BY ORDER OF THE COMMANDER
MARCH AIR RESERVE BASE

MARCH AIR RESERVE BASE
INSTRUCTION 13-204

2 JUNE 2017

Nuclear, Space, Missile, Command and Control

AIRFIELD OPERATIONS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at. **www.e-Publishing.af.mil** for downloading or ordering

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: 452 OSS/OSA

Certified by: 452 OG/CC
(Col Charles D. Assumma)
Pages: 126

This publication implements AFPD 13-2, *Air Traffic Control, Airspace, Airfield, and Range Management* and AFI 13-204, Vol. 3, *Airfield Operations Procedures and Programs*. It provides guidance and procedures on airfield operations at March Air Reserve Base (ARB). It applies to individuals at all levels who operate or perform servicing functions on aircraft at March ARB airfield facilities, operate within and in the vicinity of March ARB delegated airspace, and personnel responsible for implementing airfield operations functions, except where noted otherwise. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) listed above using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

Chapter 1

POLICIES AND GUIDANCE

1.1. General Policies.

1.1.1. Recommended Changes. Any changes to this instruction shall be coordinated through 452 OSS/OSA for review.

1.1.2. Word Meanings. As used in this instruction:

1.1.2.1. "Shall" or "must" means a procedure is mandatory.

1.1.2.2. "Shall not" or "must not" means a procedure is prohibited.

1.1.2.3. "Should" means a procedure is recommended.

1.1.2.4. "May" or "need not" means a procedure is optional.

1.1.2.5. "Will" means futurity, not a requirement for the application of a procedure.

1.1.2.6. Singular words include the plural.

1.1.2.7. Plural words include the singular.

1.1.2.8. "Aircraft" means the airframe, crew members, or both.

1.1.3. Flight Line Clothing.

1.1.3.1. Identification Badges. Metal badges and/or insignias will not be worn on the flight line. Badges will be secured with a subdued non-metallic cord or plastic armband in plain sight above the waist on the outermost garment when worn on the flight line. (T-1)

1.1.3.2. Head Apparel. Hats or caps shall not be worn on the flight line or in an engine intake danger zone during engine start or while engines are running. Hats or caps may be worn on the flight line during planned events, ceremonies, construction, or for the prevention of thermal injury (heat or cold) when appropriately required or directed. Hats or caps do not include aircrew helmets, flight deck/ground support helmets, ballistic helmets, or other military issued headgear/safety equipment required for safe operation of crewed combat vehicles/maintenance vehicles/Aerospace Ground Equipment (AGE)/aircraft, during mass troop movements, during security forces/firefighting/first responder operations, as part of the chemical warfare defensive ensemble, or as directed for specific situations. (T-1)

1.1.3.3. Other Loose Items. Sun, wind and dust goggles, sunglasses, prescription eyewear and eye protection may be worn as required to perform duties on the flight line. Wigs, hairpieces, metal hair fasteners, earrings, or any other jewelry/loose items that may fall off without notice, are not authorized on the flight line. (T-1)

1.1.3.4. Visitors. Escorts of visiting personnel will ensure Foreign Object Damage (FOD) prevention measures are taken. (T-1)

1.1.4. Tobacco Use. Tobacco products such as cigarette, pipe, and e-cigarette smoking is prohibited in flight line areas, aircraft maintenance facilities, and weapons storage and

maintenance areas. Tobacco products may be used in approved designated tobacco use areas. (T-1)

1.1.5. Grill, Smoker, and Fryer Use. Organizations intending on using grills, smokers, fryers or any open flames for cooking purposes shall obtain approval and guidelines through the installation Fire Chief. (T-3)

1.1.6. Airfield Photography. Route all requests for airfield photography through Airfield Management (AM), Emergency Communication Center (ECC) and Public Affairs (PA). PA is the approval authority for any photography on the airfield. (T-3)

1.1.7. Airfield Tours. Route all requests for airfield tours through AM, ECC and PA. PA is the approval authority for any tours on the airfield. (T-3)

1.2. Airfield Operations Board (AOB). The AOB provides a forum for discussing, updating and tracking various activities in support of the wing-flying mission as mandated by paragraph 4.2, AFI 13-204v3, *Airfield Operations Procedures and Programs*. (T-1)

1.2.1. AOB Chair Delegation. 452 AMW/CV designates 452 OG/CC to serve as the chair of the AOB. (T-1)

1.2.2. Frequency. The board will convene at least once per quarter; the chairman may convene a board at any time. (T-1)

1.2.3. Required Members. (T-3)

1.2.3.1. 452 OG/CC.

1.2.3.2. 452 MSG/CC.

1.2.3.3. 452 AMW/CP (Command Post/CP).

1.2.3.4. 452 AMW/SEF (Flight Safety/SEF).

1.2.3.5. 452 OG/OGV.

1.2.3.6. 729 AS.

1.2.3.7. 336 ARS.

1.2.3.8. 912 ARS.

1.2.3.9. Det 1, 144 FW.

1.2.3.10. 163 ATKW.

1.2.3.11. U.S. Customs and Border Patrol Office of Air and Marine, Riverside Air Unit (CBP RAU).

1.2.3.12. 452 FSS/FSVA (Aero Club).

1.2.3.13. 452 OSS/CC or DO.

1.2.3.14. 452 OSS/OSA (Airfield Operations Manager (AOM)).

1.2.3.15. 452 OSS/OSAB (Air Traffic Manager (ATM) or designated representative).

1.2.3.16. 452 OSS/OSAP (Airspace Manager or designated representative).

1.2.3.17. 452 OSS/OSAP (Terminal Instrument Procedures Specialist (TERPS) or designated representative).

1.2.3.18. 452 OSS/OSAD (Airfield Operations Automation Manager (AOAM) or designated representative).

1.2.3.19. 452 OSS/OSAA (Airfield Manager (AFM) or designated representative).

1.2.3.20. 452 OSS/OSAW (WX).

1.2.3.21. 452 OSS/OSAM (Air Traffic Control and Landing Systems (ATCALS) Maintenance or designated representative).

1.2.3.22. 452 MSG/CE (CE) (and representatives of Base Operating Support (BOS) Contractor).

1.2.3.23. 452 CS (CS).

1.2.3.24. Federal Aviation Administration (FAA) Southern California (SCT/SoCal) Terminal Radar Approach Control (TRACON) or Air Traffic Representative (ATREP).

1.2.3.25. March Inland Port Airport Authority (MIPAA).

1.2.4. Agenda. Two weeks prior to an AOB, the AOM will electronically distribute the agenda, to include date, time, place, mandatory items identified in AFI 13-204v3, and any pertinent issues. Send additional topics for discussion to the AOM for inclusion in the agenda no later than two business days prior to the scheduled AOB. (T-3)

1.2.5. Inputs. OPRs shall provide the AOM with a brief written statement on current status and estimated completion date (ECD) of all open agenda items no later than two business days prior to the scheduled AOB. (T-3)

1.2.6. Distribution. The AOM will distribute the minutes to affected base agencies, HQ AFRC/SEF/A3OA/A6/A7, and HQ AFFSA/XA within 15 business days after an AOB. (T-1)

1.2.7. Schedule of Annual Review Items. The following items are reviewed in the specified quarter: (T-3)

1.2.7.1. Letter of Procedure (LOP) Review (1st Qtr/January).

1.2.7.2. TERPS (1st Qtr/February).

1.2.7.3. Air Installation Compatible Use Zone (AICUZ) (1st Qtr/March).

1.2.7.4. Results of Annual Self-Inspection (2nd Qtr/June).

1.2.7.5. Special Interest Item (SII) (2nd Qtr/June).

1.2.7.6. Results of Annual Airfield Certification/Safety Inspection and Quarterly Joint Inspection (2nd Qtr/June).

1.2.7.7. Status of Airfield Waivers (2nd Qtr/June).

1.2.7.8. Aircraft Parking Plan (3rd Qtr/August).

1.3. Pilot-Airfield Operations Flight Liaison (PAOL) Program.

1.3.1. General. The PAOL program is an informal pilot/crew to Airfield Operations forum to improve overall efficiency of services at March ARB.

1.3.2. Frequency. PAOL meetings are normally scheduled for March, June, September, and December. (T-3)

1.3.3. Membership. All flying units at March ARB, general and commercial operators within March delegated airspace, and Air Traffic Control (ATC) representatives from adjacent ATC facilities are invited to attend. (T-3)

1.3.4. Program Monitor. The AOM shall appoint a PAOL program monitor to schedule and conduct PAOL meetings. The PAOL program monitor shall provide written meeting minutes within five days of a PAOL meeting for distribution to all members. (T-3)

1.3.5. Mid-Air Collision Avoidance (MACA). SEF is the OPR for MACA program at March ARB. SEF should invite AOM or designated representatives to jointly attend visits to local civilian airports. (T-3)

1.4. Flight Information Publications (FLIP). AM manages FLIP requirements, requisition, and distribution for March ARB. All units with enduring requirements for FLIPs shall coordinate with AM to fulfill operational needs. (T-1)

1.4.1. 452 AMW Assigned Flying Unit Requirements. AM is responsible for maintaining FLIP requirements for 452 OSS/OSAC, 729 AS, 336 ARS, and 912 ARS. AM shall order, receive, inventory and distribute FLIPs. 452 OSS/OSAC, 729 AS, 336 ARS, and 912 ARS are responsible keeping AM informed of FLIP requirements, changes and picking up products within five days of notification of delivery. 452 OSS/OSAC is responsible for keeping AM informed of FLIP requirements, changes and building FLIP kits for contingency flying operations. AM shall build and issue FLIP kits to local crews according to user requirements. AM shall support the Aero Club by providing reference material IAW 4.4.1., AFI 34-117, *Air Force Aero Club Program*. (T-3)

1.4.2. Aeronautical/Procedural Changes to FLIPs. Changes to aeronautical information contained in FLIPs shall be submitted through the AFM. The AFM shall forward the requested change to the AOM for approval or disapproval. Approved changes will be processed by AM for inclusion in FLIPs. FLIP procedural changes shall be submitted to TERPS for review. (T-3)

1.4.3. FLIP Reviews for ATC. TERPS shall review FLIP changes no later than five days prior to the effective date and provide the ATM and Training and Standardization Manager (TSM) identified operational impacts. The TSM shall include all TERPS identified impacts in monthly training. (T-3)

1.5. Prior Permission Required (PPR) Procedures.

1.5.1. Transient Aircraft PPR. PPRs are required for all non-March ARB assigned aircraft and are issued on a first come, first served basis or as directed by the AOM. AM is the focal point for PPR issuance and approval. AM will determine eligibility of all requests, available parking, and transient services required prior to issuing a PPR. AM shall coordinate with Air Terminal Operations Center (ATOC) for cargo and passenger carrying capable aircraft prior to issuing a PPR to ensure availability of aircraft services and maximum on ground (MOG) limits are not exceeded. Intervals of at least two hours is required between successive

aircraft requiring ATOC support except Distinguished Visitor (DV) Code 6 and above, Air Evac/Med Evac, return of deceased service member remains, Prisoner of War/Missing in Action (POW/MIA) repatriation, and high priority missions. AM shall coordinate with Transient Alert (TA) prior to issuing a PPR. Any PPRs proposed past TA's available time shall be approved by 452 OG/CC, AOM, AM Contracting Officer's Representative (COR), or designated representative. AM shall refer all requests for TDY operations at March ARB to 452 OSS/OSTX per 1.5.2. AM shall check the master Civil Aircraft Landing Permit for non-military aircraft to determine eligibility prior to issuing a PPR. Non-military aircraft arriving at March ARB not on United States government (USG) business and picking up a military tasked mission from March ARB shall be issued a PPR that permits no more than 24 hours on the ground from arrival time to departure time. Aircraft intended for MIPAA do not require a PPR and shall be referred to the Fixed-Base Operator (FBO) for handling. Aircraft intending to land at March ARB without a PPR may be permitted to land but shall be held on Taxiway Charlie between Runway 14/32 and Runway 12/30 or a MIPAA apron until situation is resolved by AM. See 1.5.4. (T-3)

1.5.2. Temporary Deployment PPR. 452 OSS/OSTX is the 452 AMW lead agency for temporary deployment of aircraft to March ARB. All agencies shall direct flying units intending to operate out of March ARB to 452 OSS/OSTX. AM will issue PPRs as necessary for approved temporary deployments. (T-3)

1.5.3. PPR Distribution. AM shall maintain a monthly PPR Log with the real time status of pending and approved PPRs at **https://afrc.eim.us.af.mil/sites/452aw/452OG/OSS/OSA/PPR_Logs/default.aspx**. AM shall maintain a status of all aircraft on the ground at March ARB granted PPRs. (T-3)

1.5.4. Aircrew Violations of Airfield Restrictions. AM shall provide the AOM a synopsis of aircrew violations of airfield restrictions to include date, time, description of airfield restriction, callsign, type aircraft, names and ranks of crewmembers, unit of assignment, and home station within 48 hours of the violation. The AOM shall forward the violation report for routing through 452 OG/CC, 452 AMW/CC to the aircrew's WG/CC with a courtesy copy to the aircrew's MAJCOM/A3 and HQ AFRC/A3OA. (T-1) Absence of a PPR shall be considered a violation of airfield restrictions and subject to possible assessment of landing or parking fees IAW AFI 10-1001, *Civil Aircraft Landing Permits*, as applicable to the situation. AM shall obtain the mission number of a contract air carrier that fails to obtain a PPR, arrives at March ARB without a PPR and inform the mission scheduler of the absence of a PPR. (T-3)

