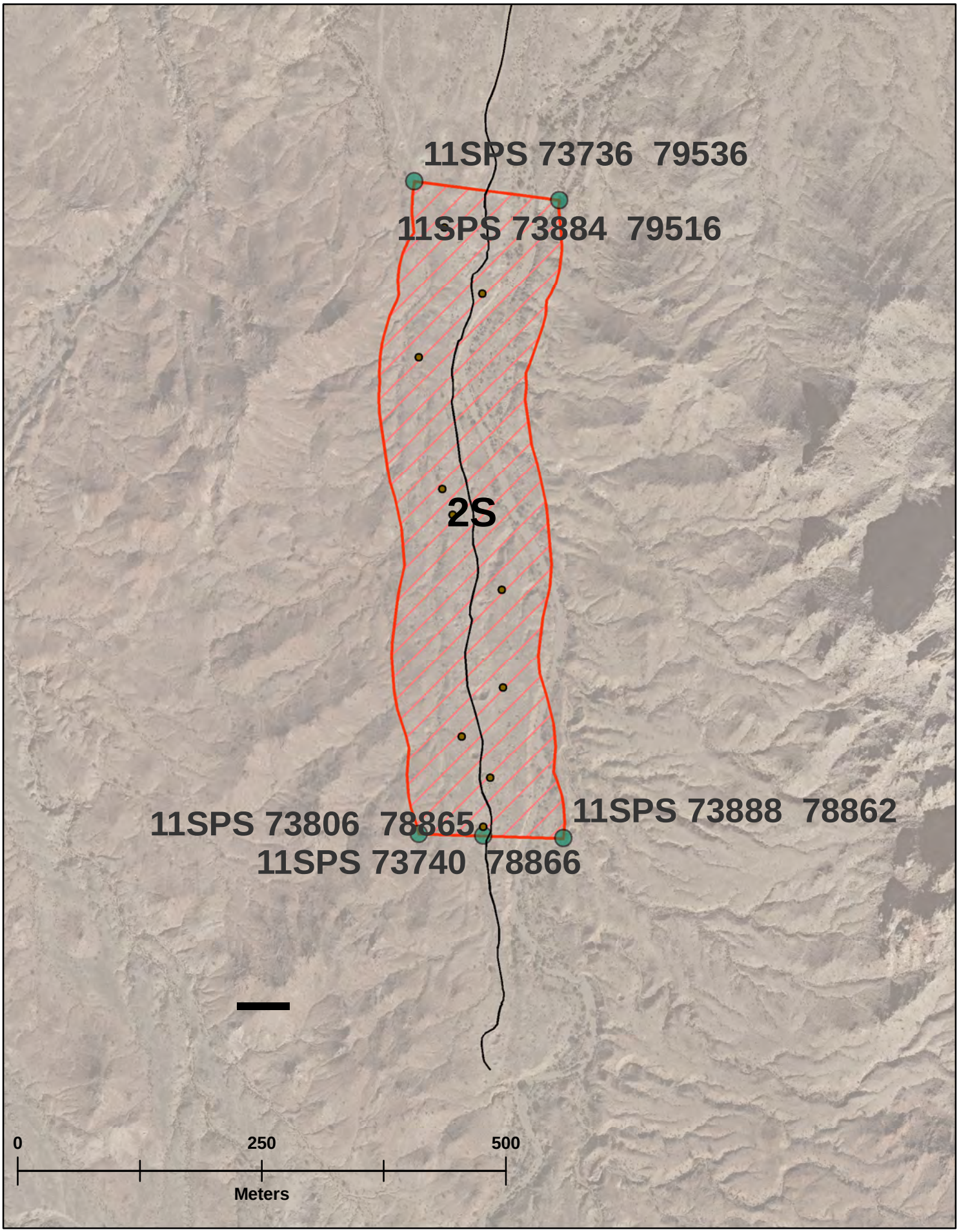
TARGET 14S


11SPS 77183 77482
11SPS 77278 77476
11SPS 77058 77309
14S
11SPS 77394 77183
11SPS 77156 77017
0
250
500
Meters

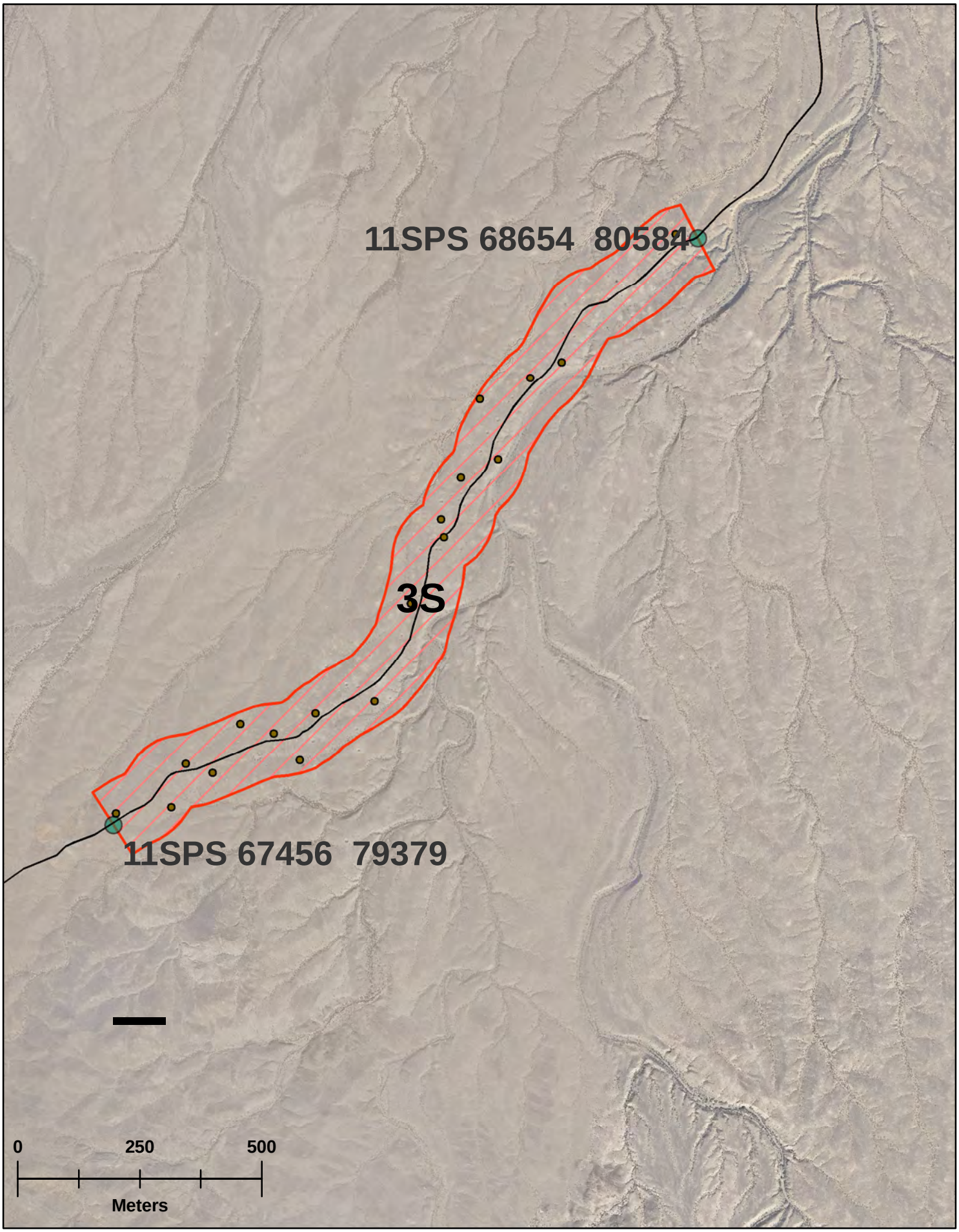
TARGET 15S


11SPS 74528 83210
11SPS 75110 83050
11SPS 74903 82943
5S
11SPS 73673 82497
15S
11SPS 74670 81879
11SPS 73858 81636
11SPS 74205 81463
11SPS 74974 81386
12S
11SPS 74824 80989
0
250
500
1,000
Meters

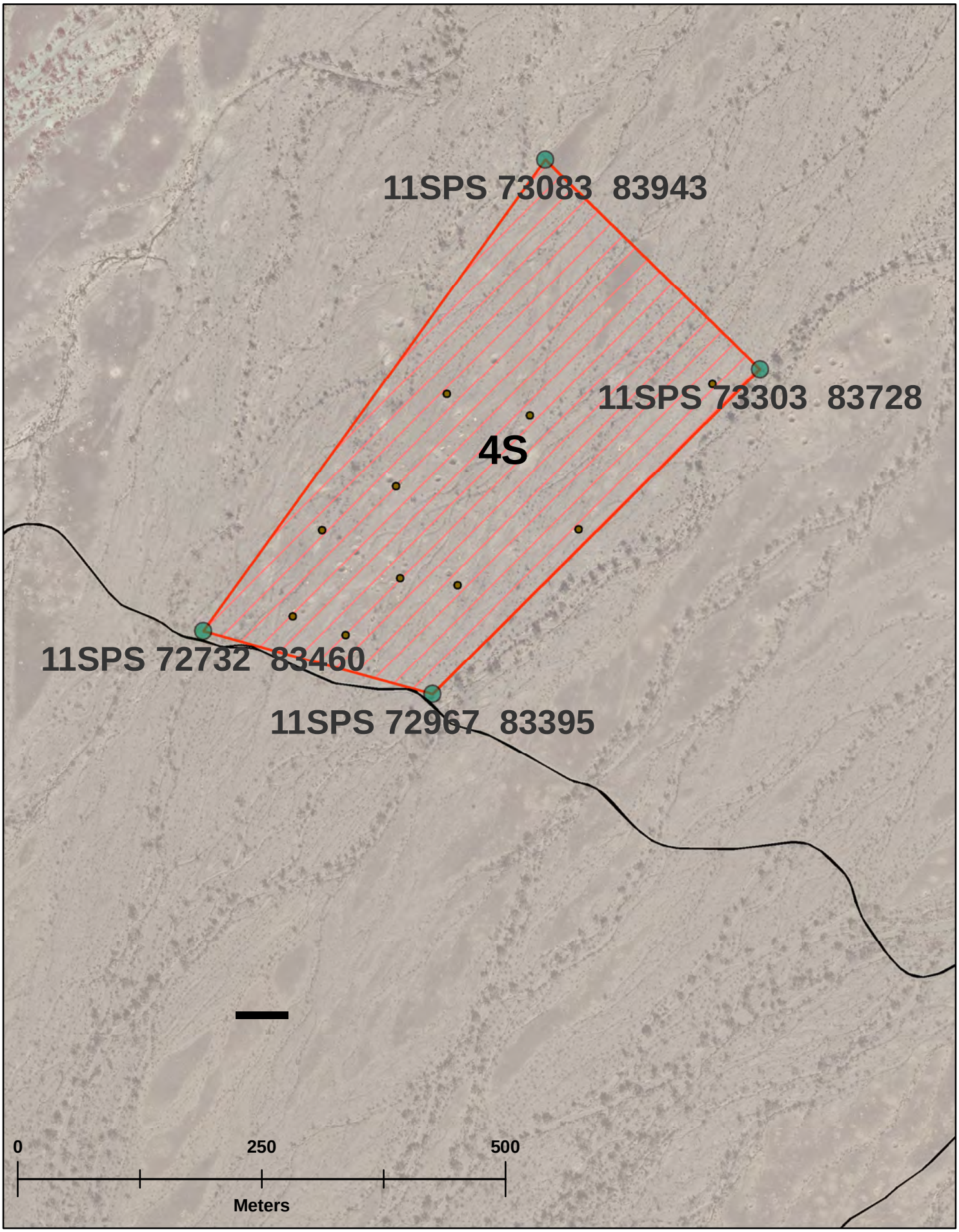
TARGET 2S


11SPS 73736 79536
11SPS 73884 79516
2S
11SPS 73806 78865
11SPS 73888 78862
11SPS 73740 78866
0
250
500
Meters