1.6. Operations Scheduling.

1.6.1. Current Operations (452 OSS/OSO) shall provide AM the weekly and daily flying schedule and any amendments. AM shall distribute the weekly and daily flying schedule and all amendments to Control Tower (Tower), Radar Approach Control (RAPCON), WX, and Bird/Wildlife Aircraft Strike Hazard (BASH) Contractor. (T-3)

1.6.2. MIPAA shall provide AM the weekly and daily flying schedule and any amendments for tenants that publish a schedule. AM shall distribute the weekly and daily flying schedule and all amendments to Tower, RAPCON, and WX. (T-1)

1.7. Exercise Planning and Execution.

1.7.1. Installation Exercises and Inspections. Exercises or inspections involving standard or special support from AM, ATC, WX or the airfield/airspace shall include the AOM in planning to ensure proper support for objectives and coordination with FAA. (T-1)

1.7.2. Deployed Aircraft to March ARB and Large Force Exercises. Planners of deployment operations and large force exercises shall coordinate with the AOM in the planning and execution phases to ensure at least 45 days advance notification to FAA. (T-0)

1.8. Noise Abatement.

1.8.1. Quiet Hours. March ARB quiet hours coincide with the published operating hours and other times by Notice to Airmen (NOTAM). Quiet hours, other than published operating hours, are coordinated through the AOM, 452 OSS/OSO, 452 OG/CC, 452 AMW/CCP and approved by 452 AMW/CC. AM is responsible for distribution of approved quiet hours, coordinating and submitting NOTAMs implementing quiet hours, and restricting PPRs for applicable quiet hour times. All units operating on the airfield shall comply with quiet hour restrictions. Emergencies, Det 1, 144 FW and CBP RAU alert operations take precedence over any quiet hour restrictions. AM and ATC will enforce quiet hours as directed and implement restrictions no later than five minutes prior to quiet hours. (T-3)

1.8.1.1. Available Operational Restrictions. Organizations requesting quiet hours shall specify operational restrictions needed below. (T-3)

1.8.1.1.1. Towing Restrictions.

1.8.1.1.1.1. No Tows. Towing of aircraft prohibited on all airfield areas.

1.8.1.1.1.2. Limit Tows (apron specific). Towing of aircraft prohibited on specified airfield areas.

1.8.1.1.1.3. Tows Permitted. Towing of aircraft permitted during quiet hours.

1.8.1.1.2. Engine Run Restrictions.

1.8.1.1.2.1. No Engine Runs. Engine runs prohibited on all airfield areas.

1.8.1.1.2.2. Limit Engine Runs (apron specific). Engine runs prohibited on specified airfield areas.

1.8.1.1.2.3. Engine Runs Permitted. Engine runs permitted during quiet hours.

1.8.1.1.3. Auxiliary Power Unit (APU) Restrictions.

1.8.1.1.3.1. No APUs. APU use prohibited on all airfield areas.

1.8.1.1.3.2. Limit APUs (apron specific). APU use prohibited on specified airfield areas.

1.8.1.1.3.3. APUs Permitted. APU use permitted during quiet hours.

1.8.1.1.4. Taxi Restrictions.

1.8.1.1.4.1. No Taxi. Taxiing prohibited on all airfield areas.

1.8.1.1.4.2. Limit Taxi (taxiway/apron specific). Taxiing prohibited on specified airfield areas.

1.8.1.1.4.3. Taxi Permitted. Taxiing permitted during quiet hours.

1.8.1.1.5. Vehicle/Personnel Movement Restrictions.

1.8.1.1.5.1. No Movement. Vehicle and personnel movement prohibited on all airfield areas.

1.8.1.1.5.2. Limit Movement (taxiway/apron specific). Vehicle and personnel movement prohibited on specified airfield areas.

1.8.1.1.5.3. Movement Permitted. Vehicle and personnel movement permitted during quiet hours.

1.8.1.1.6. Runway Operation Restrictions.

1.8.1.1.6.1. No Runway Operations. No operations are permitted on Runway 14/32 and Runway 12/30.

1.8.1.1.6.2. Limit Runway Operations (Full Stop landings only). Full stop landings are authorized only for the specified runway(s).

1.8.1.1.6.3. Runway Operations Permitted. No restrictions on use of Runway 14/32 and Runway 12/30.

1.8.1.1.7. Airspace Restrictions.

1.8.1.1.7.1. No Class C Airspace Operations. Aircraft operations within the Class C or Class D (when active) surface area are prohibited.

1.8.1.1.7.2. Limit Class C Operations (transitions above 3,000 ft mean sea level (MSL) only). Aircraft transitions within the Class C or Class D (when active) surface area are permitted.

1.8.1.1.7.3. Class C Operations Permitted. No altitude restrictions for aircraft transitions within the Class C or Class D (when active) surface area.

1.8.2. Transient Aircraft. Aircraft not permanently based at March ARB are not authorized to conduct pattern work 2100L-2300L (0500Z-0700Z [0400Z-0600Z Daylight Savings Time (DST)]). Full stop landings are authorized. (T-3)

1.8.3. Radar Pattern Restriction. RAPCON shall utilize 5,000 ft MSL pattern altitude within confines of delegated airspace 2200-2300L. (T-3)

1.8.4. Tanker-Receiver Departures. Tower shall hold tanker or receiver aircraft awaiting wingman departure at 3,500 ft MSL or higher over the airfield. (T-3)

1.8.5. Noise Complaints. All noise complaints shall be referred to PA at (951) 655-4137 during duty hours and to CP at (951) 655-4665 after duty hours or email to the following address **452amw.paworkflow@us.af.mil**. AM, Tower, and RAPCON shall document noise complaints received on the daily AF Form 3616 with the source name, organization, contact number, and detailed description of complaint. AM, Tower, and RAPCON shall notify the AFM, ATM, and AOM within one hour of noise complaint via email. (T-3)

1.9. Civil Aircraft Use of Military Navigational Aids (NAVAID). Civil use of March ARB maintained NAVAIDs are authorized when it does not interfere or preclude military use. (T-3)

1.10. Civil Aircraft Operations.

1.10.1. MIPAA Fixed-Base Operator. MIPAA shall provide AM their scheduled hours of operation and any updates. AM shall provide Tower the scheduled hours of operation of the FBO and any updates. (T-1)

1.10.2. MIPAA Tenants. MIPAA shall provide and maintain a current listing of all tenants under contract and based at the MIPAA FBO to the AOM and AM. AM shall provide a copy to Tower. MIPAA tenants are authorized to operate outside of published airfield hours and during holidays. Pattern-work is not authorized per the Joint Use Agreement. MIPAA tenants are only permitted single full stop landings. MIPAA shall include the AOM on any preliminary planning for new commercial tenants. (T-1)

1.10.3. MIPAA Transients. Aircraft arriving without notice or flight plan are authorized to land if their intent is to proceed to MIPAA FBO within the FBO's operating hours. ATC shall verify any MIPAA inbound aircraft through AM when needed. AM shall contact MIPAA to facilitate verification for ATC. MIPAA shall notify the AOM and AM at least 48 hours in advance for all out of business hours operations that are not tenants under contract, arriving or departing. AM shall notify ATC of these operations. Any aircraft arriving or departing outside of business hours for MIPAA that is not a tenant nor have advance notice from MIPAA should be denied landing and diverted or denied departure and held. MIPAA shall notify the AOM at least 48 hours in advance for any unusual volume of transient aircraft traffic. (T-1)

1.10.4. Civil Aircraft Landing at March ARB. Personnel intending to operate a civil aircraft at March ARB for official business purposes outlined in AFI 10-1001 shall submit the appropriate forms to AM for processing at least thirty days in advance. The AFM shall review the application, verify documentation, and provide a recommendation to the AOM. The AOM is delegated the approval authority for all Civil Aircraft Landing Permits. When approved or disapproved by the AOM, the AFM shall provide the applicant the notice of disapproval or signed copy indicating approval. For civil aircraft with a pre-approved Civil Aircraft Landing Permit, AM shall verify authorization with the HQ AF/A3XJ listing prior to arrival. (T-1)

1.10.5. Practice Approaches and Pattern Work. Practice instrument approaches are authorized for any civil aircraft on a non-interference basis per operational priorities in this instruction and limited to low approaches to Runway 14/32. VFR pattern work is not authorized for any transient civil aircraft to any runway. (T-1)

1.10.6. United States Government (USG) Aircraft. USG owned and operated transient aircraft may conduct practice approaches and pattern work in accordance with (IAW) operational priorities in this instruction. (T-0)

Chapter 2

GENERAL AIRFIELD INFORMATION

2.1. Airfield Area and Location.

2.1.1. Runways. March ARB has two hard surface runways. The airfield identifier is KRIV, the airport reference point is N 33°52'54.99" W 117°15'32.47", and the field elevation is 1,536 ft.

2.1.1.1. Runway 14/32. Runway 14/32 is the main runway and is 13,302 ft long and 200 ft wide with 1,000 ft long and 200 ft wide overruns on each end. The runway is a Class B instrument runway composed of portland cement concrete (PCC), grooved PCC, and asphaltic concrete (AC). The center keel pavement starting from approximately 1,500 feet (ft) to approximately 13,100 ft from the Runway 32 approach end is grooved transversely 100 ft wide and composed of PCC. The remaining PCC pavement at both ends of the runway has not been grooved. The outer 50 ft on both sides of the runway are constructed of AC pavement. The controlling aircraft for this runway is the C-17.

Table 2.1. Runway 14/32.

Centerline Threshold	Coordinates (WGS-84)	Heading	Elevation
Runway 14	N 33°53'47.15" W 117°16'14.29"	137.4°	1,535.50
Runway 32	N 32°51'53.98" W 117°14'53.81"	317.4°	1,488.24

2.1.1.2. Runway 12/30. Runway 12/30 is 3,061 ft long and 100 ft wide with 200 ft long and 100 ft wide overruns. The runway is primarily composed of AC except for pavement consisting of the full width of Taxiway Charlie and Taxiway Delta which is PCC. Runway 12/30 is limited to day Visual Flight Rules (VFR) operations. A marked day VFR helipad is located approximately 400 ft prior to the Runway 30 threshold.

Table 2.2. Runway 12/30.

Centerline Threshold	Coordinates (WGS-84)	Heading	Elevation
Runway 12	N 33°53'24.93" W 117°15'38.45"	123.0°	1,411.55
Runway 30	N 33°53'03.55" W 117°15'12.73"	303.0°	1,399.62

Figure 2.1. March ARB Airfield (Runway 14).

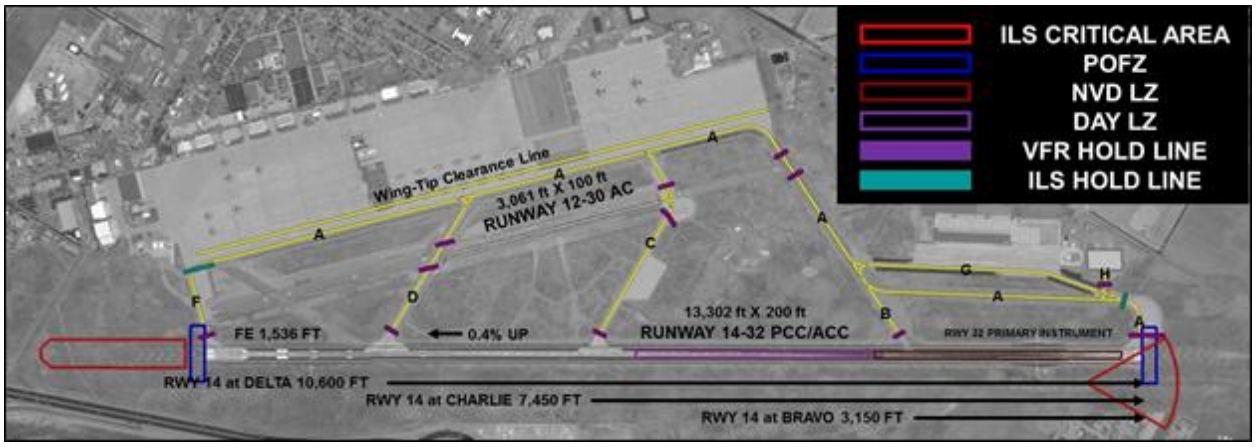
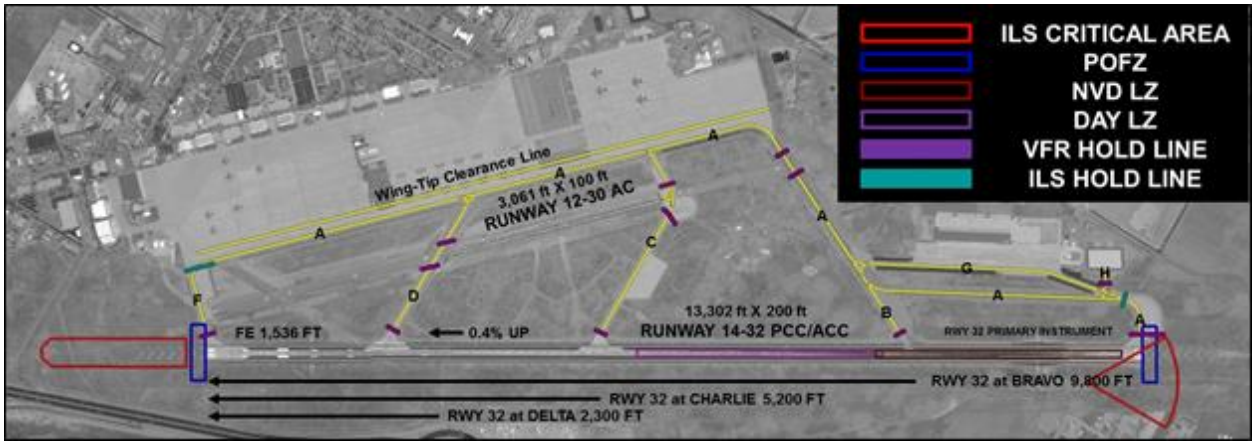
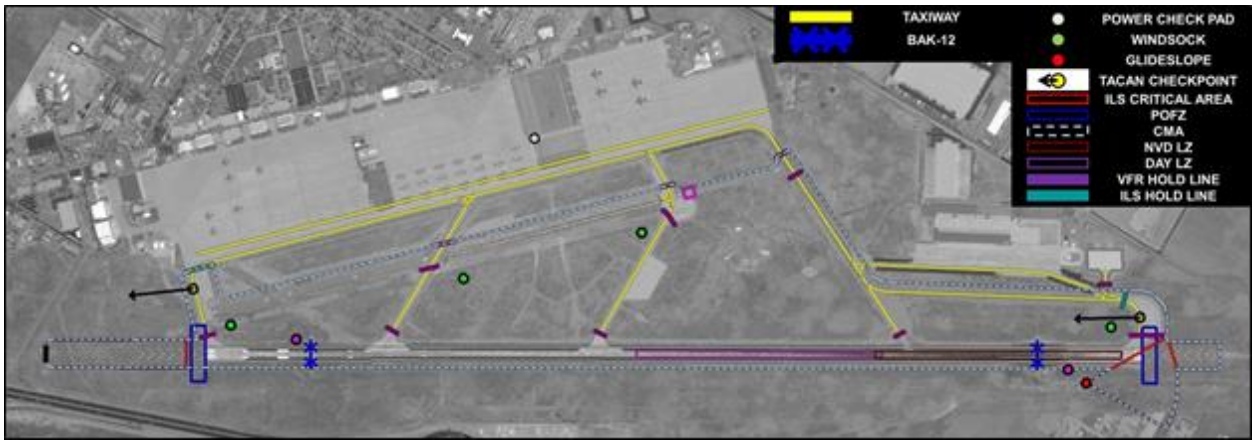


Figure 2.2. March ARB Airfield (Runway 32).



2.1.2. Controlled Movement Area (CMA)/Movement Area (MA). The CMA/MA is always active and encompasses all pavement and in-field areas including and bounded by 100 ft of Runway 14/32, 100 ft of the northern edge of Taxiway Foxtrot, an imaginary line coinciding with the VFR hold short line on Taxiway Foxtrot at the intersection with Taxiway Alpha, following an imaginary line composed of the west-southwest edge of Taxiway Alpha along the main parking apron and the VFR hold short lines east of Runway 12/30 on Taxiway Delta, Taxiway Charlie, and Taxiway Alpha, and areas west of 100 ft east of Taxiway Alpha from the main parking apron's southern corner to the approach end of Runway 32. The CMA includes precision approach critical areas for the glideslope and localizer antennas. The critical area for the glideslope antenna is the arc area ±30° on a heading of 137.4° M extending 1,300 ft from Building (Bldg) 1301 (N 33°51'58.768" W 117°15'02.713"). The critical area for the localizer antenna is the area 400 ft wide centered on and extending 2,000 ft on a heading of 137.4° M from Bldg 1801 (N 33°54'06.497" W 117°16'28.054") and the tapered area 75 ft either side of 317.4° M extending 50 ft northwest of and centered on Bldg 1801, then tapering 45° towards the antenna intercepting the 400 ft wide critical area boundary. (T-3)

Figure 2.3. CMA Diagram.



2.1.3. Airfield Lighting. March ARB airfield lighting shall be operated IAW FAA JO 7110.65. Tower will have Precision Approach Path Indicator (PAPI) lights on regardless of day or night conditions or as preconfigured using automated presets. Tower shall adjust airfield lighting settings when requested by pilots. Airfield lighting may be turned off at night, with the exception of the Airport/Airfield Identification Beacon, during published closed hours, during pre-coordinated Night Vision Device (NVD) operations, and during open hours when there are no projected aircraft operations for a significant period of time as determined by Tower. (T-3)

2.1.3.1. Runway 14/32. Runway 14/32 is equipped with High Intensity Runway Edge Lights, Threshold Lights, Runway End Lights, and Distance Remaining Markers. Runway 14 has a four element PAPI to the left of the runway at N 33°53’37.21” W 117°16’04.34” with a slope angle of 2.59° and threshold crossing height of 56 ft. Runway 32 has a four element Precision Approach Path Indicator to the left of the runway at N 32°52’01.94” W 117°15’02.35” with a slope angle of 3.00° and threshold crossing height of 59 ft and is equipped with High Intensity Approach Lighting System with Sequenced Flashing Lights, Category I. Runway 32 has recessed overt lighting for a unidirectional C-17 minimum length (3,500 ft) Airfield Marking Panel (AMP) – 3 (Night) Landing Zone (LZ) approximately 300 ft from the approach end of Runway 32.

2.1.3.2. Runway 12/30. Runway 12/30 has no runway lighting installed.

2.1.3.3. Taxiways. All taxiways have Taxiway Edge Lighting and Taxiway Guidance Signs (Mandatory).

2.1.3.4. Airport/Airfield Identification Beacon. March ARB has a rotating beacon which is continuously operated at night, regardless of published or un-published closures and holidays. (T-0)

2.1.3.5. Wind Cones. Runway 14/32 has two lit wind cones east of the runway in the vicinity of the approach ends at N 33°53’46.162” W 117°16’07.923” and N 33°51’59.801” W 117°14’52.390”. Runway 12/30 has two lit wind cones west of the runway in the vicinity of the approach ends at N 33°53’21.657” W 117°15’41.292” and N 33°53’03.413” W 117°15’19.164”. Wind cones do not remain lit when other associated airfield lighting is off.

2.1.4. Arresting Systems. Runway 14/32 has two Tower controlled remotely raised/lowered bi-directional BAK-12Bs, 1,500 ft from the approach end of Runway 14 and Runway 32. The departure end arresting system for the runway in use is normally connected in a ready position. Tower may raise and lower the arresting system as requested, as the situation warrants or per Letter of Agreement outlining specific user procedures. (T-3)

2.1.5. Landing Zones (LZ).

2.1.5.1. Day Visual Meteorological Condition (VMC) LZ. Runway 14/32 has a bi-directional marked C-17 minimum length (3,500 ft) AMP – 2 (Day) LZ laterally centered on the runway approximately 500 ft south of Taxiway Charlie and approximately 300 ft north of Taxiway Bravo. Approximately 3,300 ft south of the LZ and approximately 6,500 ft north of the LZ is considered usable full weight-bearing overrun between the thresholds of Runway 14/32. No associated overt airfield lighting is installed for this LZ. The Day VMC LZ is not coincidental with the Night VMC LZ described in 2.1.5.2.

2.1.5.2. Night VMC LZ. Runway 14/32 has recessed overt lighting for a unidirectional C-17 minimum length (3,500 ft) AMP – 3 (Night) LZ approximately 300 ft from the approach end of Runway 32. The Night VMC LZ is not coincidental with the Day VMC LZ described in 2.1.5.1. and airfield markings are applied in the same pattern as visual landing zone marker panel (VLZMP) for the AMP-3 configuration.

2.1.6. Drop Zone (DZ). March ARB has no DZs on the airfield.

2.2. Helicopter Landing Surfaces.

2.2.1. March ARB has a single limited use day VFR helipad, 50 ft by 50 ft, located approximately 400 ft prior to the Runway 30 threshold at N 33°53’00.592” W 117°15’09.159”, and oriented in line with Runway 12/30.

2.3. Taxiways.

2.3.1. Taxiway Location Descriptions.

2.3.1.1. Taxiway Alpha. Taxiway Alpha begins as a taxilane that is adjacent and west-southwest to the main parking apron and east-northeast of and parallel to Runway 12/30 beginning at the west-northwestern extent of the main parking apron and extending the full length of the main parking apron. Taxiway Alpha then continues from the main parking apron’s southern corner south-southwest-bound towards Runway 14/32 for approximately 0.5 NM. The taxiway then branches off southeast-bound to the approach end of Runway 32 and ends with a warm-up pad adjacent and southeast of the taxiway.

2.3.1.2. Taxiway Bravo. Taxiway Bravo begins at the intersection where Taxiway Alpha branches off southeast-bound to the approach end of Runway 32 and ends at Runway 14/32. A closed warm-up pad pavement area is adjacent to and southeast of Taxiway Bravo and southwest of Taxiway Alpha which is not marked as part of the load bearing pavement and not for use by any aircraft.

2.3.1.3. Taxiway Charlie. Taxiway Charlie begins at the intersection of Taxiway Alpha, south-southeast 3/4 of the main ramp, traverses the approach end of Runway 30 and turns west-southwest terminating at Runway 14/32. A warm-up pad runs south of, parallel to, and mid-way along the length of Taxiway Charlie between the approach end of Runway

30 and Runway 14/32. A hazardous cargo pad is located south of the intersection of Runway 12/30 and Taxiway Charlie (See **2.4.11.1**).

2.3.1.4. Taxiway Delta. Taxiway Delta begins at the intersection of Taxiway Alpha, mid-way down the main ramp, traverses the approach end of Runway 12 direct to and terminating at Runway 14/32.

2.3.1.5. Taxiway Foxtrot. Taxiway Foxtrot begins at the west-northwestern extent of the main parking apron where Taxiway Alpha begins and extends south-southwest to the approach end of Runway 14. A warm-up pad runs parallel to and the mid-way point along the length of Taxiway Foxtrot south-southwest of the intersection of Taxiway Alpha and Taxiway Foxtrot.

2.3.1.6. Taxiway Golf. Taxiway Golf begins prior to the intersection of Taxiway Alpha and Taxiway Bravo extending southeast parallel to Taxiway Alpha and merges with Taxiway Alpha where it curves to the approach end of Runway 32. Taxiway Golf is limited to MIPAA operations and should not be used for transiting aircraft.

2.3.1.7. Taxiway Hotel. Taxiway Hotel begins at the intersection of Taxiway Alpha and Taxiway Golf extending into the MIPAA FBO apron.

2.3.2. Wing-Tip Clearance (WTC) Descriptions.

2.3.2.1. Taxiway Alpha. A non-movement area marking consisting of two yellow lines, one dashed spaced 3 ft apart and 3 ft in length 6 inches wide and one solid 6 inches wide with 6 inch space between them, runs parallel to and the full length of Taxiway Alpha adjacent to the Main Apron from the south apron edge fronting the Bldg 1290, Base Fire Station to 37.5' south of the peripheral taxilane centerline around the Alert Facility. It is discontinuous on Row Alpha thru Echo and Row Papa thru Tango/Uniform with non-movement area boundary markings only centered on the turn into/out of the interior taxilane and 60 ft wide outlined in black. The discontinuous non-movement area boundary markings are located between Row Alpha and Bravo, Row Bravo and Charlie, Row Charlie and Delta, Row Delta and Row Echo, Row Echo and the fuel farm asphalt area, the Joint Inspection (JI) asphalt area and Row Papa, Row Papa and Romeo, Row Romeo and Sierra, Row Sierra and Tango, on parking taxilane U-1, U-2, U-3, and the peripheral taxilane parallel to the south apron edge boundary marking. It is only continuous between the fuel farm asphalt area and the JI asphalt area. The line is 165 ft from the centerline of Taxiway Alpha and is designed to provide adequate WTC for up to C-5 aircraft or aircraft with a wingspan of 222.7 ft or less.

2.3.3. Intersection Distances. The following distances are available for the runway and taxiways indicated to be used for intersection departures. These distances are rounded to the lower 50 ft increment for ATC/pilot use IAW FAA JO 7110.65.

2.3.3.1. Runway 14/32.

Table 2.3. Runway 14/32 Intersection Dstance Remaining.

Runway	Taxiway Alpha	Taxiway Bravo	Taxiway Charlie	Taxiway Delta	Taxiway Foxtrot	Runway
32	13,300 ft	9,800 ft	5,200 ft	2,300 ft	N/A	

	N/A	3,150 ft	7,450 ft	10,600 ft	13,300 ft	14

2.3.3.2. Runway 12/30. No intersections cross this runway.

2.4. Ramps/Aprons.

2.4.1. Ramp Designations, Parking Plan and Spot Coordinates. March ARB has a single contiguous parking apron that runs parallel to Runway 12/30 and a significant segment of Taxiway Alpha. An alert facility apron is northwest of the intersection of Taxiway Alpha and Taxiway Foxtrot. MIPAA has two apron areas; the main civilian apron is parallel to Taxiway Golf and a smaller apron is at the terminus of Taxiway Hotel.