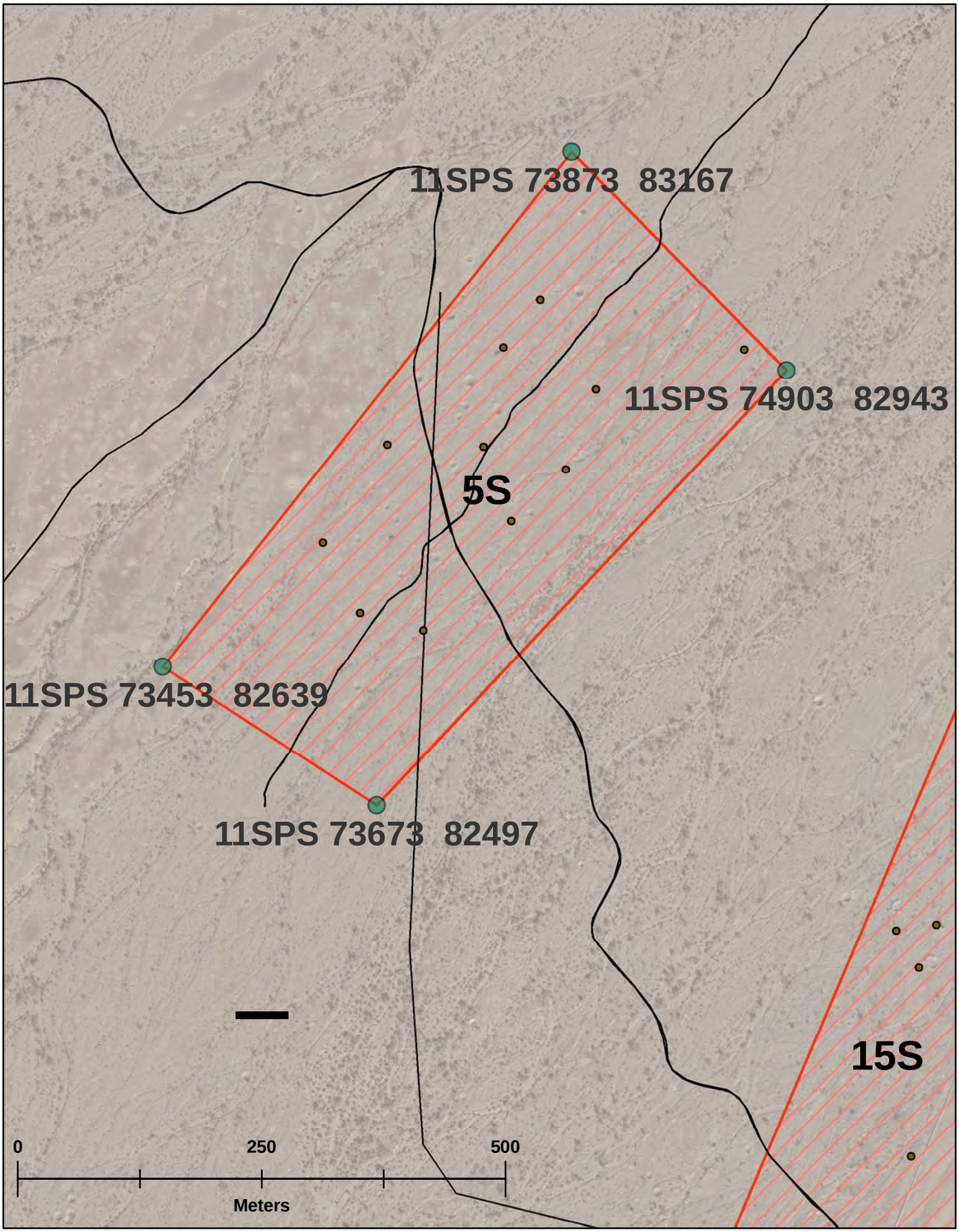
TARGET 3S



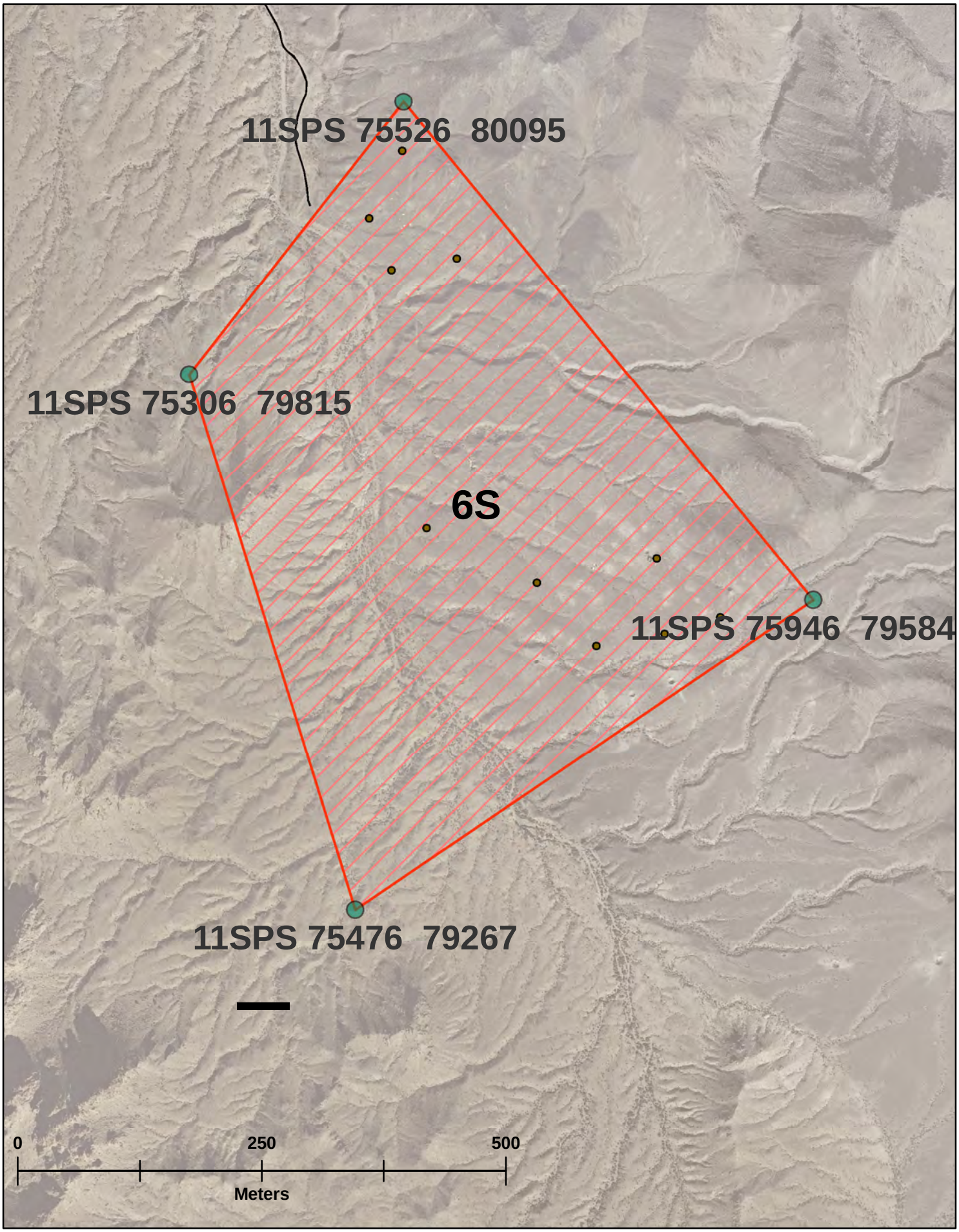
TARGET 4S


11SPS 73083 83943
11SPS 73303 83728
4S
11SPS 72732 83460
11SPS 72967 83395
0
250
500
Meters

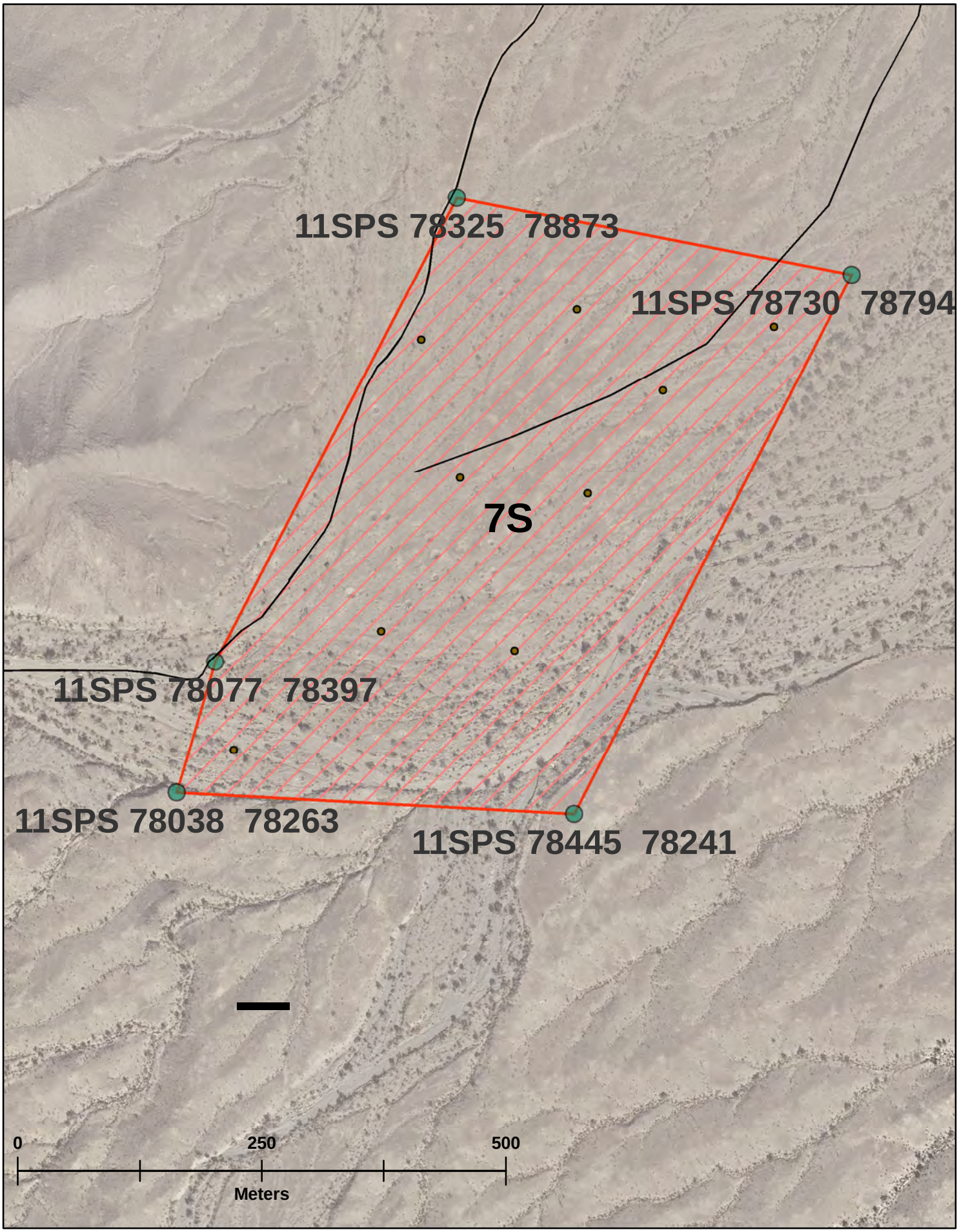
TARGET 5S


11SPS 73873 83167
11SPS 74903 82943
5S
11SPS 73453 82639
11SPS 73673 82497
15S
0
250
500
Meters