2.4.1.1. March ARB Main Parking Apron. The parking plan denotes individual rows alphabetically starting from the northwest with "A" and ending in the extreme southeast at "U" with "N", "O" and "Q" omitted. Numerical spot designations begins with "1" from the northwest and increasing in value towards the southwest. Spot A-3 is marked for a single KC-135 or four F-15 sized aircraft. Row H southwest of the fuel tanks is used for AGE storage. Spot L-1 is the primary DV spot. Row M and N are used for JI activities and AGE storage. Row O is used for AGE storage.

Figure 2.4. KC-135 Apron.

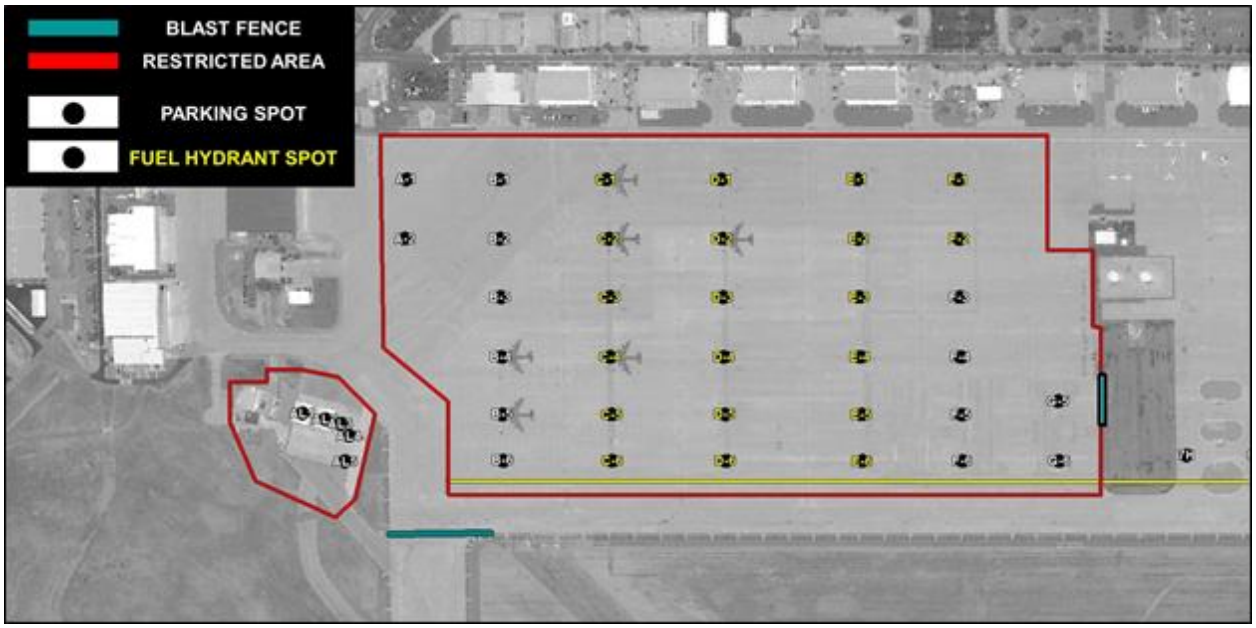


Figure 2.5. Transient Apron.

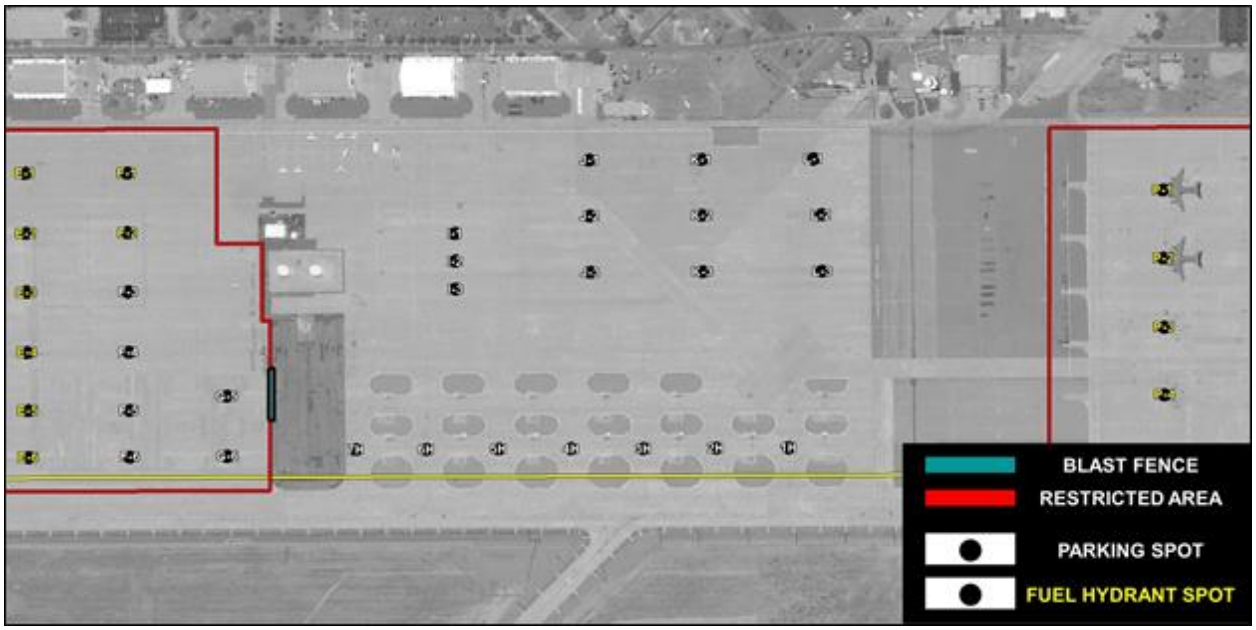


Figure 2.6. C-17 Apron.

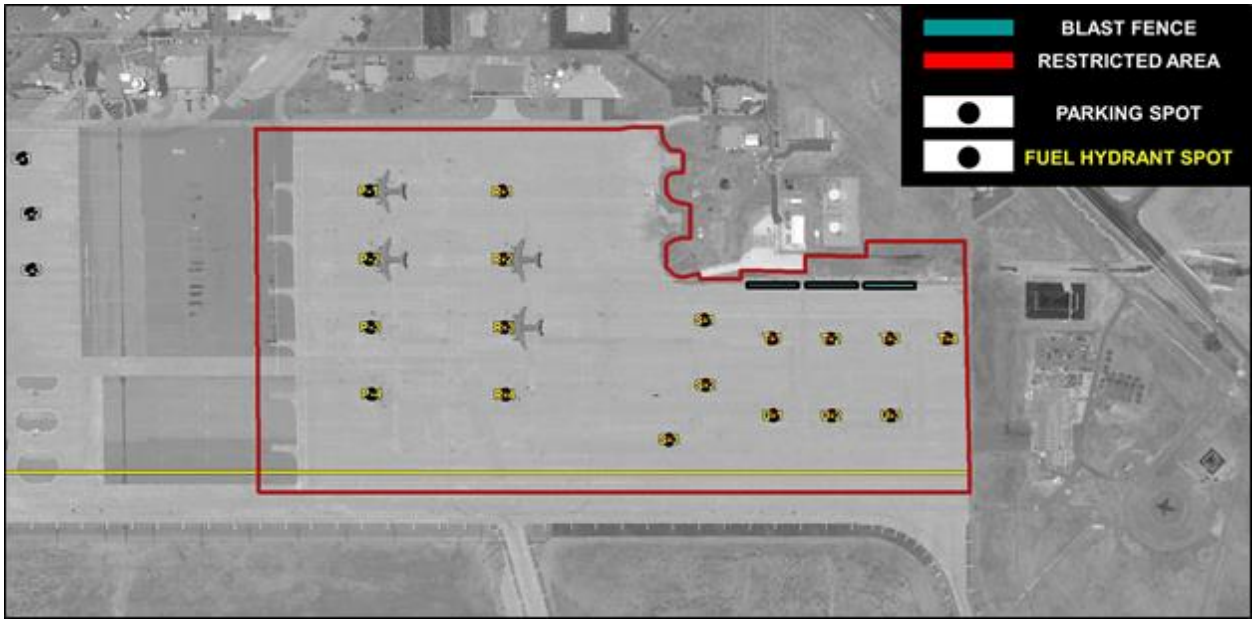


Table 2.4. March ARB Main Apron Parking Plan (T-3).

Delegated Organization	Intended Type A/C	Spot	Spot Coordinates (Nose Wheel)	Parking Direction	Refueling Pit	Engine Run	Blast Fence	C-5 Spots
452 AMW	KC-135	A 1	N 33°54'04.5319" W 117°15'51.6093"	N				N/A

		A 2	N 33°54'02.9722" W 117°15'53.6290"	N				
	F-15	A 3-1	To Be Surveyed	N				
		A 3-2		N				
		A 3-3		N				
		A 3-4		N				
	KC-135	A 4		N				
	KC-135	B 1	N 33°54'01.9849" W 117°15'48.5405"	N				
		B 2	N 33°54'00.3763" W 117°15'50.5013"	N				
		B 3	N 33°53'58.7805" W 117°15'52.4115"	N				
		B 4	N 33°53'57.1446" W 117°15'54.3803"	N				
		B 5	N 33°53'55.5686" W 117°15'56.2568"	N		X		
		B 6	N 33°53'54.2978" W 117°15'57.7759"	N		X		
		C 1	N 33°53'59.0802" W 117°15'45.0405"	N	X			
		C 2	N 33°53'57.4121" W 117°15'46.9283"	N	X			
		C 3	N 33°53'55.8138" W 117°15'48.8386"	N	X			
		C 4	N 33°53'54.1793" W 117°15'50.8022"	N	X			
		C 5	N 33°53'52.5905" W 117°15'52.6736"	N	X	X		
		C 6	N 33°53'51.3257" W 117°15'54.1888"	N	X	X		
		D 1	N 33°53'55.9362" W 117°15'41.2508"	N	X			
		D 2	N 33°53'54.3089" W 117°15'43.1909"	N	X			
		D 3	N 33°53'52.7111" W 117°15'45.0999"	N	X			
		D 4	N 33°53'51.0716" W 117°15'47.0604"	N	X	X		
		D 5	N 33°53'49.4956" W 117°15'48.9447"	N	X	X		
		D 6	N 33°53'48.2203" W 117°15'50.4520"	N	X	X		
		E 1	N 33°53'52.2298" W 117°15'36.7858"	N	X			4/C-5
		E 2	N 33°53'50.6047" W 117°15'38.7284"	N	X			
		E 3	N 33°53'49.0068" W 117°15'40.6360"	N	X			
		E 4	N 33°53'47.3609" W 117°15'42.5898"	N	X			
		E 5	N 33°53'45.7766" W 117°15'44.4693"	N	X	X		
		E 6	N 33°53'44.5072" W 117°15'45.9818"	N	X	X		
		F 1	N 33°53'49.4838" W 117°15'33.4797"	N	X			
		F 2	N 33°53'47.8582" W 117°15'35.4200"	N	X			
		F 3	N 33°53'46.2651" W 117°15'37.3353"	N				
		F 4	N 33°53'44.6196" W 117°15'39.2881"	N				
		F 5	N 33°53'43.0410" W 117°15'41.1720"	N				
		F 6	N 33°53'41.7750" W 117°15'42.6886"	N				
		G 5	N 33°53'40.7793" W 117°15'37.5565"	N		X	X	
		G 6	N 33°53'39.1424" W 117°15'39.5182"	N				
Aero Club	GA	AC1	N 33°53'46.1285" W 117°15'27.4280"					N/A
		AC2	N 33°53'45.7464" W 117°1526.9660"					
		AC3	N 33°53'45.3647" W 117°15'26.5063"					
		AC4	N 33°53'44.9797" W 117°15'26.0423"					
		AC5	N 33°53'44.5975" W 117°15'25.5820"					
		AC6	N 33°53'44.2154" W 117°15'25.1236"					
		AC7	N 33°53'43.3455" W 117°15'26.1644"					
		AC8	N 33°53'43.7303" W 117°15'26.6123"					
		AC9	N 33°53'44.1118" W 117°15'27.0599"					