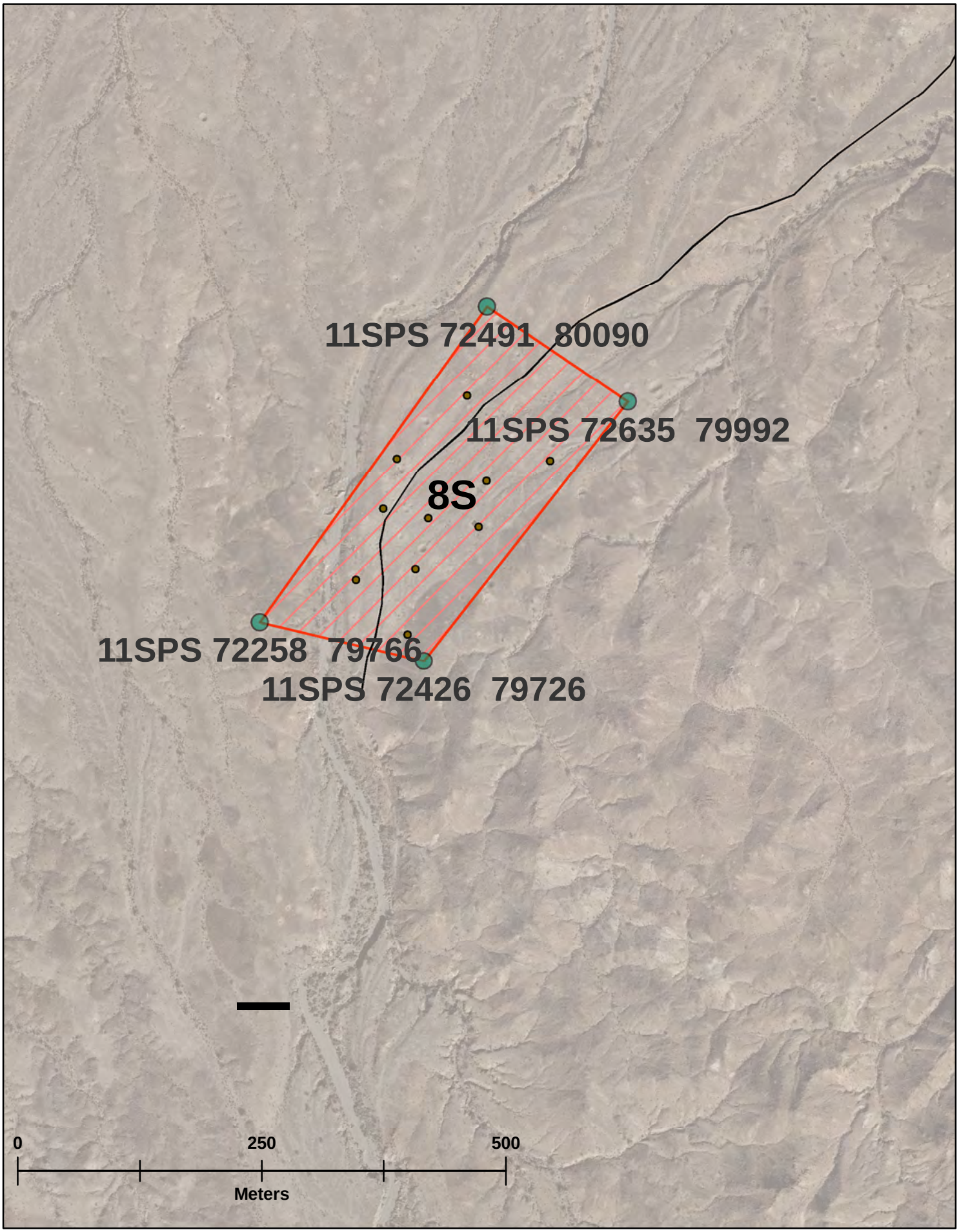
TARGET 6S


11SPS 75526 80095
11SPS 75306 79815
6S
11SPS 75946 79584
11SPS 75476 79267
0
250
500
Meters

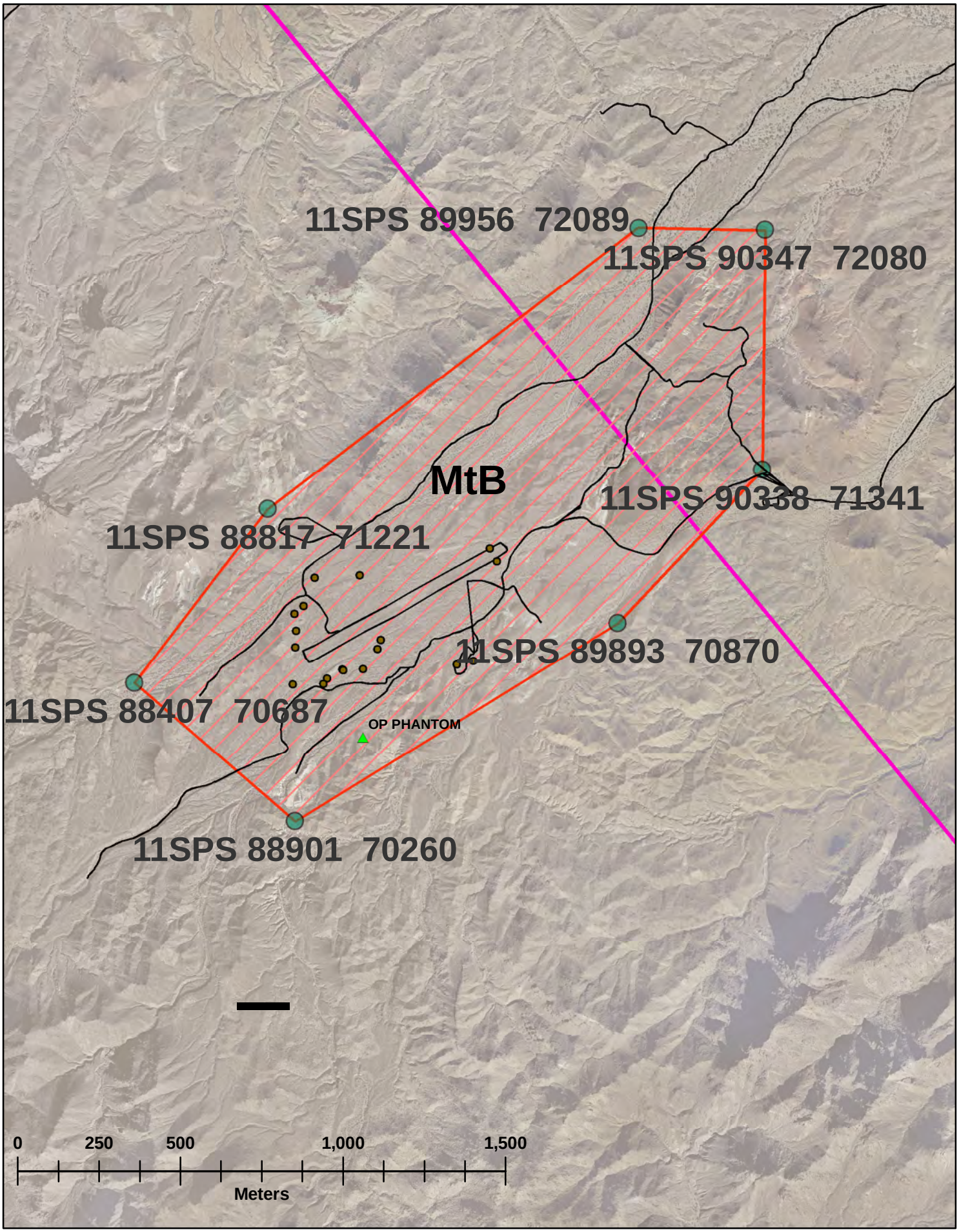
TARGET 7S


11SPS 78325 78873
11SPS 78730 78794
7S
11SPS 78077 78397
11SPS 78038 78263
11SPS 78445 78241
0
250
500
Meters

TARGET 8S


11SPS 72491 80090
11SPS 72635 79992
8S
11SPS 72258 79766
11SPS 72426 79726
0
250
500
Meters

MOUNT BARROW



APPENDIX C

MCAS YUMA ORDNANCE MATRICES

TOPIC	PAGE
R-2507 North	C-3
R-2507 South	C-5
Mt. Barrow (R-2507 South)	C-7
R-2510 & R-2512	C-8
R-2301 West	C-9
MCAS Small Arms Ranges	C-10
Convoy Security Operations Course (CSOC) Ranges	C-11
Special Warfare Training Area Four (SWAT-4)	C-12
JDAM Launch Acceptable Regions for R-2507	C-14

Matrices Legend:

	= Not Authorized
X	= Authorized under special conditions (see Notes)
X	= Authorized

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	= Not Authorized
X	= Authorized under special conditions (see Notes)
X	= Authorized

R-2507 North	ICM BOX	2 NORTH	3 NORTH	9 NORTH	10 NORTH	11 NORTH	13 NORTH	14 NORTH	1 NORTH	6 NORTH	7 NORTH	8 NORTH	12 NORTH	15 NORTH	NOTES
AIRBORNE LASER		X	X	X	X	X	X	X	X	X	X	X	X	X	COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT
.50CAL / 7.62MM		X	X	X	X	X	X	X	X	X	X	X	X	X	
2.75" ROCKETS		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
30MM, 25MM, 20MM GUNS		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
5" ROCKETS		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
AGM-114 HELLFIRE		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15. **APPROVED MISSILE FIRING REQUEST REQUIRED BEFORE AUTHORIZATION TO DROP - SEE APPENDIX E FOR SUBMISSION FORM**
AGM-154 JSOW															*****NOT AUTHORIZED*****
AGM-65 MAVERICK															*****NOT AUTHORIZED*****
AGM-88 HARM															*****NOT AUTHORIZED*****
AIM-120 AMRAAM															*****NOT AUTHORIZED*****
AIM-7 SPARROW															*****NOT AUTHORIZED*****
AIM-9 SIDEWINDER															*****BY SPECIAL REQUEST ONLY***ROTARY WING ONLY*** APPROVED MISSILE FIRING REQUEST REQUIRED BEFORE AUTHORIZATION TO DROP - SEE APPENDIX E FOR SUBMISSION FORM**
BDU-33		X	X	X	X	X	X	X	X	X	X	X	X	X	
BDU-45		X	X	X	X	X	X	X	X	X	X	X	X	X	
BDU-48		X	X	X	X	X	X	X	X	X	X	X	X	X	
BGM-71 TOW		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15. **APPROVED MISSILE FIRING REQUEST REQUIRED BEFORE AUTHORIZATION TO DROP - SEE APPENDIX E FOR SUBMISSION FORM**
BLU-109		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
BLU-110		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
BLU-111		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
CBU-52	X														RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior
CBU-55															*****NOT AUTHORIZED*****
CBU-58	X														RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior
CBU-59	X														RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior
CBU-71															*****NOT AUTHORIZED*****
CBU-72															*****NOT AUTHORIZED*****
CBU-75															*****NOT AUTHORIZED*****
CBU-78															*****NOT AUTHORIZED*****
CBU-87	X														RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior
CBU-89															*****NOT AUTHORIZED*****

Special Restrictions: 1. Target 15 North (WISS Airfield) has several targets of opportunity to include a runway and UTC. The UTC located 1,250 ft. east of the center runway at MGRS 11S PS 49038 87229 is restricted to 25mm TP and below. The runway (and immediately surrounding targets) remains supportable of inert ordnance expenditures. **2.** Target 1 North (within Iris Wash) UTC: Mk-76, LGTR, BDU-48, 2.75" inert, 25mm and below is authorized. CP at UTC is a mosque located N 33° 22' 39.85" W 115° 24' 08.00". Heavy inert: BDU-45, M-83I, Mk-84I shall be released on bullseye located at N 33° 22' 20.62" W 115° 23' 41.84" (offset from mosque at 144° magnetic/960 meters).

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

R-2507 North	ICM BOX	2 NORTH	3 NORTH	9 NORTH	10 NORTH	11 NORTH	13 NORTH	14 NORTH	1 NORTH	6 NORTH	7 NORTH	8 NORTH	12 NORTH	15 NORTH	NOTES
CBU-97															*****NOT AUTHORIZED*****
CBU-99	X														RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior
CBU-100	X														RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior
CBU-103 WCMD															*****NOT AUTHORIZED*****
CBU-104 WCMD															*****NOT AUTHORIZED*****
CBU-105 WCMD															*****NOT AUTHORIZED*****
CBU-107 WCMD															*****NOT AUTHORIZED*****
CHAFF, RADAR EVASION		X	X	X	X	X	X	X	X	X	X	X	X	X	COMPLY WITH FAA/DOD GUIDANCE - SEE PARAGRAPH 4000.3.h (PAGE 4-5)
FLARES, IR DECOY		X	X	X	X	X	X	X	X	X	X	X	X	X	
GBU-10 LGB (2,000 lb.)		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
GBU-12 LGB (500 lb.)		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
GBU-12 F/B DMLGB		X	X	X	X	X	X	X	X	X	X	X	X	X	ONE DROP PER PASS ON AUTHORIZED TARGETS ONLY; INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15
GBU-15 OGB (1,000 lb.)		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
GBU-16 LGB (1,000 lb.)		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
GBU-29/30/38 JDAM (500 lb.)		X	X		X		X	X							RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior - **SEE "JDAM ACCEPTABLE REGIONS" AT THE END OF THIS APPENDIX AND SUBMIT REQUESTS THAT FALL WITHIN THESE PARAMETERS**
GBU-31 JDAM (2,000 lb.)		X	X		X		X	X							RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior - **SEE "JDAM ACCEPTABLE REGIONS" AT THE END OF THIS APPENDIX AND SUBMIT REQUESTS THAT FALL WITHIN THESE PARAMETERS**
GBU-32 JDAM (1,000 lb.)		X	X		X		X	X							RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior - **SEE "JDAM ACCEPTABLE REGIONS" AT THE END OF THIS APPENDIX AND SUBMIT REQUESTS THAT FALL WITHIN THESE PARAMETERS**
GBU-54 DMLGB (500 lb.)		X	X	X	X	X	X	X	X	X	X	X	X	X	ONE DROP PER PASS ON AUTHORIZED TARGETS ONLY; INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15
LGTR (89 lb.)		X	X	X	X	X	X	X	X	X	X	X	X	X	
LUU-19 (IR)		X	X	X	X	X	X	X	X	X	X	X	X	X	
LUU-2		X	X	X	X	X	X	X	X	X	X	X	X	X	
LUU-4		X	X	X	X	X	X	X	X	X	X	X	X	X	
MK-20 ROCKEYE	X														RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior
MK-76 (25 lb. PB)		X	X	X	X	X	X	X	X	X	X	X	X	X	
MK-77 NAPALM	X														
MK-81 (250 lb. GP)		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
MK-82 (500 lb. GP)		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
MK-83 (1,000 lb. GP)		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.
MK-84 (2,000 lb. GP)		X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON TARGETS 1, 6, 7, 8, 12 AND 15.

Special Restrictions: 1. Target 15 North (WISS Airfield) has several targets of opportunity to include a runway and UTC. The UTC located 1,250 ft. east of the center runway at MGRS 11S PS 49038 87229 is restricted to 25mm TP and below. The runway (and immediately surrounding targets) remains supportable of inert ordnance expenditures. **2.** Target 1 North (within Iris Wash) UTC: Mk-76, LGTR, BDU-48, 2.75" inert, 25mm and below is authorized. CP at UTC is a mosque located N 33° 22' 39.85" W 115° 24' 08.00". Heavy inert: BDU-45, M-83I, Mk-84I shall be released on bullseye located at N 33° 22' 20.62" W 115° 23' 41.84" (offset from mosque at 144° magnetic/960 meters).

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

R-2507 South	1 SOUTH	2 SOUTH	3 SOUTH	4 SOUTH	5 SOUTH	6 SOUTH	7 SOUTH	8 SOUTH	10 SOUTH	11 SOUTH	12 SOUTH	13 SOUTH	14 SOUTH	15 SOUTH	NOTES
AIRBORNE LASER	X	X	X	X	X		X	X	X	X	X	X	X	X	COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT
.50CAL / 7.62MM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.75" ROCKETS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
30MM, 25MM, 20MM GUNS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
5" ROCKETS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
AGM-114 HELLFIRE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH. **APPROVED MISSILE FIRING REQUEST REQUIRED BEFORE AUTHORIZATION TO DROP - SEE APPENDIX E FOR SUBMISSION FORM**
AGM-65 MAVERICK			X												**TARGET 3 SOUTH ***BY SPECIAL REQUEST ONLY*** APPROVED MISSILE FIRING REQUEST REQUIRED BEFORE AUTHORIZATION TO DROP - SEE APPENDIX E FOR SUBMISSION FORM**
AGM-88 HARM															*****NOT AUTHORIZED*****
AIM-120 AMRAAM															*****NOT AUTHORIZED*****
AGM-154 JSOW															*****NOT AUTHORIZED*****
AIM-7 SPARROW															*****NOT AUTHORIZED*****
AIM-9 SIDEWINDER															*****BY SPECIAL REQUEST ONLY***ROTARY WING ONLY*** APPROVED MISSILE FIRING REQUEST REQUIRED BEFORE AUTHORIZATION TO DROP - SEE APPENDIX E FOR SUBMISSION FORM**
BDU-33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
BDU-45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
BDU-48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
BGM-71 TOW	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH. **APPROVED MISSILE FIRING REQUEST REQUIRED BEFORE AUTHORIZATION TO DROP - SEE APPENDIX E FOR SUBMISSION FORM**
BLU-109	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
BLU-110	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
BLU-111	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
CBU-52															*****NOT AUTHORIZED*****
CBU-55															*****NOT AUTHORIZED*****
CBU-58															*****NOT AUTHORIZED*****
CBU-59															*****NOT AUTHORIZED*****
CBU-71															*****NOT AUTHORIZED*****
CBU-72															*****NOT AUTHORIZED*****
CBU-75															*****NOT AUTHORIZED*****
CBU-78															*****NOT AUTHORIZED*****
CBU-87															*****NOT AUTHORIZED*****
CBU-89															*****NOT AUTHORIZED*****
CBU-97															*****NOT AUTHORIZED*****

Special Restrictions: Target 15 South (Blue Mountain Airfield) has several targets of opportunity. In order to preserve the runway and taxiways for favorable visual reference, HE ordnance will be restricted to only those the targets of opportunity immediately surrounding the runway and taxiway. HE will not be authorized on the runway or taxiways.

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

R-2507 South	1 SOUTH	2 SOUTH	3 SOUTH	4 SOUTH	5 SOUTH	6 SOUTH	7 SOUTH	8 SOUTH	10 SOUTH	11 SOUTH	12 SOUTH	13 SOUTH	14 SOUTH	15 SOUTH	NOTES
CBU-99															*****NOT AUTHORIZED*****
CBU-100															*****NOT AUTHORIZED*****
CBU-103 WCMD															*****NOT AUTHORIZED*****
CBU-104 WCMD															*****NOT AUTHORIZED*****
CBU-105 WCMD															*****NOT AUTHORIZED*****
CBU-107 WCMD															*****NOT AUTHORIZED*****
CHAFF, RADAR EVASION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	COMPLY WITH FAA/DOD GUIDANCE - SEE PARAGRAPH 4000.3.h (PAGE 4-5)
FLARES, IR DECOY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
GBU-10 LGB (2,000 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
GBU-12 LGB (500 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
GBU-12 F/B DMLGB	X	X	X	X	X	X	X	X	X	X	X	X	X	X	**ONE DROP PER PASS ON AUTHORIZED TARGETS ONLY**; INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
GBU-15 OGB (1,000 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
GBU-16 LGB (1,000 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
GBU-29/30/38 JDAM (500 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	**RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior**; INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH. **SEE "JDAM ACCEPTABLE REGIONS" AT THE END OF THIS APPENDIX AND SUBMIT REQUESTS THAT FALL WITHIN THESE PARAMETERS**
GBU-31 JDAM (2,000 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	**RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior**; INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH. **SEE "JDAM ACCEPTABLE REGIONS" AT THE END OF THIS APPENDIX AND SUBMIT REQUESTS THAT FALL WITHIN THESE PARAMETERS**
GBU-32 JDAM (1,000 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	**RANGE SCHEDULING APPROVAL REQUIRED 48 Hrs Prior**; INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH. **SEE "JDAM ACCEPTABLE REGIONS" AT THE END OF THIS APPENDIX AND SUBMIT REQUESTS THAT FALL WITHIN THESE PARAMETERS**
GBU-54 DMLGB (500 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	**ONE DROP PER PASS ON AUTHORIZED TARGETS ONLY**; INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
LGTR (89 lb.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
LUU-19 (IR)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
LUU-2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
LUU-4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MK-20 ROCKEYE															*****NOT AUTHORIZED*****
MK-76 (25 lb. PB)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MK-77 NAPALM															*****NOT AUTHORIZED*****
MK-81 (250 lb. GP)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
MK-82 (500 lb. GP)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
MK-83 (1,000 lb. GP)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH
MK-84 (2,000 lb. GP)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	INERT/TP ORDNANCE ONLY ON RUNWAY @ TGT 15 SOUTH

Special Restrictions: Target 15 South (Blue Mountain Airfield) has several targets of opportunity. In order to preserve the runway and taxiways for favorable visual reference, HE ordnance will be restricted to only those the targets of opportunity immediately surrounding the runway and taxiway. HE will not be authorized on the runway or taxiways.

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

MT BARROW (R-2507 South)	MT BARROW	NOTES
AIRBORNE LASER	X	COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT
.50CAL / 7.62MM	X	ONLY HELO DELIVERED ORDNANCE AT MT BARROW
2.75" ROCKETS	X	ONLY HELO DELIVERED ORDNANCE AT MT BARROW
5" ROCKETS	X	ONLY HELO DELIVERED ORDNANCE AT MT BARROW
25MM, 20MM GUNS	X	ONLY HELO DELIVERED ORDNANCE AT MT BARROW
AGM-114 HELLFIRE		**NOT AUTHORIZED**
BGM-71 TOW		**NOT AUTHORIZED**
CHAFF, RADAR EVASION	X	COMPLY WITH FAA/DOD GUIDANCE - SEE PARAGRAPH 4000.3.h (PAGE 4-5)
FLARES, IR DECOY	X	ONLY HELO DELIVERED ORDNANCE AT MT BARROW

Legend		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

R-2510 & R-2512	R-2510		R-2512		NOTES (SEE CHAPTER 4 FOR SPECIFIC RESTRICTIONS, RUN-IN LINES, AND STRAFING GUIDELINES)
	101 SHADETREE	103 LOOM LOBBY	95 KITTYBAGGAGE	68 INKEYBARLEY	
AIRBORNE LASER		X			**LASER ON TGT 103 ONLY. LASER OPERATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH NAF EL CENTRO'S CURRENT LASER SAFETY SURVEY REPORT**
.50CAL / 7.62MM	X	X	X	X	
2.75" ROCKETS	X	X	X	X	2.75 INERT ONLY
20MM GUNS	X	X	X	X	20MM TP ONLY
25MM GUNS	X	X	X	X	25MM TP ONLY
30MM GUNS	X	X	X	X	30MM TP ONLY
5" ROCKETS					*****NOT AUTHORIZED*****
BDU-33	X	X	X	X	
BDU-45					*****NOT AUTHORIZED*****
BDU-48	X	X	X	X	
LGTR (89 lb.)		X			LGTR AUTHORIZED ON TARGET 103 ONLY *****CONTACT NAF EL CENTRO FOR SPECIFIC PARAMETERS**
CHAFF, RADAR EVASION					*****NOT AUTHORIZED*****
FLARES, IR DECOY					*****NOT AUTHORIZED*****
LUU-19					*****NOT AUTHORIZED*****
LUU-2	X				ILLUMINATION AUTHORIZED ON **TGT 101 ONLY**
MK-45	X				ILLUMINATION AUTHORIZED ON **TGT 101 ONLY**
MK-76	X	X	X	X	
MK-106	X	X	X	X	

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

R-2301 W	YODAVILLE UTC	CACTUS WEST	AUX II	TACTS LO	TACTS HI	NOTES
AIRBORNE LASER	X	X		X	X	**COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT**
.50CAL	X	X				STRAFE BERM ONLY AT CACTUS WEST. **STRAFING OF CACTUS WEST BULLS-EYE IS PROHIBITED. FOR YODAVILLE, STRAFING (20mm/25mm/.50 cal) WILL BE RESTRICTED TO THE MILITARY PERSONNEL TARGETS AND SINGLE STORY SHIPPING CARGO CONTAINERS LOCATED NORTH OF THE MAIN EAST-WEST RUNNING ROAD.**
2.75" ROCKETS	X	X				**INERT ONLY**
25MM, 20MM GUNS	X	X				**TP ONLY**. AUTHORIZED AT STRAFE BERMS AT CACTUS WEST AND YODAVILLE (SEE STRAFING RESTRICTIONS IN CHAPTER 4 OF THIS ORDER). **STRAFING OF CACTUS WEST BULLS-EYE IS PROHIBITED. FOR YODAVILLE UTC, STRAFING (25mm/20mm/.50 cal) WILL BE RESTRICTED TO THE MILITARY PERSONNEL TARGETS AND SINGLE STORY SHIPPING CARGO CONTAINERS LOCATED NORTH OF THE MAIN EAST-WEST RUNNING ROAD.**
30MM GUNS						*****NOT AUTHORIZED*****
5" ROCKETS		X				**INERT ONLY - CACTUS WEST BULLS-EYE ONLY**
7.62MM	X	X				NOT AUTHORIZED ON CACTUS WEST BULLS-EYE.
BDU-33 (25 lb. PB)	X	X				
BDU-45 (500 lb. Practice)		X				**INERT ONLY - CACTUS WEST BULLS-EYE ONLY**
BDU-48 (10 lb. PB)	X	X				
GBU-12 (500 lb.)		X				**INERT ONLY - CACTUS WEST BULLS-EYE ONLY**
GBU-16 (1,000 lb.)		X				**INERT ONLY - CACTUS WEST BULLS-EYE ONLY**
LGTR - BDU-59 (89 lb.)	X	X				**INERT ONLY WITH RESTRICTIONS - SEE CHAPTER 4 (PAGE 4-26 FOR YODAVILLE AND PAGE 4-21 FOR CACTUS WEST) FOR SPECIFIC TARGET RESTRICTIONS WHEN EMPLOYING LGTR** - THE **1000 METER OP** IS THE **ONLY** AUTHORIZED OP WHEN CONDUCTING LGTR OPERATIONS WITH TACP SUPPORT
CHAFF, RADAR EVASION	X	X	X	X	X	COMPLY WITH FAA/DOD GUIDANCE - SEE PARAGRAPH 4000.3.h (PAGE 4-5)
FLARES, IR DECOY	X	X	X	X	X	AUX II BY SPECIAL REQUEST ONLY. **MJU-57 FLARES NOT AUTHORIZED**
GTR-18A SMOKEY SAM	X		X	X		USE AT AUX-II REQUIRES CACTUS WEST AIRSPACE TO BE SCHEDULED CONCURRENTLY (1,800 FT VERTICAL HAZARD)
LUU-19	X	X				
LUU-2	X	X				
M-257 (Illum. Warhead)	X					YODAVILLE UTC ONLY
M-278 (IR Illum. Warhead)	X					YODAVILLE UTC ONLY
MK-76 (25 lb. PB)	X	X				
MK-81 (250 lb.)		X				**INERT ONLY - CACTUS WEST BULLS-EYE ONLY**
MK-82 (500 lb.)		X				**INERT/BDU ONLY - CACTUS WEST BULLS-EYE ONLY**
MK-83 (1,000 lb.)		X				**INERT ONLY - CACTUS WEST BULLS-EYE ONLY**
MK-84 (2,000 lb.)						*****NOT AUTHORIZED*****