		AC10	N 33°53'44.5108" W 117°15'27.5278"					
		AC11	N 33°53'44.8927" W 117°15'27.9759"					
		AC12	N 33°53'45.2826" W 117°15'28.4305"					
		AC13	N 33°53'45.6726" W 117°15'28.8885"					
		AC14	N 33°53'46.0499" W 117°15'29.3535"					
		AC15	N 33°53'46.8952" W 117°15'28.3499"					
		AC16	N 33°53'46.5116" W 117°15'27.8894"					
		AC17	N 33°53'43.2905" W 117°15'23.8889"					
		AC18	N 33°53'42.9163" W 117°15'24.3628"					
		AC19	N 33°53'42.5317" W 117°15'24.8303"					
		AC20	N 33°53'42.1504" W 117°15'25.2944"					
		AC21	N 33°53'41.7585" W 117°15'25.7544"					
		AC22	N 33°53'41.3826" W 117°15'26.2195"					
CBP RAU	PC-12	I 1	N 33°53'38.9619" W 117°15'24.8515"	N				
		I 2	N 33°53'38.2107" W 117°15'25.7500"	N				
	AS-350	I 3	N 33°53'37.4568" W 117°15'26.6478"	N				
452 OSS/OSAA	Transient C-17 or Smaller	J 1	N 33°53'37.3056" W 117°15'18.1133"	N				
		J 2	N 33°53'35.7913" W 117°15'19.9241"	N				
		J 3	N 33°53'34.2530" W 117°15'21.7458"	N				
		K 1	N 33°53'34.2810" W 117°15'14.4704"	N				
		K 2	N 33°53'32.7692" W 117°15'16.2825"	N				4/C-5
		K 3	N 33°53'31.2282" W 117°15'18.1044"	N				
		L 1	N 33°53'31.2563" W 117°15'10.8265"	N				
		L 2	N 33°53'29.5355" W 117°15'12.3936"	N				
		L 3	N 33°53'28.0044" W 117°15'14.2258"	N				
452 AMW	C-17/C-5	1 H	N 33°53'24.1622" W 117°15'21.0948"	W				
		2 H	N 33°53'26.1165" W 117°15'23.4469"	W				
		3 H	N 33°53'28.0733" W 117°15'25.8024"	W				
		4 H	N 33°53'30.0257" W 117°15'28.1515"	W				7/C-5
		5 H	N 33°53'31.9823" W 117°15'30.5061"	W				
		6 H	N 33°53'33.9352" W 117°15'32.8564"	W				
		7 H	N 33°53'35.8312" W 117°15'35.1389"	W				
	C-17	P 1	N 33°53'20.9524" W 117°15'00.5517"	N	X			
		P 2	N 33°53'19.0911" W 117°15'02.7759"	N	X			1/C-5 (P-5)
		P 3	N 33°53'17.2183" W 117°15'05.0124"	N	X	X		
		P 4	N 33°53'15.3806" W 117°15'07.2059"	N	X	X		
		R 1	N 33°53'17.3044" W 117°14'56.1635"	N	X			
		R 2	N 33°53'15.4481" W 117°14'58.3952"	N	X			1/C-5 (R-5)
		R 3	N 33°53'13.5729" W 117°15'00.6261"	N	X			
		R 4	N 33°53'11.7388" W 117°15'02.8211"	N	X	X		
		S 1	N 33°53'08.3113" W 117°14'53.7977"	S	X			N/A
		S 2	N 33°53'06.5308" W 117°14'55.9372"	S	X			
		S 3	N 33°53'06.0627" W 117°14'58.9541"	N	X			1/C-5
		T 1	N 33°53'05.9690" W 117°14'52.1963"	W	X	X	X	
		T 2	N 33°53'04.3743" W 117°14'50.2773"	W	X		X	N/A
		T 3	N 33°53'02.7682" W 117°14'48.3390"	W	X		X	
		T 4	N 33°53'01.1923" W 117°14'46.4470"	W	X			
		U 1	N 33°53'03.8640" W 117°14'54.7134"	W	X			2/C-5

		U 2	N 33°53'02.2671" W 117°14'52.7946"	W	X			
		U 3	N 33°53'00.6622" W 117°14'50.8587"	W	X			
Det 1, 144 FW	F-16/15	2337	N 33°54'01.0491" W 117°16'02.7927"	W				N/A
		2336	N 33°54'00.2811" W 117°16'02.2482"	W				
		AL3	N 33°53'59.7306" W 117°16'01.8927"	W				
		AL4	N 33°53'59.1719" W 117°16'02.0071"	W				
		AL5	N 33°53'58.6006" W 117°16'02.9841"	W				

2.4.1.2. Alert Facility Apron. The alert facility has two covered marked spots for fighter sized aircraft designated Bay 1 (Bldg 2237) and Bay 2 (Bldg 2236). There are three additional marked spots parallel and adjacent to the covered marked spots for fighter sized aircraft. They are designated Alert 3 and Alert 4 in sequence north to south. Alert 5 is utilized for repositioning due to Runway 14/32 Clear Zone requirements.

2.4.1.3. MIPAA Apron. The MIPAA apron consists of two aprons.

2.4.1.3.1. Main Civilian Apron. The main civilian apron runs adjacent to and parallel to Taxiway Golf.

2.4.1.3.2. Fixed-Base Operator Apron. The fixed-base operator apron is at the end of Taxiway Hotel.

2.4.2. Parking Restrictions. See **Table 2.4** for parking restrictions.

2.4.3. Restricted/Controlled Areas.

2.4.3.1. PL-1 and PL-2 Areas. PL-1 and PL-2 may be established as required.

2.4.3.2. PL-3 Areas. The alert facility apron area is designated PL-3. Spots on Alpha, Bravo, Charlie, Delta, Echo, Foxtrot, and Golf are contained in a single designated PL-3 area. Spots on Papa, Romeo, Sierra, Tango, Uniform and the aircraft wash rack are contained in a single designated PL-3 area.

2.4.3.3. PL-4 Areas. The airfield is designated as a PL-4 area.

2.4.4. Aircraft Wash Rack. March ARB has three designated wash rack facilities. Wash Rack 1 is southeast of parking spot R-1 and is a tow-in only spot. Wash Rack 2 is southeast of parking spot R-2 and is a tow-in only spot. Bldg 2312 is the primary wash rack for the C-17.

2.4.5. Aircraft Jacking Areas. No aircraft jacking areas have been identified on March ARB.

2.4.5.1. The following spots meet KC-135 aircraft jacking specifications for complete fuselage and forward fuselage jacking operations: B-1, B-3 thru B-6, C-1 thru C-6, D-1 thru D-3, E-1 thru E-3, F-1 thru F-3 and G-6. KC-135 aircraft complete fuselage and forward fuselage jacking may be performed in Bldg 2303, 2306, 2312, 423 and 1244.

2.4.5.2. The following spots meet C-17 aircraft jacking specifications for complete fuselage and forward fuselage jacking and integral jacking operations: P-1 thru P-4, R-1 thru R-4, S-1 thru S-3, U-1 thru U-3 and T-1 thru T-3. C-17 aircraft complete fuselage and forward fuselage and integral jacking may be performed in Bldg 2312 and 2303.

2.4.5.3. All other spots on the KC-135 ramp not listed in 2.4.5.1. may be used for forward fuselage jacking only.

2.4.6. Aircraft Inspection Dock. The C-17 inspection dock is located in Bldg 2312 and the KC-135 inspection dock is located in Bldg 2306.

2.4.7. Fuel System Repair Facilities. Aircraft fuel system repair facilities are located on open air spots T-2, T-3, G-5, G-6 and in Bldg 423 (C-17) and Bldg 1244 (KC-135).

2.4.8. Aircraft Hot Pit Refueling Areas. March ARB has no designated hot pit refueling areas.

2.4.9. Engine Run-Up Areas.

2.4.9.1. C-17. Designated engine run-up areas for base assigned C-17s are P-3, P-4, R-4 and T-1. See **Table 2.4**.

2.4.9.2. KC-135. Designated engine run-up areas for base assigned KC-135s are B-5, B-6, C-5, C-6, D-4, D-5, D-6, E-5, E-6 and G-5. See **Table 2.4**.

2.4.9.3. Fighter Aircraft. See **Table 2.4**.

2.4.9.3.1. Unsuppressed Power Check Pad. An aircraft trim pad and thrust anchor is located abeam the north end of Bldg 395 perpendicular to Taxiway Alpha between and south of Spot L-3 and H-1 and north of the JI area. It is surrounded by eight 3 ft high removable plastic bollards. No blast deflector is installed for use at this power check pad. The thrust anchor is designed for up to 267 kilonewtons (kN) (60,000 lbf) IAW UFC 3-260-01.

2.4.9.4. CBP RAU & Aero Club Aircraft. Engine run-up may be performed on any assigned parking spot on the main apron.

2.4.9.5. Transient Aircraft. Utilize existing engine run-up areas for transient aircraft. Maintenance personnel supporting transient aircraft or TA will coordinate with Maintenance Operations Center (MOC) and AM as required.

2.4.9.6. Blast Fences. Blast fences are located on spots G-5, T-1, T-2, and T-3. See **table 2.4**.

2.4.10. Arm/De-Arm Areas. March ARB has four designated arm/de-arm areas.

2.4.10.1. Taxiway Alpha. The warm-up apron adjacent to the approach end of Runway 32 is a primary arm/de-arm area for aircraft with forward firing munitions, chaff, flares and bombs.

2.4.10.2. Taxiway Charlie. The hazardous cargo pad south of the intersection of Runway 12/30 and Taxiway Charlie is a secondary arm/de-arm area for aircraft with forward firing munitions, chaff, flares and bombs.

2.4.10.3. Taxiway Delta. The intersection of Runway 12/30 and Taxiway Delta is a secondary arm/de-arm area for aircraft with forward firing munitions, chaff, flares and bombs.

2.4.10.4. Taxiway Foxtrot. The warm-up apron adjacent to the intersection of Taxiway Alpha and Taxiway Foxtrot is a primary arm/de-arm area for aircraft with forward firing munitions, chaff, flares and bombs.

2.4.11. Hazardous Cargo Areas. March ARB has a primary and alternate hazardous cargo pad and main apron areas approved for hazardous cargo operations.

2.4.11.1. Primary. The primary hazardous cargo pad (PHCP) is located south of the intersection of Runway 12/30 and Taxiway Charlie. See **Table 2.5** for approved explosive siting plan. (T-0)

2.4.11.1.1. Compensatory Measures. (T-0)

Table 2.5. PHCP Explosive Site Plan. (T-0)

Site Plan	Facility	HD 1.1. Lbs	HD (xx) 1.2.1. MCE ≤ Lbs	HD 1.2.2. Lbs	HD (xx) 1.2.3. MCE ≤ Lbs	HD 1.3. Lbs	HD 1.4. Lbs
02-S05	Primary Hot Cargo Pad	30000	(18) 30000 ≥ 450	30000	(18) 30000 ≤ 450	30000	30000

2.4.11.2. Alternate. The alternate hazardous cargo pad (AHCP) is located at the intersection of Runway 12/30 and Taxiway Delta. See **Table 2.6** for approved explosive siting plan. (T-0)

2.4.11.2.1. Compensatory Measures. (T-0)

Table 2.6. AHCP Explosive Site Plan (T-0).

Site Plan	Facility	HD 1.1. Lbs	HD (xx) 1.2.1. MCE ≤ Lbs	HD 1.2.2. Lbs	HD (xx) 1.2.3. MCE ≤ Lbs	HD 1.3. Lbs	HD 1.4. Lbs
16-S022	Alternate Hot Cargo Pad	30000	(12) 30000 ≥ 450	30000	(12) 30000 ≤ 450	30000	30000

2.4.11.3. KC-135 Apron. (Reserved for future use)

2.4.11.3.1. Compensatory Measures. (Reserved for future use) **Table 2.7** KC-135 Apron Explosive Site Plan. (Reserved for future use)

2.4.11.4. Transient Apron. **Table 2.7** details approved transient apron Hazard Divisions (HD) and Net Explosive Weights for Quantity Distance (NEWQD) for ammunition/explosive (AE) cargo shipments. (T-0)

2.4.11.4.1. Compensatory Measures. (T-0)

2.4.11.4.1.1. When J-3, K-3, or L-3 are in use with AE cargo, the corresponding adjacent spot (J-2 for J-3, K-2 for K-3, or L-2 for L-3) shall not be used and remain vacant. This restriction does not apply when only HD 1.3 and HD 1.4 AE are present.

2.4.11.4.1.2. Operations for Runway 12/30 shall be suspended when P/AHCP is in use.

2.4.11.4.1.3. If AHCP is occupied with AE cargo, H-4 will remain vacant.

Table 2.7. Transient Apron Explosive Site Plan (T-0).