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

MCAS RANGE	LASER	PISTOLS to .45	RIFLES to 5.56	RIFLES to 7.62	SHOTGUNS to 12 Ga	SUBMACHINEGUNS to .45	MACHINEGUNS to 7.62	HBMG .50	GRENADE LNCHR - MK 19/47	M203/M79	MORTARS 60MM	MORTARS 81MM	94MM (LAAW / NLAAW)	84MM (M136, M3)	TOW	SMAW	HE FRAG GRENADE	SMOKE GRENADE	NON-LETHAL	DEMO	CLAYMORE MINES	PYRO HAND EMPLOYED	SNIPER RIFLE to .50 Cal	NOTES
KD Rifle [1, 2]	X		X																					LASERS - COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT
KD Pistol [1, 2]	X	X			X																			Shotgun - NO SLUG AMMO; LASERS - COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT
Range 01[1, 3]		X	X		X					X														
Range 01A[1, 3]		X	X		X					X												X		40MM=TP, Smoke and Signal Pyro ONLY
Panel Stager [1, 2, 3]	X	X	X	X	X		X	X	X	X								X				X		40MM=TP, Smoke and Signal Pyro ONLY; LASERS - COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT

Note 1: Units using the ranges listed above shall put themselves in a check-fire status when observing an aircraft in the immediate vicinity of the range area.
Note 2: Units conducting laser operations on approved ranges shall comply with the laser parameters defined within MCAS Yuma Laser Range Certification Report.
Note 3: Units are required to participate in a face-to-face range walk thru with Range Safety prior to training in order to review special instructions associated with this range training area.

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

RANGE	LASER	PISTOLS to .45	RIFLES to 5.56	RIFLES to 7.62	SHOTGUNS to 12 Ga	SUBMACHINEGUNS to .45	MACHINEGUNS to 7.62	HBMG .50	GRENADE LNCHR - MK 19/47	M203/M79	MORTARS 60MM	MORTARS 81MM	94MM (LAAW / NLAAW)	84MM (M136, M3)	TOW	SMAW	HE FRAG GRENADE	NON-LETHAL	DEMO	CLAYMORE MINES	PYRO HAND EMPLOYED	SNIPER RIFLE to .50 Cal	NOTES
CSOC-1	X	X	X	X			X	X	X	X						X					X		LASERS - COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT; 40MM-TP,Smoke and Signal Pyro ONLY
CSOC-2	X	X	X	X			X	X	X	X						X					X		LASERS - COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT; 40MM-TP,Smoke and Signal Pyro ONLY
Murrayville East	X	X	X	X			X		X	X						X					X		LASERS - COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT; 40MM-TP,Smoke and Signal Pyro ONLY
Murrayville West	X	X	X	X			X	X	X	X						X					X		LASERS - COMPLY WITH PARAMETERS OF LASER RANGE CERTIFICATION REPORT; 40MM-TP,Smoke and Signal Pyro ONLY

Notes (apply to all ranges above): 1. Units conducting laser operations on approved ranges shall comply with the laser parameters defined within the MCAS Yuma Laser Range Certification Report. **2.** Units are required to participate in a face-to-face range walk thru with Range Safety prior to training in order to review special instructions associated with these range training areas. Units are required to physically possess a copy of the range SPINS while conducting training in the areas listed above. Each training area possesses unique restrictions and safety parameters. Range OICs and Range RSOs are required to understand these special instructions prior to engaging targets within these training areas.

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

SWAT	LASER	PISTOLS to .45	RIFLES to 7.62	SHOTGUNS to 12 Ga	SUBMACHINEGUNS to .45	MACHINEGUNS to 7.62	HBMG .50	M203/M79	Grenade Launcher - MK 19/47	MORTARS 60MM	MORTARS 81MM	94MM (LAAW / NLAAW)	84MM (M136, M3)	TOW	SMAW	HE FRAG GRENADE	SMOKE GRENADE	NON-LETHAL	DEMO	CLAYMORE MINES	PYRO HAND EMPLOYED	SNIPER RIFLE to .50 Cal	NOTES
4-1																			X				MAXIMUM DEMO 50 lb NEW
4-2																X							
4-3								X	X			X	X		X								40mm TP and Pyrotechnics Only
4-4		X	X			X														X		X	
4-5		X		X	X																		
4-6A			X																				
4-6B						X	X		X														40mm TP Only
4-7		X	X																			X	NO MG AUTHORIZED
4-8										X													
4-9			X																			X	NO MG AUTHORIZED
4-10	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **0.5 lb** NEW
4-11	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **0.5 lb** NEW
4-12	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **0.5 lb** NEW
4-13	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **0.5 lb** NEW
4-14	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-15	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-16	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-17	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-18	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-19	X	X	X		X	X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-20										X													Dormant

Notes (apply to all ranges above): 1. Units conducting laser operations on approved ranges shall comply with the laser parameters defined within the MCAS Yuma Laser Range Certification Report. **2.** Units are required to physically possess a copy of the range SPINS while conducting training in the areas listed above. Each training area possesses unique restrictions and safety parameters. Range OICs and Range RSOs are required to understand these special instructions prior to engaging targets within these training areas.

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

SWAT	LASER	PISTOLS to .45	RIFLES to 7.62	SHOTGUNS to 12 Ga	SUBMACHINEGUNS to .45	MACHINEGUNS to 7.62	HBMG .50	M203/M79	GRENADE LAUNCHER - MK 19/47	MORTARS 60MM	MORTARS 81MM	94MM (LAAW / NLAAW)	84MM (M136, M3)	TOW	SMAW	HE FRAG GRENADE	SMOKE GRENADE	NON-LETHAL	DEMO	CLAYMORE MINES	PYRO HAND EMPLOYED		NOTES
4-21	X	X	X			X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-22	X	X	X			X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-23	X	X	X			X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW
4-24	X	X	X			X		X									X		X		X		LASERS - see note below; 40mm TP and Pyrotechnics only; MAXIMUM DEMO **1.0 lb** NEW

Notes (apply to all ranges above): 1. Units conducting laser operations on approved ranges shall comply with the laser parameters defined within the MCAS Yuma Laser Range Certification Report. **2.** Units are required to physically possess a copy of the range SPINS while conducting training in the areas listed above. Each training area possesses unique restrictions and safety parameters. Range OICs and Range RSOs are required to understand these special instructions prior to engaging targets within these training areas.

Legend		
		= Not Authorized
	X	= Authorized under special conditions (see Notes)
	X	= Authorized

MCAS YUMA, AZ
JDAM Launch Acceptable Regions for R-2507
~~(WDZ Tool-10 Jan 2013)~~

ASSUMPTIONS:

- Footprints are based on RMTK, Weapons Danger Zone (WDZ) Tool data v9.3.1.2.1 dated 11/27/2012.
- WDZs will be based on a 99.9999% level of containment and must be kept wholly within the installation range boundary. While containment levels on the WDZ tool are adjustable from 1:10,000 to a 1:1,000,000 probability of munitions (for inert ordnance) or a hazardous fragment (for live ordnance) escaping the containment area, 1:1,000,000 is the range standard.

APPROVED PARAMETERS FOR GBU-31/32/38 (2,000/1,000/500 lbs.):

- Aircraft employment specifics:
  - 30,000ft MSL or below
  - 500KTAS or slower
  - Aircraft level flight or any allowable dive
  - JDAM impact angle 65° or greater
  - JDAM impact velocity 500fps or greater
- Authorized impact areas for deployment in **R2507N**:
  - Impact Area ~~**2N**~~**, 10N and 14N** – allowable run-in heading 250° clockwise to 110° (release no further than 6.0nm)
  - Impact Area **3N** - allowable run-in heading 250° clockwise to 110° (release no further than 5.0nm and no higher than 25,000ft)
  - Impact Area **13N** - allowable run-in heading 290° clockwise to 120° (release no further than 5.0nm)

- Authorized impact areas for deployment in **R2507S**:
  - Impact Areas **1S, 2S, 3S** – allowable run-in heading 290° clockwise to 120° (release no farther than 6.0nm from target)
  - Impact Area **4S, 5S, 6S, 8S, 12S, 13S, 14S, 15S** – allowable run-in heading 290° clockwise to 120° (release no further than 7.0nm)
  - Impact Area **10S and 11S** - allowable run-in heading 290° clockwise to 120° (release no further than 6.0nm and no higher than 25,000ft)

***** OP FEETS and MP FEETS are approximately 700m from targets 10S and 11S. **NO** ground personnel will be authorized at OP FEETS and MP FEETS while employment of JADAM is being conducted on targets 10S and 11S.

****** All non-mission essential personnel shall remain outside the WDZ. Individual footprints are available upon request. Mission essential personnel (TACP & support personnel, etc…) may remain in the WDZ but shall mitigate risk by choosing aircraft / weapon run-in headings as close to perpendicular to the line of troops as possible. All JTACs and FACs shall follow the procedures and guidelines of the JFIRE manual (Dec 2007) and all other pertinent reference publications.

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APPENDIX D
COMMUNICATIONS
RANGE FREQUENCY CARD

	UHF	VHF	Callsign/Description
Command Post	337.9	----	Yuma Command _____
Metro	349.9	----	Metro _____
Clearance Delivery	336.4	118.0	Clearance Delivery _____
Yuma Range Operations	310.0	141.85	LEG IRON (check-in)_____
ATIS	273.5	118.8	N/A _____
Ground	314.0	121.9	Ground _____
Tower	382.0	119.3	Tower _____
Approach	372.0	124.7	Approach _____
Departure	281.4	125.55	Departure _____
Laguna Ground	229.4	121.8	Ground _____
Laguna Tower	242.175	126.2	Tower _____
Gila Bend Tower	257.65	127.75	Tower _____
Yuma ATC Range Control	276.0	124.15	YUMA RANGE (check-in)____
Cactus West	276.0	124.15	YUMA RANGE (check-in)____
Cactus West Tgt	311.85	----	Area Cm Cactus W Tgt/WISS
Yodaville UTC	290.1	----	Yodaville/MLT (Droid)____
Aux-II	311.85/262.6	----	Cactus West_____
Aux-VI	122.9	----	Unicom_____
R-2301 West High/Low	276.0	124.15	YUMA RANGE (check-in)____
R-2301W High	279.2	----	01W High Area Common/TCTS
R-2301W High	250.25	139.25	01W High TCTS_____
R-2301W High	313.85	----	01W High TCTS_____
R-2301W Low	378.65	----	01W Low Area Common/TCTS_
R-2301W Low	323.35	141.2	01W Low TCTS_____
R-2301W Low	237.85	----	01W Low TCTS_____
R-2507 North/South	276.0	124.15	YUMA RANGE (check-in)____
R-2507 North	272.9	----	07N Area Common/TCTS_____
R-2507 South	386.8	----	07S Area Common/TCTS_____
R-2507 North	271.6	143.175	07N TCTS_____
R-2507 South	281.35	148.913	07S TCTS_____
R-2306 A, B, C, D, and E	248.4	119.0	Cibola Range_____
R-2307	248.4	119.0	Kofa Range_____
R-2308 A, B, and C	248.4	119.0	Cibola Range_____
R-2309	----	----_____	
R-2510	291.7	128.6	Los Angeles Center_____
Shade Tree Tgt	283.2/277.2	120.375	Area Cm/Shade Tree/WISS__
Loom Lobby Tgt	306.75/277.2	120.375	Loom Lobby/WISS_____
R-2512	276.0	124.15	YUMA RANGE (check-in)____
Inky Barley Tgt	264.7/277.2	120.375	Area Cm/Inky Barley/WISS_
Kitty Baggage Tgt	265.8/277.2	120.375	Kitty Baggage/WISS_____
	265.8	----	Unmonitored_____
MOA's/ATCAA's	276.0	124.15	YUMA RANGE_____
Abel North/South MOA	276.0	124.15	YUMA RANGE (check-in)____
Abel East MOA	276.0	124.15	YUMA RANGE (check-in)____
Abel Bravo MOA	276.0	124.15	YUMA RANGE (check-in)____
Kane East MOA	276.0	124.15	YUMA RANGE (check-in)____
Kane East MOA	339.95	----	Kane East Area Cm/TCTS___
Kane East MOA	365.85	----	Kane East TCTS_____
Kane West MOA	291.7	128.6	YUMA RANGE (check-in)____
Kane South MOA	276.0	124.15	YUMA RANGE (check-in)____
Dome MOA	276.0	124.15	YUMA RANGE (check-in)____
Imperial ATCAA	276.0	124.15	YUMA RANGE (check-in)____
Quail MOA	285.6	128.15	Los Angeles Center_____
Turtle MOA	285.6	128.15	Los Angeles Center_____
Luke Range Control	264.125	120.55	Range Control_____
29 Palms Range Control RW	323.5	----	BEARMAT_____
29 Palms Range Control FW	276.45	----	BEARMAT_____
VMFT-401	273.725	----	SNIPERS_____
VMA-513	287.8	----	NIGHTMARES_____
VMA-311	262.9	----	TOMCAT_____
VMA-214	362.9	----	BLACKSHEEP_____
VMA-211	328.1	----	WAKE_____
3RD MAW Helo Common	263.65	----_____	
MCAS Yuma Ranges – Ground	40.83	----	LEG IRON (check-in)_____
Southwest TTR Admin	342.775	----	Hassle Base – Yuma_____
Southwest TTR Admin	342.775	----	War Wagon – Miramar_____

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APPENDIX E

APPLICABLE FORMS

TOPIC	**PAGE**
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Range Control Facility

Pre-Range Entry Checklist

[ ] I understand it is my responsibility to inform Range Control (LEG IRON) prior to entering the Training area. Radios are available at Range Safety. I will provide number and type of vehicles, Number of personnel (pax), and destination. I also understand it is my responsibility to check in with range control before entering/departing the ranges and upon arrival/departure from the specific training area/destination.

[ ] I understand that some areas (such as the Hazard Areas in the BMGR, ground areas associated with the CMAGR, etc.) require advance scheduling through the Range Scheduling office. I have contacted Range Scheduling and have been properly scheduled for those areas requiring advance notice.

[ ] I will drive on designated roads while in the training area. Under no circumstance will vehicles be driven beyond 25 ft. on either side of designated roadways. I will use designated turnouts and parking areas only.

[ ] I will carry out all trash and waste. LEAVE NO TRACE! If you find trash left by someone else, pick it up. If unable to carry it out, identify location and notify Range Control.

[ ] I will notify LEG IRON immediately should there be a hazmat spill while in the training area. I have been informed of the spill report procedures. Should your vehicle be static for a long period, you are required to have a drip pan.

[ ] I possess a means of positive communication during my time on the range in order to maintain two-way communication with LEG IRON at all times.

[ ] I will ensure that all personnel have a sufficient amount of water with them during their times on the range. The extreme heat conditions of the desert warrant positive assurance that such measures are taken to avoid heat injuries.

[ ] I will Use Port-a-Johns or Banta buckets for all human waste, including toilet paper when your unit is in a static position. Do not dump or leave the buckets in the field.

[ ] I will notify LEG IRON if I am in a vehicle accident.

[ ] I understand this is a civilian recreational camping area; civilians are authorized in most training areas. Be polite and courteous. Do not get into a confrontation with civilians, notify Range Control and allow them to handle the situation.

[ ] I have been informed of MEDEVAC procedures.

[ ] The endangered Flat-tailed horn lizard and Desert tortoise reside in these areas. I am not to feed, harass, pet, capture, or kill any wildlife aboard the training area.

[ ] I understand this form is for individual use, for transit through the training area and does not replace the Range Safety brief, but is a temporary means to conduct a leaders reconnaissance of the training area.

[ ] I understand that I am directly responsible for the actions of additional personnel traveling in my group. I will stay as a group and not split up.

[ ] Unless otherwise specified this form limits you to no more than 2 vehicles and 8 personnel.

Responsible Individual

_____
(Name) (Rank) (Unit)

_____
(Signature)

Range Control Facility

_____
(Name)

_____
(Signature)

RANGE ACCESS PROCEDURES

Subj: STANDARD OPERATING PROCEDURES FOR ACCESSING MCAS YUMA RANGE TRAINING AREAS (RTA)

Ref: (a) MCO 3570.1C
(b) MCO 3550.10 w/CH 1
(c) StaO 3710.6J

1. Purpose. These procedures establish minimum guidelines for the safe ground access, training, occupation, and egress of all Marine Corps Air Station (MCAS) Yuma, Arizona RTA. These procedures are specifically applicable to the restricted areas associated to R-2507 (also known as the Chocolate Mountain Aerial Gunnery Range – CMAGR) and to R-2301W (also known as the Barry M. Goldwater Aerial Gunnery Range - BMGR). These procedures document the roles and responsibilities of all parties when requesting support to use ranges and coordinating real-time operations.

2. Background.

a. Reference (a) provides range safety policy for the United States Marine Corps (USMC) controlled ranges. Paragraph 2-7 gives local Installation Commander the discretion to allow State and Federal agencies access to controlled ranges.

b. Reference (b) is the established guidance for the Marine Corps policies and procedures for Range and Training Area (RTA) management. Paragraph 5003.2e outlines Range Control's responsibility to monitor and control access of personnel, vehicles, and aircraft activities within training areas.

c. Reference (c) provides all pertinent information relative to scheduling, prioritization, location, description, type operations, and ordnance compatibility of the restricted areas and MOA/ATCAAs scheduled by the Commanding Officer, MCAS Yuma, AZ.

3. Information. The controlled ranges located at MCAS Yuma will enhance the effectiveness of all training and non-training entities while ensuring real-time safety of all participants during ongoing training activities in their area of operations. Users are defined as any group of military or non-military personnel wishing to access the MCAS Yuma RTA for the purpose of training, administrative support, law enforcement support, environmental support, and other range-related activities. Individuals wishing to access the restricted ground areas for the purpose of recreational activity must possess and adhere to the guidelines of the Range Permit allowing for such access.

4. Roles and Responsibilities.

a. MCAS Yuma Range Control Facility (call sign LEG IRON) shall:

(1) Authorize and schedule controlled range access and use of all MCAS Yuma RTA.

(a) Range Scheduling will provide RFMSS username, password, and necessary information for properly scheduling ground range access (and airspace where applicable).

(b) Range Scheduling and LEG IRON shall enforce deadlines for RFMSS ground and airspace requests and the daily range schedule.

(2) Provide required training for Range Safety Officers (RSOs) and Officers In Charge (OICs) where applicable.

(3) Provide real-time information on the effects of hazardous activities taking place in the vicinity of the area being requested for access.

(4) Provide conflict resolution for all ground access to areas affected by aviation activities.

(5) Serve as the primary point of contact for medical emergencies that occur within the RTA.

(6) Serve as the primary point of contact for law enforcement coordination when illegal activities are witnessed and/or discovered by Users within MCAS Yuma RTA. (i.e. Scrapper activity, discovery of Undocumented Aliens – UDAs, etc.)

(7) Assign priority of ground access based on current scheduled and unscheduled activities for the purpose of minimizing impacts to aviation and other military training events.

(8) Coordinate with the appropriate law enforcement entity when impacts to training and/or other interfering activities are discovered within MCAS Yuma RTA.

(9) Conduct proper hand over with Yuma Air Traffic Control and/or MCAS Central Dispatch before shutting down LEG IRON each day.

b. Users shall:

(1) Comply with all USMC orders, MCAS Yuma orders, safety, environmental policies and procedures when requesting range access and conducting operations on MCAS Yuma controlled ranges.

(2) Range access shall be scheduled in advance via the Range Facility Management Support System (RFMSS). Most ground areas require the airspace above them to be scheduled concurrently.

(a) Contact Range Scheduling for a username, password, and applicable RFMSS training for ensuring requests are made properly and in a timely manner.

(b) Airspace requests are required no less than 14 days in advance. Requests received less than 14 days before a planned event will be processed based on availability.

(c) Ground requests are required no less than 14 days in advance.

(3) Contact LEG IRON via LMR radio using the “LEG IRON” talk group when accessing any of MCAS Yuma’s RTA or via phone (928) 269-7080 for range Ingress/Egress. VHF FM 40.83 is also available in MCAS Yuma’s RTA if users can provide their own radios for using this frequency. Contact Range Management for current range communications capability.

(4) Maintain two-way communication with LEG IRON at all times when occupying the ranges per References (a), (b), and (c).

(5) Contact LEG IRON at least once every hour for operational status, location on the ranges, and to receive updates on training activities in their area. Training activities hazardous to ground personnel may require Users to evacuate the ranges when applicable.

(6) Contain all operational activities within the pre-coordinated areas. Contact LEG IRON prior to exiting any RTA for operational or administrative egress.

5. Reimbursable. Users shall reimburse for actual cost:

(1) of repairs due to misuse or negligence of range(s) or equipment on federal property.

(2) associated with ordnance storage, transportation or disposal.

(3) of an Environmental cleanup due to any hazardous material mishap.

6. Points of Contact.

Range Control "LEG IRON"
MCAS Yuma
(928) 269-7080

Installation Range Safety Officer
MCAS Yuma
(928) 269-5574

RFMSS Support
MCAS Yuma
(928) 269-2215

RCF Manager/Range Operations Officer
MCAS Yuma
(928) 269-5573

Range Scheduling
MCAS Yuma
(928) 269-5575

Range Plans Officer
MCAS Yuma
(928) 269-6488

RANGE PERMIT APPLICATION

ACKNOWLEDGMENT OF DANGER; RELEASE AND HOLD HARMLESS AGREEMENT
BARRY M. GOLDWATER RANGE (BMGR)
CABEZA PRIETA NATIONAL WILDLIFE REFUGE
AND THE AREA A PORTION OF SONORAN DESERT NATIONAL MONUMENT
(This form is subject to the Privacy Act of 1974)
Issuing Agency: BLM, CPNWR, LAFB, MCAS

PERMIT #

AUTHORITY: 10USC. 5013, 5043 AND 8012; 50 CFR; AND 43 CFR

PRINCIPAL PURPOSE: Indicates certification by an individual or corporation to hold the United States Government, Department of Defense, Department of Interior, and any Barry M. Goldwater Range Lessee, or Lesser harmless in consideration of permission granted by the U.S. Government to visit the Barry M. Goldwater Range Complex (BMGR), Area A portion of the Sonoran Desert National Monument (SDNM), and Cabeza Prieta National Wildlife Refuge (CPNWR).

ROUTINE USES: Used to gain access to the BMGR, Area A portion of SDNM, and/or the CPNWR.

DISCLOSURE IS VOLUNTARY: Failure to provide this information would result in an individual or corporation being denied access to the BMGR/CPNWR/Area A portion of SDNM.

TERM OF PERMIT: This permit is valid from July 1 through June 30 for the CPNWR, Area A portion of SDNM, and the BMGR East and West. **This permit does not grant you access to TACTICAL, MANNED, or LASER** (Light Amplification by Stimulated Emission of Radiation) **ranges.** Some areas may be periodically closed due to military operations.

PLEASE READ AND INITIAL EACH BLANK

___1. The BMGR/CPNWR/Area A portion of SDNM contains the danger of property damage and permanent, painful, disabling, and disfiguring injury or death due to high explosive detonations from falling objects such as aircraft, aerial targets, live ammunition, missiles, bombs, etc. There are also physical injury and health dangers from ground and aerial LASER and other electromagnetic emissions.

___2. The BMGR/CPNWR/Area A portion of SDNM contains the danger of property damage and permanent, painful, disabling, and disfiguring injury or death due to the presence of expended, but still live, bombs, rockets, cannon rounds, flares, and other types of warheads. Unexploded munitions may be encountered anywhere within the BMGR/CPNWR/Area A portion of SDNM: lying on the ground partially or completely buried. These munitions can still explode though they may have lain in the desert for decades. I have been instructed **NOT** to approach or disturb any military equipment or ordnance discovered on the BMGR, Area A portion of SDNM, or CPNWR.

___3. The BMGR/CPNWR/Area A portion of SDNM contains the danger of injury or death from the presence of old mine shafts and other openings or weaknesses in the earth, as well as other natural and/or man-made conditions which are too numerous to recite herein.

___4. The BMGR/CPNWR/Area A portion of SDNM cannot feasibly be marked to warn of the location and nature of each danger. Further, there are few road signs or other navigational aids to assist visitors.

___5. The BMGR/CPNWR/Area A portion of SDNM occupies one of the most extreme environments in North America. I have been advised to guard against the dangers presented by the BMGR/CPNWR/Area A portion of SDNM's rugged landscape, high temperatures, remoteness, and other threats such as venomous reptiles. The BMGR/CPNWR/Area A portion of SDNM contains no sources of safe drinking water. I have been advised to pack sufficient water, food, and first aid supplies with me at all times.

____6. The BMGR/CPNWR/Area A portion of SDNM has no services. If I get lost, if my vehicle breaks down, or in the case of any emergency, I AM ON MY OWN. There are no regular patrols of the BMGR/CPNWR/Area A portion of SDNM. I certify that I have informed friends or family of my anticipated route and time of return from the BMGR/CPNWR/Area A portion of SDNM. I will bear the full cost of all search and rescue activities resulting from my actions on the BMGR/CPNWR/Area A portion of SDNM.