Site Plan	Facility	HD 1.1. Lbs	HD (xx) 1.2.1. MCE ≤ Lbs	HD 1.2.2. Lbs	HD (xx) 1.2.3. MCE ≤ Lbs	HD 1.3. Lbs	HD 1.4. Lbs
13-S05	A-3-2	(04) 29.5	None	1000	None	None	MEQ
13-S06	A-3-3	None	None	None	None	500	MEQ

16-S014	H-1 (C-5)	186	(04) 321 ≤ 65	20000	(04) 20000 ≤ 66	20000	20000
16-S015	H-4 (C-5)	165	(04) 273 ≤ 61	20000	(04) 20000 ≤ 65	20000	20000
16-S016	J-2 (C-17)	None	None	None	None	2836	3000
16-S017	J-3 (C-17)	None	(03) 115 ≤ 40	2635	(03) 115≤ 40	5700	10000
16-S018	K-2 (C-17)	None	None	None	None	2771	3000
16-S019	K-3 (C-17)	None	(03) 101 ≤ 40	1770	(03) 101≤ 40	6233	10000
16-S020	L-2 (C-17)	None	None	None	None	3000	3000
16-S021	L-3 (C-17)	None	(03) 124 ≤ 40	3290	(03) 3000 ≤ 40	6184	10000

2.4.11.5. C-17 Apron. **Table 2.8** details approved C-17 apron HD and NEWQD for AE cargo shipments. (T-0)

2.4.11.5.1. Compensatory Measures. None required. (T-0)

Table 2.8. C-17 Apron Explosive Site Plan. (T-0)

Site Plan	Facility	HD 1.1. Lbs	HD (xx) 1.2.1. MCE ≤ Lbs	HD 1.2.2. Lbs	HD (xx) 1.2.3. MCE ≤ Lbs	HD 1.3. Lbs	HD 1.4. Lbs
16-S023	P-2 (C-17)	None	None	None	None	10000	10000
16-S024	P-3 (C-17)	185	None	248	None	15000	500000
16-S025	P-4 (C-17)	195	None	267	None	18000	500000
16-S026	R-2 (C-17)	20	None	248	None	15000	500000
16-S027	R-3 (C-17)	108	None	192	None	10000	500000
16-S028	R-4 (C-17)	169	None	218	None	15000	500000
16-S029	S-2 (C-17)	27	None	129	None	10000	500000
16-S030	T-2 (C-17)	None	None	None	None	3000	3000
16-S031	T-3 (C-17)	None	None	None	None	1500	3000
16-S032	U-1 (C-17)	88	None	87	None	7000	500000
16-S033	U-2 (C-17)	88	None	87	None	7000	500000
16-S034	U-3 (C-17)	23	None	90	None	7000	500000

2.4.12. Munitions Storage Area (MSA). March ARB has a munitions storage area located in the CMA southwest of the PHCP south of Taxiway Charlie, north of Taxiway Bravo, and east of Runway 14/32. (T-0)

2.4.12.1. Compensatory Measures. None required. (T-0)

Table 2.9. Munitions Storage Area Explosive Site Plan. (T-0)

Site Plan	Facility	HD 1.1. Lbs	HD (xx) 1.2.1. MCE ≤ Lbs	HD 1.2.2. Lbs	HD (xx) 1.2.3. MCE ≤ Lbs	HD 1.3. Lbs	HD 1.4. Lbs
05-S10	1706	128	None		None		MEQ
04-S1	1708	None	None	500000	None	16000	MEQ
05-S1	1718	11400	16840 ≤ 325	500000		105017	MEQ
99-S2	1720	150	150 ≤ 100	200	500	500	MEQ
13-S7	1714	425	5000 ≤ 99	5000	5000 ≤ 200	5000	MEQ

2.5. Closed Airfield Areas.

2.5.1. Main Apron. Twenty oblong asphalt areas, approximately 100 ft by 75 ft, in three parallel rows of seven, on the main parking apron parallel to Taxiway Alpha and centered on the intersection of Taxiway Alpha and Taxiway Delta are non-stressed shoulder pavement areas unusable to any taxiing aircraft. Standard six inch wide, yellow taxilane centerline stripes, outlined in black, run perpendicular to Taxiway Alpha and lead into aircraft parking

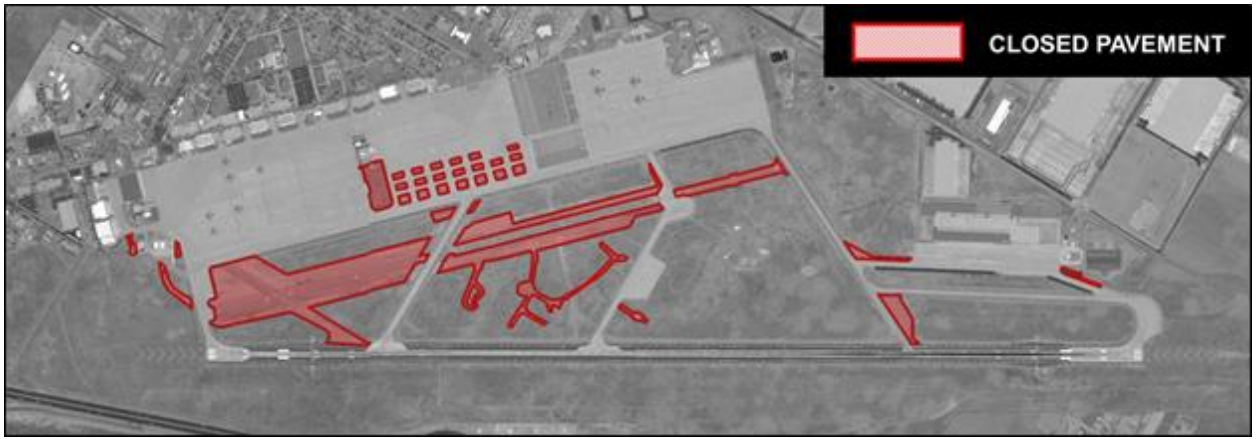
spots between each asphalt area. The non-stressed shoulder pavement areas are marked with six inch parallel double yellow lines, six inches apart, and denote the edge of the taxilane and apron. (T-3)

2.5.2. Main Apron Fuel Farm. A single asphalt area, 280 ft by 440 ft, northwest of the area described in **2.5.1** and between Taxiway Alpha and the fuel farm is non-stressed shoulder pavement areas unusable to any taxiing aircraft. (T-3)

2.5.3. Runway 12/30. Obliterated pavement along the extended centerline of Runway 12/30 to the northwest between Taxiway Delta to Taxiway Foxtrot is closed to all aircraft. Pavement northeast and parallel to the Runway 12 approach end outside of the marked runway is closed to all aircraft. The pavement area extending southeast from the marked helipad boundary at the approach end of Runway 30 to Taxiway Alpha is closed to all aircraft. Helicopters may utilize the marked helipad and pavement extending northwest to the approach end of Runway 30. (T-3)

2.5.4. Taxiway Bravo. A closed warm-up pad pavement area is adjacent to and southeast of Taxiway Bravo and southwest of Taxiway Alpha which is not marked as part of the load bearing pavement and not for use by any aircraft. (T-3)

Figure 2.7. Closed Airfield Areas.



2.6. Navigational Aids, Surveillance Systems, Landing Systems, Meteorological Sensors.

2.6.1. Airport Surveillance Radar. March ARB has a standard AN/GPN-30 (ASR-11) (Bldg 1283) Digital Airport Surveillance Radar (DASR) located east of Runway 14/32 at N 33°53’04.130” W 117°14’40.560” with an antenna height of 77 ft above ground level (AGL).

2.6.2. Tactical Air Navigation (TACAN). March ARB has a single AN/FRN-45 TACAN (Bldg 2150) north of Runway 14/32 at N 33°54’23.275” W 117°16’30.132” and available on Channel 77, 113.0 (RIV). The TACAN checkpoint for Runway 14 is located approximately six ft north of the centerline of Taxiway Foxtrot, west-southwest of the lead-in line from the alert facility and east-northeast of the VFR hold short line for Runway 14 (N 33°53’53.3419” W 117°16’05.8590”). The TACAN checkpoint for Runway 32 is located on the centerline of Taxiway Alpha, east-northeast of the VFR hold short line for Runway 32 and west-southwest of the instrument hold line at the intersection of Taxiway Alpha and Taxiway Golf (N 33°51’57.0241” W 117°14’48.4730”).

Table 2.10. TACAN Checkpoint Information.

Runway	Elevation	Fix
14	N/A	131R/0.6DME
32	1,488	136R/2.8DME
Ref. 20140702 FAA Form 8240-2 Flight Inspection Report		

2.6.3. Instrument Landing System (ILS). March ARB has a single Category IE ILS serving Runway 32 on 110.1 (I-RIV). The AN/GRN-30 localizer (Bldg 1801) is located at the departure end of Runway 32 at N 33°54'06.52" W117°16'28.08" and the AN/GRN-31 glideslope (Bldg 1303) is located near the approach end of Runway 32 west of the runway centerline at N 33°51'58.77" W 117°15'02.72".

2.6.4. Automated Weather Observation System. March ARB has a standard AN/FMQ-19 Automatic Meteorological Station which provides weather observations, conditions, and Runway Visual Range (RVR) measurements.

2.6.5. Backup Generator Power. The following facilities have backup generators.

2.6.5.1. Bldg 395, Airfield Operations Complex (Control Tower/RAPCON).

2.6.5.2. Bldg 260, Utility Vault (Airfield Lighting).

2.6.5.3. Bldg 1283, AN/GPN-30 (ASR-11) Digital Airport Surveillance Radar (DASR).

2.6.5.4. Bldg 1300, AN/GRN-31 Glideslope Antenna (Runway 32).

2.6.5.5. Bldg 1800, AN/GRN-30 Localizer Antenna (Runway 32).

2.6.5.6. Bldg 2150, AN/FRN-45 TACAN.

2.7. Airfield Services.

2.7.1. Airfield Operating Hours. March ARB airfield operates 24 hours daily regardless of holidays. March Tower and AM operates 24 hours daily regardless of holidays. March RAPCON operates 0700L-2300L (1500Z-0700Z [1400Z-0600Z DST]) except as specified via NOTAM. (T-3) MIPAA fixed-base operator operates Monday thru Friday, 0700L-2000L. (T-0) Airfield quiet hours are 2300L-0700L (0700Z-1500Z [0600Z-1400Z DST]). (T-3) Operations during published quiet hours require 452 OG/CC or MIPAA approval, as applicable. (T-3) Air Defense Alert and CBP RAU missions are authorized to operate at any time. (T-0) MIPAA designated tenants are authorized to operate at any time. (T-0) Aero Club aircraft on the approved listing are authorized to operate, but not conduct pattern work, when the airfield is NOTAM closed and during holidays except during quiet hours, 2300L-0700L. (T-3) Aircraft intending to arrive or depart when the MIPAA fixed-base operator is closed are not authorized to operate unless prior coordinated with MIPAA. (T-0)

2.7.2. Airfield Management (AM) Services. AM manages March airfield providing flight plan filing, aeronautical information services, customs and immigration coordination, prior permission required issuance, TA and fuels coordination and other services as needed. AM is a contracted activity and operates 24 hours, during closed periods and holidays. (T-0)

2.7.2.1. Pilot-to-Dispatch (PTD) Service. AM provides services over PTD when requested. Adjustments to flight plans, coordination of fuel, ATOC services, and other services may be requested via PTD. PTD is manned whenever AM is open. (T-0)

2.7.2.2. Flight Plans.

2.7.2.2.1. Domestic Departures. All aircraft departing VFR or Instrument Flight Rules (IFR) from March ARB shall file a DD Form 175 or DD Form 1801 with AM at least one hour prior to departure. (T-0)

2.7.2.2.2. International Departures. All aircraft departing VFR or IFR from March ARB to an international destination shall file a DD Form 1801 with AM at least two hours prior to departure. (T-0)

2.7.2.2.3. E-filing of Flight Plans. Completed flight plans shall be wet signed and may be filed in person, via fax, or digitally scanned and emailed to **452baseops@us.af.mil**. 729 AS, 336 ARS, 912 ARS, Aero Club, Det 1, 144 FW, CBP RAU, MIPAA are authorized to fax flight plans and pilots shall follow up filing by calling AM to verify receipt. Original flight plans shall be maintained in the respective unit's file plan for a minimum of 90 days after flight was completed or should be forwarded to AM. (T-1)

2.7.2.2.4. Amendments. Aircraft with the capability to utilize PTD may make minor changes to filed flight plans. Significant changes to route of flight or destination require a new flight plan be filed with AM. (T-1)

2.7.2.2.5. Special Instructions.

2.7.2.2.5.1. AR-209. Pilots shall use named fixes only to describe points along AR-209 on all flight plans filed; avoid use of latitude and longitude. (T-0)

2.7.2.2.5.2. Functional Check Flights. Pilots should annotate in the remarks of a functional check flight with, "FCF." (T-3)

2.7.2.2.5.3. MIPAA. Pilots operating non-military aircraft from or hosted by MIPAA shall file flight plans through the FAA. Pilots operating military aircraft from or hosted by MIPAA shall file flight plans through AM using procedures in **2.7.2.2.1** to **2.7.2.2.4**. MIPAA shall provide AM copies of all flight plans hosted by MIPAA bi-monthly. (T-0)

2.7.2.3. Notice to Airmen (NOTAM). AM is the designated Aeronautical Information Service facility for RIV. (T-3) AM shall maintain the capability to manage, process, coordinate, submit and remove relevant NOTAMs as required for safe, efficient air operations at RIV IAW AFJMAN 11-208. (T-0) MIPAA shall forward NOTAM requests to the AFM and AOM for review and approval prior to publication. (T-0) Tower is the designated NOTAM monitoring facility for RIV. (T-3) Tower and RAPCON shall review and verify NOTAMs with AM daily no later than 0715L. Tower and RAPCON Watch Supervisor (WS) shall document all NOTAM reviews or changes in the daily AF Form 3616. AM shall notify Tower, RAPCON and CP of all NOTAMs pertaining to RIV upon publication or update. (T-3)

2.7.2.4. Domestic Immigration, Customs, and Agricultural Inspections Services.

2.7.2.4.1. March ARB. AM shall notify U.S. Customs and Border Protection (CBP) for immigration and customs services for all arriving aircraft that March ARB is the first point of entry to the U.S. AM requires at least 24 hour advance notice to coordinate with customs and immigration. Customs and immigration is coordinated

automatically for base assigned aircraft and when PPRs are issued for transient aircraft. ATOC shall determine responsibility for regulated foreign garbage based on type of mission. If the inbound aircraft is a contract commercial carrier, ATOC shall contact the contract commercial carrier's ground representative to verify contract catering and/or cleaning firms have valid and current agricultural compliance agreements with U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS). If a contract catering and/or cleaning firm with valid and current agricultural compliance agreements with USDA APHIS is being utilized, the name of the firm shall be included in the notification to U.S. CBP by AM. ATOC shall provide AM the name of the firm at least 24 hours prior to aircraft arrival. When ATOC must use the regulated foreign garbage backup plan, ATOC shall immediately notify U.S. CBP and the AOM. The AOM shall notify HQ AFRC/A3OA and the AFM. The AFM shall coordinate and submit a NOTAM and update the Foreign Clearance Guide. Loss of any regulated foreign garbage handling capability will require utilization of Ontario International Airport as the first point of entry to the U.S. prior to arriving at March ARB. (T-0)

2.7.2.4.2. MIPAA.

2.7.2.4.2.1. MIPAA tenants and business invitees are required to notify U.S. CBP for customs, agriculture, and immigration services of all inbound international flights in accordance with Code of Federal Regulations (CFR) Title 19, Part 122, Air Commerce Regulations. It is the pilot's responsibility to file an international flight plan and to call U.S. CBP in advance to arrange for inspection on arrival. (T-0)

2.7.2.4.2.2. MIPAA tenants and business invitees are required to ensure personnel arriving from an international flight do not de-plane the aircraft until cleared by U.S. CBP. (T-0)

2.7.2.4.2.3. MIPAA tenants and business invitees are required to dispose of foreign garbage in accordance with: (1) 7 CFR 330.400, Federal Plant Pest Regulations; and (2) 9 CFR 94.3, Animal and Animal Product. (T-0)

2.7.2.4.3. Japanese Beetle (Popillia Japonica Newman) Quarantine and Regulation. California is one of nine western states protected by the Japanese Beetle Quarantine. USDA APHIS designates regulated and de-regulated airports to ensure compliance with 7 CFR 301.48. Crews issued a PPQ Form 250, Aircraft Clearance or Safeguard Order upon departure from a regulated airport in a quarantine area and inbound direct to March ARB shall provide documentation to AM upon arrival. AM shall forward PPQ Form 250 to AOM. (T-0)

2.7.2.4.3.1. MIPAA. Crews arriving from regulated airports at MIPAA shall provide the MIPAA Airport Manager a copy of PPQ Form 250 upon arrival. The MIPAA Airport Manager shall retain a copy of PPQ Form 250 for 12 months and provide U.S. CBP copies when requested.

2.7.3. Transient Alert (TA) Services. TA is a contracted activity and provides standard transient alert services for March ARB during published operating hours; other times as directed by the AOM. Services include taxi "FOLLOW ME" service, parking of transient

aircraft, providing wheel chocks, gear lock pins, egress and safety pins (as required), checking for hot brakes, pre-positioning fire extinguishers, ladders, boarding ramps, ground wires and all support equipment. For aircraft containing explosive devices, such as egress, jettison, and flare systems, the TA crew shall ensure aircraft commander documents that all systems are made safe. TA shall ensure aircraft commander properly documents locations of explosive devices, safety devices and precautions and ground aircraft IAW TO 00-25-172, Section III. Fuel requirements may be coordinated through AM upon issuance of a PPR, through TA, or through PTD. Fuel services are available 24 hours per day, 7 days per week including weekends and holidays. (T-0)

2.7.4. Weather Services. March ARB weather station operates 24 hours, during closed periods and holidays. (T-1) Services include support for base assigned and transient crews.

2.7.4.1. MIPAA. Tenants and business invitees shall obtain weather briefings via FAA Flight Service Station (FSS). (T-0)

2.7.5. Air Traffic Control (ATC) Services.

2.7.5.1. Air Traffic Control Tower (ATCT).

2.7.5.1.1. General. The ATCT at March ARB, hereafter referred to as Tower in this publication, provides ATC service for the airspace described in **2.8.3.4**. Pilots should use the terminology, *MARCH TOWER* or *MARCH GROUND*, as appropriate when contacting Tower. Tower provides Clearance Delivery service via *MARCH GROUND*. (T-0)

2.7.5.1.2. Automatic Terminal Information Service (ATIS). Tower ATIS is operated 24 hours a day, during published airport closure hours and during holidays continuously. (T-0)

2.7.5.2. Radar Approach Control (RAPCON).

2.7.5.2.1. General. The RAPCON at March ARB, hereafter referred to as RAPCON in this publication, provides ATC service for the airspace described in 2.8.3.5. Pilots should use the terminology, *MARCH APPROACH* or *MARCH DEPARTURE*, as appropriate when contacting RAPCON. (T-0)

2.7.6. ATC Frequencies/Local Frequencies.

Table 2.11. ATC Frequencies/Local Frequencies (T-0).

Facility	Use	VHF	UHF
CP	Command and Control (C2)	138.45	311.0 349.4
	Contingency Ops	N/A	233.4 334.4
163 ATKW/CP	C2	N/A	293.7
452 MSG/CEF	Crash Net	148.225 (FM Tx) 150.345 (FM Rx)	
AM	Pilot-to-Dispatch	N/A	372.2
	Ramp Net	150.425 (FM)	
WX	Pilot-to-Metro	N/A	239.8

ATCT	ATIS	134.75	239.05
	Ground Control/ Clearance Delivery	121.75	335.8
	Local Control	127.65	253.5
	MQ-9 SOF	N/A	TBD
RAPCON	Arrival Control	133.5	306.975
	Approach Control	119.25	270.275
	Former Minimum Interval Takeoff (MITO)	N/A	256.7
	Unassigned Discrete		271.3
			359.0
			396.0
SCT	Hemet Sector	134.0	278.3

2.8. Airspace.

2.8.1. Airfield Obstacles. (Reserved for future use)

2.8.2. Waivers to Airfield/Airspace Criteria. March ARB has eight permanent waivers to airfield and airspace criteria. See the Flight Planning Room diagram in Bldg 395 for additional info.

2.8.2.1. B-52 Static Display at March Field Museum. The B-52 on static display at the March Field Museum violates the 7:1 imaginary surface for Runway 14/32. An obstruction light is installed on the tail.

2.8.2.2. Localizer Emergency Generator Facility. This facility is of rigid construction, not frangible and measures 14 ft wide with 5 ft of the facility located inside the 250 ft area of frangibility.

2.8.2.3. BAK-12. The BAK-12 is installed on-grade, sited at the previous Air Force (AF) standard of 250 ft; 25 ft less than the current UFC 3-260-01 required 83.82 meters (275 ft) from the runway centerline. Four on-grade energy absorber protective shelters are constructed of lightweight framing materials and sheathing, with frangible connections. All four two-ton 16 ft x 12 ft x 8 ft 8 inch energy absorbers are not frangible.

2.8.2.4. Runway 32 Approach End Clear Zone. Runway 32 Approach End Clear Zone has open earthen storm water channels 8 to 10 ft deep with steep banks and several above grade projections of concrete culvert headwalls, and an environmental spill control gate. These deviations from UFC 3-260-01 do not comply with the ± 2% maximum grade.

2.8.2.5. Bridge. A vehicle bridge constructed in 1956 is located approximately 1,430 ft south of the Runway 32 Approach End Threshold and approximately 380 ft southwest of the Runway 32 centerline, violates UFC 3-260-01 above ground structures criteria.

2.8.2.6. Runway 14 Approach End Clear Zone. Runway 14 Approach End Clear Zone has open earthen storm water channels 8 to 10 ft deep with steep banks and several above-grade projections of concrete culvert headwalls. These deviations from UFC 3-260-01 do not comply with the ± 2% maximum grade.

2.8.2.7. Storm Water Monitoring Station Two. An automated sampling station is located 250 ft on the runway centerline in the Runway 32 Approach End Clear Zone. The monitoring structure is 4 ft high and 4 ft wide, constructed with break-a-way studs.

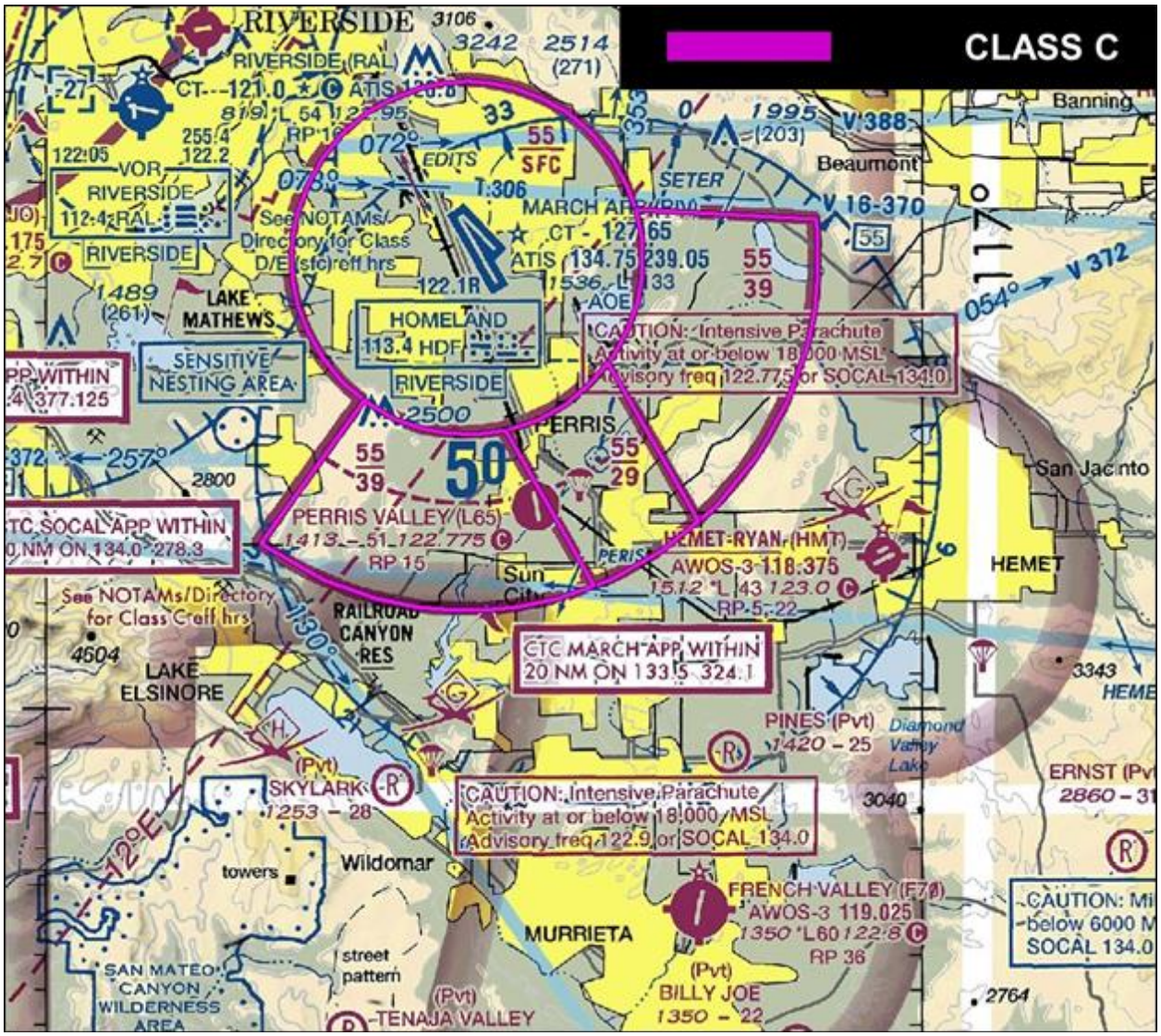
2.8.2.8. Storm Water Monitoring Station One. An automated sampling station is located 650 ft east of the runway centerline in the Runway 32 Approach End Clear Zone. The monitoring structure is 8 ft high and 4 ft wide, constructed with break-a-way studs.