___7. I have been warned that I am responsible for knowing and abiding by all federal, military, and state laws and regulations pertaining to use of BMGR/CPNWR/Area A portion of SDNM.

____8. I recognize that the Cabeza Prieta is a National Wildlife Refuge and a designated wilderness area with significant differences in use. I have read and understand the applicable rules and regulations.

___9. All public access and use of the BMGR/CPNWR/Area A portion of SDNM may only be authorized by permit and is accompanied by significant limitations. All individuals or entities that apply for an access permit, regardless of their intended use, will be subject to comply with all Federal, State, and local laws, regulations, and policies in force over the BMGR/CPNWR/Area A portion of SDNM.

___10. Any entity, other than a private individual, is required to obtain a Special Use Permit for authorization to gain access and use to the BMGR/CPNWR/Area A portion of SDNM. Special Use Permits may only be issued by the agency responsible for the affected land.

___11. Anyone granted a range permit for access and use, who violates the parameters of their permit, is subject to judicial penalties to include a fine, civil action, and debarment.

____12. When on the BMGR/CPNWR/Area A portion of SDNM, I will possess a valid permit at all times and present it upon request to any authorized law enforcement officer or U.S. military personnel. Any person without a valid permit will be required to immediately leave the range and may be fined and/or barred from the BMGR/CPNWR/Area A portion of SDNM.

____13. I UNDERSTAND I MUST CALL PRIOR TO EACH VISIT TO RECORD SPECIFIC TRIP INFORMATION AND TO RECEIVE ANY INFORMARION ABOUT WILDLAND FIRES, ROAD CLOSURES, OR OTHER PERTINENT INFORMATION. IF VISITING BMGR-WEST, I WILL CALL 1.877.226.7010, OR LOCAL YUMA, 928.343.4393. IF VISITING CPNWR, THE SDNM, OR BMGR-EAST, I WILL CALL 928.683.6200.

Upon my own initiative, therefore, and at my own risk, I accept permission to enter this area and in consideration of such permission do, for myself, my spouse, my children, my heirs, personal representatives, and assignees of the same, remise, release, and forever discharge as well as agree to indemnify and hold harmless the United States Government, any lessee there from, any individual officer, agent, employee, or director thereof from any claim of liability for injury, death, or property damage arising out of my usage of or presence upon said Barry M. Goldwater Range in accordance with permission to enter thereon.

I further affirm that I will never prosecute or assist in prosecuting any civil action against the United States Government, the U.S. Marine Corps, U.S. Air Force, or U.S. Department of Interior, or any of their agents, employees, service members, contractors, or lessees for claim or liability arising from my entry to the BMGR/CPNWR/Area A portion of SDNM.

Each adult individual (18 yrs or older) in the group must complete, sign, and submit a separate HOLD HARMLESS AGREEMENT AND PERMIT APPLICATION. Please fill in the following:

_____

Name (Print or Type) First Middle Last

_____

Street Address City/State/Zip Code

_____

Home Telephone Work Telephone

Drivers License Number and State of Issuance: _____

Vehicle(s) Description(s): **(NOTE - ALL vehicles MUST be Registered, Arizona Highway Legal, AND Insured).**

Veh #1: Year _____ Style _____ Make_____

Color _____ License # _____ State _____ 4WD Yes___ No __

Veh #2: Year _____ Style _____ Make _____

Color _____ License # _____ State _____ 4WD Yes___ No__

I _____ have received a brochure and regulations for requirements and procedures
Name (Print)
for legal access to the BMGR, Area A portion of SDNM, and the CPNWR. I understand that non-compliance with any state and federal laws, and BMGR/CPNWR/Area A portion of SDNM rules and regulations by myself, or anyone accompanied by myself, is a violation of this permit. My access may be revoked or suspended for violations or conduct inconsistent to the management goals of the BMGR/CPNWR/Area A portion of SDNM. **I CERTIFY THAT BEFORE SIGNING BELOW, I RECEIVED, READ, AND UNDERSTAND THE HOLD HARMLESS AGREEMENT, THE BMGR/CPNWR/Area A portion of SDNM REGULATIONS, AND MAP.**

_____

Signature Date

Aerial Laser Report

As required by Station Order 3710.6_, each unit utilizing any RTA covered by this order and conducting laser operations shall submit to MCAS Yuma Range Management Department the following information no later than the next working day.

Aerial Laser:

(1) Mission Number _____

(2) Command _____

(3) Date _____

(4) Range utilized and range time _____

(5) Pilot/co-pilot's name and rank _____

(6) Gunner's name and rank (if applicable) _____

(7) Laser safety supervisor name and rank _____

(8) Type and number of aircraft _____

(9) Type laser _____

(10) Laser firing incidents _____

(11) Laser firing duration (each incident) _____

(12) Laser target location (each incident) _____

(13) Direction and altitude of lase _____

(14) Remarks _____

This report can be sent via email to yuma.skeds@usmc.mil or fax to (928)269-2964.

Ground Laser Report

As required by Station Order 3710.6_, each unit utilizing any RTA covered by this order and conducting laser operations shall submit to MCAS Yuma Range Management Department the following information no later than the next working day.

Ground Laser:

(1) Mission Number _____

(2) Command _____

(3) Date _____

(4) Range utilized and range time _____

(5) Operator name and rank _____

(6) Laser safety supervisor name and rank _____

(7) Type laser _____

(8) Laser firing incidents _____

(9) Laser firing duration (each incident) _____

(10) Laser target location (each incident) _____

(11) Direction of lase _____

(12) Remarks _____

This report can be sent via email to yuma.skeds@usmc.mil or fax to (928) 269-2964.

Missile Firing Request

IAW StaO 3710.6_, all guided munitions launched from aircraft operating within the R-2507 North/South ranges or from any unmanned aircraft systems will require special approval from MCAS Yuma Range Management Department. In addition to RFMSS scheduling requests, units shall submit Missile Firing Requests to Range Safety via FAX to DSN 269-2216 Comm (928) 269-2216 with the following information:

(1) Unit _____

(2) Type Aircraft _____

(3) Type ordnance/guided ammunition _____

a.) Inert/Live _____

b.) Event Dive/Level _____

c.) Direct / Indirect? _____

d.) String of Bombs _____

(4) Scheduled range time and date approved via Range Management Support System (RFMSS) _____

(5) Target location _____

(6) Release distance from target (kilometers) _____

(7) Emitter/Flare drop location (if applicable) _____

(8) Plan to ingress/egress emitters onto/off range (to include MCAS Yuma EOD presence if applicable) _____

(9) FAC/TACP/FAC(A) location (if applicable) _____

NOTE

For ALL GROUND ACCESS within MCAS Yuma's range training areas (RTA), a request SHALL be entered and approved through Range Facility Management Support System (RFMSS). Also, a range specific brief SHALL be received prior to access into the ground RTA.

(10) Splash pattern/safety fan description for release aircraft profile.

a.) Altitude _____

b.) Azimuth (magnetic heading) _____

c.) Airspeed _____

d.) Dive Angle (if applicable)_____

(11) Point of contact

a.) Rank _____

b.) Name _____

c.) Phone Number (DSN) _____

SILENCE, ON THE PART OF MCAS YUMA RANGE MANAGEMENT DEPARTMENT TOWARDS ANY REQUEST, IS NOT CONSENT!

All guided munitions will be utilized in such a manner as to accommodate current range regulations and limitations. Weapons danger zones (WDZs), impact zones, splash patterns, safety fans, and kinetic potential of each munition must fall entirely within the restricted areas. **Missile Firing Requests shall be submitted no later than five (5) business days in advance of the requested training.** Expedited requests may be accommodated based on Range Safety availability.

Requesting units may print this page as an example, fill in required (applicable) information, and FAX to the MCAS Yuma Range Management Department at DSN 269-2216, Commercial (928)269-2216. The MCAS Yuma Range Management Department will review all missile requests, plot the missile request required information, and either APPROVES/DISAPPROVES/APPROVES WITH RECOMMENDATIONS.

Recommendations may be made to ensure that all WDZs and debris fields are contained within the restricted areas.

Requesting units will receive approval confirmation. A copy of the approval confirmation will be forwarded to the MCAS Yuma Range Scheduling Office. The MCAS Yuma Range Management Department ONLY reviews missile requests. Requesting units must STILL schedule range time as required through the MCAS Yuma Range Scheduling Office.

JDAM REQUEST FORM

Expenditure Date	mm/dd/yy

Squadron	

	AC-1	AC-2	AC-3	AC-4	AC-5
Call-sign					
***Time (MST)**					
Target(s)					
***Run in Hdg.**					
***Release Point**					
Delivery Alt MSL					
Delivery KTAS					
Dive angle					
Impact angle					
***Impact velocity**					
***Type Ordnance**					

	AC-6	AC-7	AC-8	AC-9	AC-10
Call-sign					
***Time (MST)**					
Target(s)					
***Run in Hdg.**					
***Release Point**					
Delivery Alt MSL					
Delivery KTAS					
Dive angle					
Impact angle					
***Impact velocity**					
***Type Ordnance**					

*** Arizona including Yuma observes MST year round.**
*** Heading in degrees magnetic.**
*** Requested release point in NM / Ft. / M.**
*** Impact velocity in FPS .**
*** Include number if more than 1 and Nomenclature ending with I for Inert and HE for Live i.e. 4/GBU-32HE.**
*** All JDAM Request will be submitted two (2) business days prior to the drop date.**
*** All other requests outside of these parameters require a request for waiver with the CO MCAS Yuma.**

RANGE SAFETY OFFICER (RSO)
CHECKLIST

(Unless otherwise noted, all duties listed are to be accomplished by the RSO.)

PHASE 1 – RANGE PREPARATION

- **REVIEW OPERATIONAL RISK MANAGEMENT (ORM) ASSESSMENT WITH OIC**
  - POINTS OF INTEREST AND POTENTIAL SAFETY HIGHLIGHTS OUTLINED IN ORM HAVE BEEN ADDRESSED
- **ASSUMPTION OF RESPONSIBILITY FOR SCHEDULED RANGE/TRAINING AREA**
  - RANGE REGS FOR THE SPECIFIC RANGE/TRAINING AREA HAVE BEEN READ
  - RANGE INSPECTED FOR SAFETY HAZARDS
  - RANGE FLAG ERECTED (INDICATES THE RANGE IS OCCUPIED WITH INTENTION TO FIRE AMMUNITION OR EXPLOSIVES)
  - TARGET MATERIAL INSPECTED FOR SAFETY HAZARDS
  - OBTAIN PERSONNEL ROSTER FOR THE RANGE FROM THE OIC (INCLUDES FIRST & LAST NAME AND RANK, AND BLOOD TYPE)
  - SAFETY PERSONNEL AND PROPER SAFETY EQUIPMENT ARE PRESENT
  - SAFETY CORPSMAN IS PRESENT WITH MEDICAL KIT AND EQUIPMENT (MAY INCLUDE UNIT 1 OR UNIT 5 MEDICAL KIT, SPINE BOARD, C-COLLAR NECK BRACE, AND OXYGEN KIT WITH BAG VALVE MASK)
  - SAFETY VEHICLE WITH QUALIFIED DRIVER IS PRESENT
  - SAFETY VEHICLE DRIVER BRIEFED ON DUTIES
  - VEHICLES STAGED ON THE RANGE TO FACILITATE QUICK ACCESS TO TRAINING AREA
  - SAFETY RADIO OPERATOR WITH COMMUNICATION GEAR IS PRESENT
  - COMMUNICATION GEAR CHECKED TO ENSURE IT'S IN WORKING CONDITION
  - EXTRA BATTERIES ARE PRESENT
  - RADIO OPERATOR BRIEFED ON PROCEDURES
  - RADIO FREQUENCY CONFIRMED
  - OE-254 ERECTED (IF NECESSARY
  - RADIO OPERATOR MONITORING RADIO AT ALL TIMES
  - SAFETY ROAD GUARDS POSTED WITH POSITIVE 2-WAY COMMUNICATION
  - AMMO GUARDS POSTED (IN TEAMS OF TWO)
  - ALL GUARDS BRIEFED ON POST REQUIREMENTS
  - ALL GUARDS PROVIDED WITH MEAL(S) AND WATER FOR POST DURATION
  - COMMUNICATION WITH RANGE CONTROL (LEG IRON) ESTABLISHED
  - RANGE CONTROL PERMISSION REQUESTED TO ASSUME HOT STATUS

- ☐ FIRE DANGER RATING CONFIRMATION
- ☐ NUMBER OF PERSONNEL ON RANGE REPORTED
- ☐ NUMBER AND TYPE(S) OF WEAPONS TO BE FIRED ON RANGE REPORTED
- ☐ NUMBER AND TYPE(S) OF ROUNDS TO BE FIRED ON RANGE REPORTED
- ☐ SAFETY RADIO OPERATOR CONDUCTING RADIO CHECKS (HOT STATUS = EVERY 30 MINUTES; COLD STATUS = EVERY 60 MINUTES)
- ☐ COMMUNICATION LOG INITIATED BY RADIO OPERATOR

☐ **DESIGNATION AND ESTABLISHMENT OF A FIELD AMMUNITION SUPPLY POINT (FASP)**

- ☐ FASP ESTABLISHMENT
- ☐ TW0-MAN AMMO GUARD (100% ALERT) ASSIGNED FOR STORED AMMO IN THE FASP
- ☐ AMMO GUARD(S) IN CONDITION THREE (WITH 30 ROUNDS OF AMMO EACH)
- ☐ SITE FOR DUNNAGE CONSOLIDATION POINT ESTABLISHED
- ☐ SITE FOR TRASH COLLECTION ESTABLISHED
- ☐ CLEAR PLASTIC TRASH BAGS USED (FOR EASE OF INSPECTION)
- ☐ USING UNIT BRIEFED ON TRASH AND DUNNAGE HANDLING

FASP REQUIREMENTS

- ☐ AMMO STORED 100M FROM BIVOUAC SITE
- ☐ NO FLAME-PRODUCING ITEMS WITHIN 50M (I.E., SMOKING)
- ☐ AMMO SHELTERED WITH WATER-RESISTANT COVER (PONCHO/TARP)
- ☐ AMMO STORED ON PALLETS AT ALL TIMES
- ☐ NO RADIO TRANSMITTERS WITHIN 25 FT. OF STORED AMMO
- ☐ ALL AMMO, DEMOLITION, AND PYROTECHNICS STORAGE IN COMPLIANCE WITH FIELD ASP REGS
- ☐ COMPLIANCE WITH FIELD ASP REGS

☐ **RECEIPT, CONTROL, ASSUMPTION OF RESPONSIBILITY FOR AMMUNITION**

- ☐ AMMUNITION SEPARATED BY DEPARTMENT OF DEFENSE IDENTIFICATION CODE (DODIC)
- ☐ ALL DELIVERED AMMO AND EXPLOSIVES (A&E) PHYSICALLY INVENTORIED WITH DELIVERY AMMO TECH
- ☐ AMMO DODICS NEVER MIXED DURING USE OR STORAGE
- ☐ GUARD SUPERVISED AND INSTRUCTED ON A&E SECURITY PROCEDURES
- ☐ USING UNIT BRIEFED ON AMMO TO BE USED ON THE RANGE/TRAINING AREA
- ☐ TRAINING UNIT BRIEFED ON PROPER HANDLING PROCEDURES
- ☐ SHAKE-DOWN PROCEDURES BRIEFED
- ☐ ONLY ENOUGH AMMO TO ACCOMMODATE EACH TRAINING PHASE IS BROKEN-OUT

- **ESTABLISHMENT OF TRAINING EVOLUTION SAFETY STANDARDS**
  - SPECIAL SAFETY CONSIDERATIONS FOR THE RANGE/TRAINING AREA BRIEFED
  - FOUR SAFETY RULES FOR HANDLING WEAPONS BRIEFED
  - WEAPONS CONDITION FOR EACH WEAPON SYSTEM USED ON THE RANGE/TRAINING AREA BRIEFED
  - MISFIRE PROCEDURES FOR EACH WEAPON SYSTEM USED ON THE RANGE/TRAINING AREA BRIEFED
  - ASSISTANT RSO (ARSO) DESIGNATED AND BRIEFED
  - SAFETY BRIEF WHICH INCLUDES ORM ASSESSMENTS IS PROVIDED

PHASE II - CONDUCT OF TRAINING

- **SAFETY SUPERVISION DURING CONDUCT OF TRAINING**
  - ARSO(s) IN PLACE PRIOR TO BEGINNING OF TRAINING
  - HELMETS AND FLAK JACKETS, AND ANY OTHER PERSONNEL PROTECTIVE EQUIPMENT PROPERLY WORN
  - FINAL SWEEP OF IMPACT/TRAINING AREA CONDUCTED
  - TRAINING UNIT CONDUCTED INSPECTION FOR PROPER AMMO AND EQUIPMENT
  - TARGETS AND TARGET MATERIALS PLACED IN A SAFE LOCATION AND DIRECTION
  - BLANK FIRING ATTACHMENTS PROPERLY MOUNTED (IF APPLICABLE)
  - AMMUNITION SHAKE-DOWN PROCEDURES SUPERVISED AND CONDUCTED FOR EACH AMMUNITION TYPE TRANSITION

PHASE III - AMMUNITION SHAKE-DOWN PROCEDURES

- **ESTABLISHMENT OF SHAKE-DOWN SITE AND SUPERVISION OF ALL AMMUNITION HANDLING**
- **THREE STATIONS (WITH DISTANCE BETWEEN EACH) ESTABLISHED**
  - DOWNLOAD STATION – ALL UNEXPENDED MUNITIONS ARE REMOVED FROM MAGAZINES AND EQUIPMENT
  - INSPECTION STATION – SUPERVISE PAT-DOWNS AND MAGAZINE CHECKS
  - ISSUE POINT – SUPERVISE ISSUANCE OF THE CORRECT TYPE OF AMMUNITION FOR THE NEXT TRAINING EVOLUTION
- **SUPERVISION OF CONDUCT OF DOWNLOAD SITE**
  - BUDDY-SYSTEM USED TO DOWNLOAD UNEXPENDED AMMO FROM MAGAZINES, POUCHES, EQUIPMENT AND UNIFORMS
  - PARTICIPANTS RECEIVED PROPER INSTRUCTIONS

- ALL PARTICIPANTS ACCOUNTED FOR AT THIS STATION USING THE ROSTER PROVIDED BY THE OIC OF TRAINING
- ALL MUNITIONS ARE SEGREGATED AND STORED IN PROPERLY MARKED CONTAINERS

SUPERVISION OF CONDUCT OF INSPECTION STATION

- ARSO RECEIVED PROPER INSTRUCTIONS
- THOROUGH PAT-DOWN OF ALL INDIVIDUAL CLOTHING AND POCKETS
- DETAILED MAGAZINE CHECK CONDUCTED FOR ALL WEAPON SYSTEMS
- EQUIPMENT DISPLAYED AND INSPECTED BY RSO OR ARSO
- ALL PARTICIPANTS ACCOUNTED FOR AT THIS STATION USING THE ROSTER PROVIDED BY THE OIC OF TRAINING

SUPERVISION OF CONDUCT OF AMMO ISSUE POINT

- PROPER AMMO ISSUED FOR NEXT TRAINING EVENT
- PARTICIPANTS HAVE ENSURED ALL MAGAZINES ARE LOADED WITH PROPER AMMO
- TEST-FIRE CONDUCTED (IF FEASIBLE)
- ALL PARTICIPANTS ARE ACCOUNTED FOR AT THIS STATION USING THE ROSTER PROVIDED BY THE OIC OF TRAINING

PHASE IV - CONCLUSION OF TRAINING

CONDUCT RANGE INSPECTION

- SWEEPS RANGE AND/OR TRAINING AREA FOR UNEXPENDED AMMO AND DUDS FROM MISFIRES
- RANGE CONTROL CONTACTED FOR DISPOSAL AND EOD LIAISON REQUIREMENTS

CONDUCT FINAL DOWNLOAD AT CONCLUSION OF TRAINING

- FINAL SHAKE-DOWN INSPECTION CONDUCTED BEFORE PARTICIPANTS DEPART THE RANGE/TRAINING AREA
- ALL PERSONNEL (INCLUDING SAFETY PERSONNEL, OBSERVERS, AND PARTICIPANTS) INSPECTED FOR AMMO AND EXPLOSIVES
- ALL PERSONNEL TO BE INSPECTED ARE ACCOUNTED FOR AND SUPERVISED
- SUPERVISE AND ACCOUNT FOR ALL PERSONNEL TO BE INSPECTED

UNEXPENDED AMMO AND EXPLOSIVES ACCOUNTABILITY

- ALL UNEXPENDED AMMO AT THE FASP CONSOLIDATED
- EACH DODIC AT THE FASP PHYSICALLY COUNTED
- ALL DUNNAGE AND TRASH INSPECTED
- CLEAR PLASTIC TRASH BAGS INSPECTED; ALL DUNNAGE FOR UNEXPENDED AMMO PHYSICALLY INSPECTED

- ☐ SUPERVISE SEPARATION OF DUNNAGE FROM TRASH
- ☐ LIAISON MADE WITH TRAINING UNIT FOR REMOVAL OF DUNNAGE AND TRASH FROM THE RANGE/TRAINING AREA
- ☐ AMMUNITION EXPENDITURE (TO DETERMINE HOW MUCH AMMO WAS ACTUALLY EXPENDED) RECONCILED
- ☐ NAVMC 11381 FORM COMPLETED
- ☐ RESPONSIBLE UNIT AMMO TECH CONTACTED FOR AMMUNITION TURN-IN

☐ **ASSUMPTION OF A COLD STATUS FOR RANGE/TRAINING AREA REQUESTED FROM RANGE CONTROL**

- ☐ COMMUNICATION WITH RANGE CONTROL MAINTAINED WHILE OCCUPIED

☐ **POLICE CALL OF RANGE/TRAINING AREA CONDUCTED BY OIC**

☐ **POLICE CALL INSPECTION**

☐ **CONTROL OF UNEXPENDED AMMO TO RECEIVING RESPONSIBLE UNIT AMMO TECH TURN-OVER**

- ☐ COMPLETED AMMO EXPENDITURE REPORT TURNED OVER TO AMMO TECH
- ☐ JOINT INVENTORY OF UNEXPENDED AMMO (WITH AMMO TECH) COMPLETED
- ☐ FORM 1348-1 COMPLETED WITH THE AMMO TECH WHILE ON THE RANGE/TRAINING AREA
- ☐ AMMO PROPERLY PACKAGED
- ☐ ALL GRADE III AMMO IDENTIFIED FOR TURN-IN

OPERATIONAL RISK MANAGEMENT MATRIX
MCAS YUMA, AZ

TRAINING EVOLUTION:	ORGANIZATION:	PREPARED BY:	DATE:

OPERATIONAL PHASE	HAZARD	CAUSES	INITIAL RAC	DEVELOP CONTROLS	RESIDUAL RAC	HOW TO IMPLEMENT	HOW TO SUPERVISE

HAZARD SEVERITY

I – CATASTROPHIC – Death, permanent disability, major property damage.
II – CRITICAL – Permanent partial disability, major system damage, minor property damage.
III – MARGINAL – Minor injury, minor system or property damage.
IV – NEGLIBIBLE – 1st aid, minor system repair.

MISHAP PROBABILITY:

A – FREQUENT
B – LIKELY
C – OCCASSIONALY
D – UNLIKELY

RISK ASSESSMENT CODE: (RAC)

1 – CRITICAL
2 – SERIOUS
3 – MODERATE
4 – MINOR
5 - NEGLIGIBLE

RAC ASSESSMENT CODE MATRIX

HAZARD SEVERITY	MISHAP PROBABILITY			
	A	B	C	D
I	1	1	2	3
II	1	2	3	4
III	2	3	4	5
IV	3	4	5	5

COMMAND REVIEW / APPROVAL

OIC:

XO:

CO:

RCO:

MEDEVAC Checklist

Time Call Received / Date _____ / _____

1. Requestor _____

2. Phone# / Radio Frequency _____ / _____

3. Point Of Contact _____ Phone _____

4. Location / Landmarks _____

_____

5. Type of Accident _____

_____

6. Number of Patients _____

7. Condition of Patients _____

_____

8. Callsign & Frequency of on-scene unit _____ / _____

9. How is LZ marked? _____

_____

DEVIATION/WAIVER REQUEST FORM
(UNIT HEADING)

3500
Date

From: Commanding Officer, Unit Requesting Deviation/Waiver

To: Commanding Officer, Marine Corps Air Station Yuma, Arizona

Subj: REQUEST FOR DEVIATION/WAIVER OF MCO 3570.1_ (OR STAO 3710.6_)

Ref: (a) MCO 3570.1_
(b) StaO 3710.6_

Encl: (1) Surface Danger Zone Diagram (1:50,000 scale)
(2) Risk Assessment
(3) Maps or charts as necessary

1. Per reference (a), it is requested that a deviation/waiver be granted for page XX, paragraph XXXX of reference (X).

2. It is requested that (UNIT) be authorized to (ACTUAL DEVIATION/WAIVER DESIRED).

3. This deviation/waiver is desired in order to (JUSTIFICATION SHOULD EXPLAIN VALUE OF TRAINING DESIRED, A COPY OF RISK ASSESSMENT AND STATEMENT THAT APPROPRIATE MEASURES WILL BE TAKEN TO ENSURE SAFETY).

//SIGN//

Copy to:
MCAS Yuma Range Control Officer