2.8.2.9. Non-Standard Taxiway Marking on Taxiway Charlie. See 3.20.1. for a detailed description.

2.8.3. March ARB Airspace. Airspace delegated to March ATC is a mix of airspace delegated in the Federal Register (FR) and airspace directly delegated by SCT. Pilots operating aircraft within March Class C are expected to comply with the requirements of 14 CFR §91.130 and the requirements of 14 CFR §91.129 when March Class D airspace is in effect. Paragraph 2.8.3.4. and 2.8.3.5. designates airspace March ATC provides service. (T-0)

2.8.3.1. March Class C. That airspace extending upward from the surface to and including 5,500 ft MSL within a 5 NM radius of March Field (N 33°52'50" W 117°15'34") and that airspace extending upward from 3,900 ft MSL to and including 5,500 ft MSL within the 10 NM radius of March Field from the centerline of V-16/V-370 east of the airport clockwise to the 216° true bearing from the airport and that airspace extending upward from 2,900 ft MSL to but not including 3,900 ft MSL within 2 NM east and 1.5 NM west of the 150° true bearing from the airport extending from the 5 NM radius to the 10 NM radius of the airport. This Class C airspace area is effective during the specific days and hours of operation of the March RAPCON facility as established in advance by a NOTAM. The effective dates and times will thereafter be continuously published in the Airport/Facility Directory. (Reference FAA JO 7400.9 and 64 FR 47385, 11/04/99) (T-0)

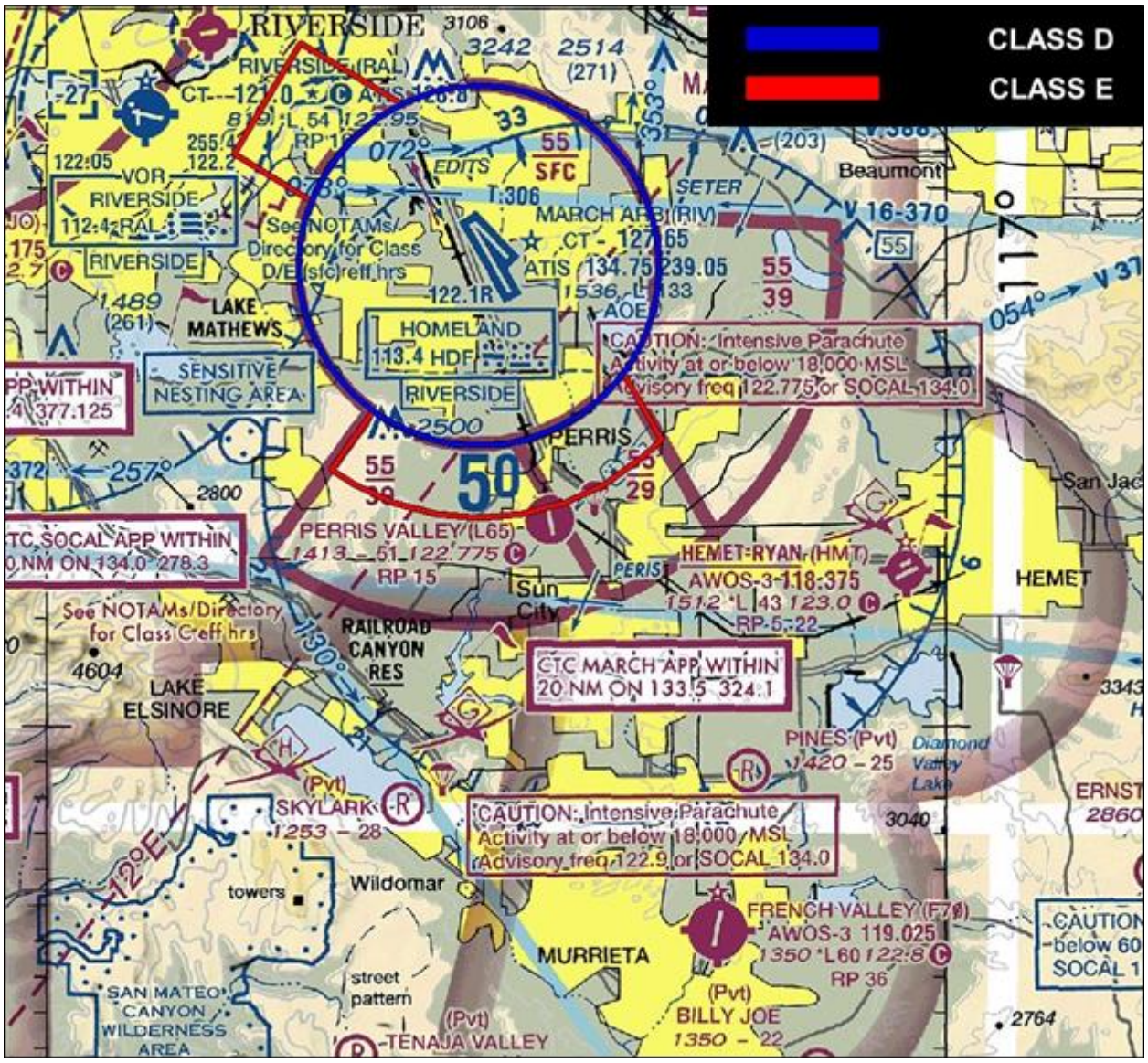
Figure 2.8. March Class C Airspace.



2.8.3.2. March Class D. That airspace extending upward from the surface to and including 4,000 ft MSL within a 5 NM radius of March Field (N 33°52'50" W 117°15'34"). This Class D airspace area is effective during the specific days and times established in advance by a NOTAM. The effective days and times will thereafter be continuously published in the Airport/Facility Directory. (Reference FAA JO 7400.9 and 69 FR 61760, 11/25/04) (T-0)

2.8.3.3. March Class E. That airspace extending upward from the surface within 1.8 NM each side of the March TACAN (N 33°54'24" W 117°16'27") 301° true radial, extending from the 5 NM radius to 6 NM northwest of the TACAN; and that airspace between the 5 NM radius and 7 NM radius of March Field (N 33°52'50" W 117°15'34") and between a line 2 NM east of 150° true bearing from the airport clockwise to the 216° true bearing from the airport. (Reference FAA JO 7400.9) (T-0)

Figure 2.9. March Class D and E Airspace.

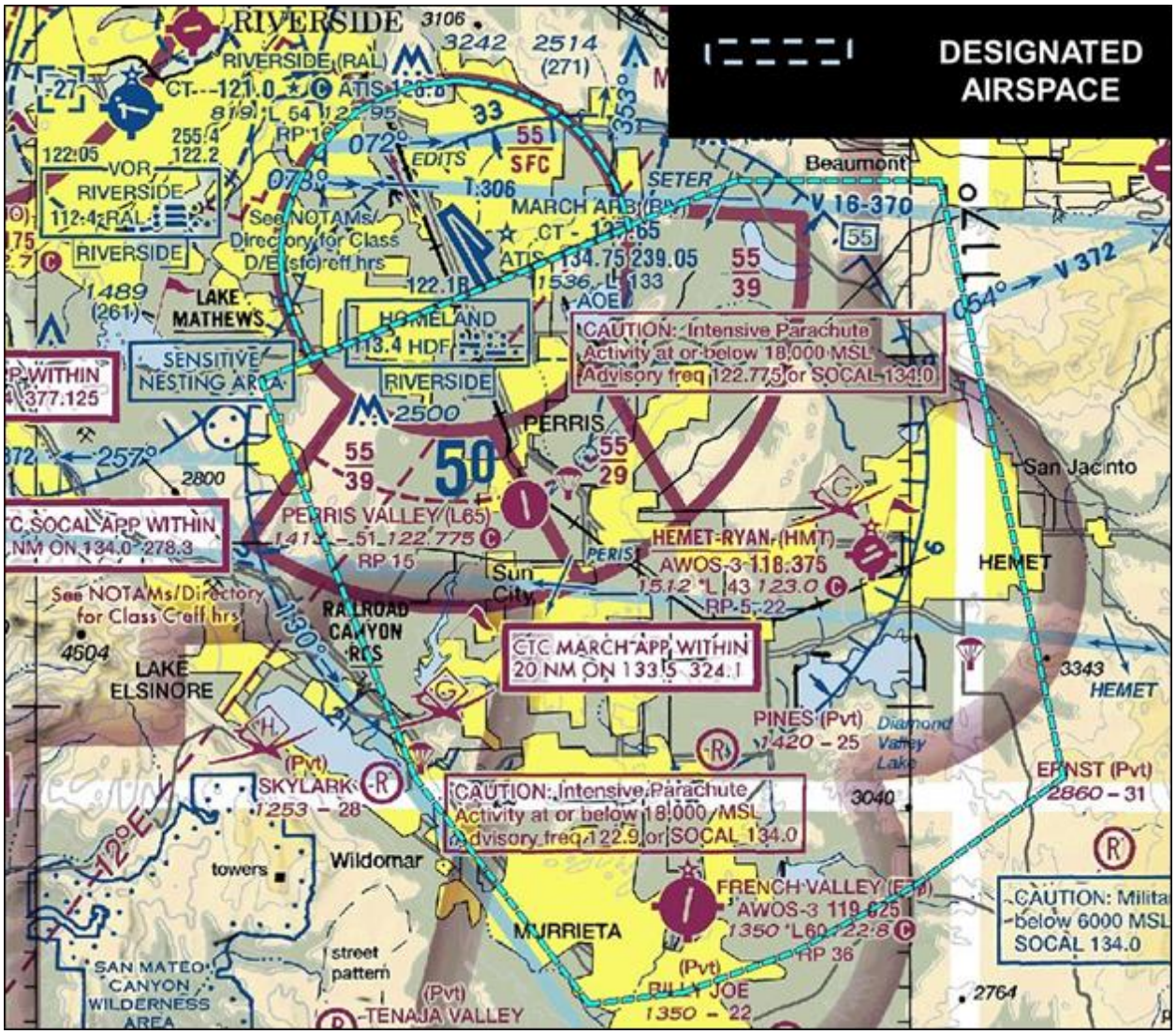


2.8.3.4. March ATCT Designated Airspace. Tower is designated the Class C airspace extending upward from the surface to and not including 3,000 ft MSL within a 5 NM radius of March Field (N 33°52'50" W 117°15'34") when the airfield is open. Tower is designated the Class D airspace extending upward from the surface to and including 4,000 ft MSL within a 5 NM radius of March Field (N 33°52'50" W 117°15'34") when the airfield is closed. (T-0)

2.8.3.5. March RAPCON Designated Airspace. RAPCON is designated the Class C airspace extending upward from 3,000 ft MSL up to and including 4,000 ft MSL within a 5 NM radius of March Field (N 33°52'50" W 117°15'34") and that airspace extending upward from 3,900 ft MSL to and including 5,000 ft MSL within the 10 NM radius of March Field from the centerline of V-16/V-370 east of the airport clockwise to the 216° true bearing from the airport, that airspace extending upward from 2,900 ft MSL to but not including 3,900 ft MSL within 2 NM east and 1.5 NM west of the 150° true bearing

from the airport extending from the 5 NM radius to the 10 NM radius of the airport, and excludes Class C airspace designated in the Class E airspace description that follows. RAPCON is designated the Class E airspace extending upward from the surface up to and including 5,000 ft MSL bounded by N 33°55'00" W 117°06'00" to N 33°55'00" W 116°59'00" to N 33°38'00" W 116°54'45" thence via 22 NM arc from the DASR at N 33°53'10" W 117°14'38" to N 33°31'30" W 117°11'00" to N 33°38'00" W 117°17'00" to N 33°49'20" W 117°22'15" and the origin point. (T-0)

Figure 2.10. March ATCT & RAPCON Designated Airspace.



2.8.4. Adjacent Airfields and Airspace.

2.8.4.1. Perris Valley (L65).

2.8.4.1.1. Perris Jump Zone. 1 NM radius of HDF 220/001, surface up to and including 17,500 ft MSL. (T-0)

2.8.4.1.2. Perris Climb/Descent Area. Airspace within the March ARB Class C airspace commencing 5 NM southeast of March ARB at the intersection of I-215 and

Nuevo Road (N 33°48’00” W 117°13'45"), then southeast via a straight line to the intersection of I-215 and McCall Boulevard (Blvd) (N 33°43’25” W 117°11’15”), then clockwise via the southern boundary of the March ARB Class C airspace 10 NM arc to a point just south of Kabian County Park (N 33°42’45” W 117°15'30"), then northwest bound via a straight line to the eastern edge of the Mead Valley Refuse Disposal Area (N 33°47’40” W 117°16’40”), then eastbound via the March ARB Class C airspace 5 NM arc to the point of beginning, from the surface up to and including 5,500 ft MSL. (T-0)

2.8.4.2. French Valley (F70). No assigned airspace. Ultralight activity in vicinity.

2.8.4.3. Hemet-Ryan (HMT). No assigned airspace. Glider activity north of airport.

2.8.4.4. Skylark Field Airport (CA89). No assigned airspace. Glider and parachute activity in the vicinity.

2.8.4.4.1. Skylark Field Jump Zone. 1 NM radius of HDF 198/010.5, surface up to and including 17,500 ft MSL. (T-0)

2.8.4.4.2. Skylark Field Climb/Descent Area. Bounded by N 33°39′48.11″ W 117°21′51.84″, N 33°43′54.58″ W 117°14′31.57″, N 33°34′26.16″ W 117°06′49.11″, N 33°30′15.07″ W 117°14′09.37″ to the point of beginning, from the surface to up to and including 5,000 ft MSL. (T-0)

2.8.5. Reporting Points (Visual/Instrument).

2.8.5.1. Visual.

2.8.5.1.1. THREE SISTERS. RIV 230/004.75. N 33°52’11.97” W 117°21’34.13” (formerly FLAT TOP). (T-3)

2.8.5.1.2. BOX SPRINGS. RIV 318/003.25. N 33°57’13.53” W 117°18’25.07” (formerly ZOLTZ). (T-3)

2.8.5.1.3. RIDGE CREST. RIV 076/005.5. N 33°54’30.94” W 117°09’53.75” (formerly JOE BOB). (T-3)

2.8.5.1.4. Lake Perris. RIV 110/006. N 33°51’11.69” W 117°10’23.20”. (T-3)

2.8.5.1.5. TAC EAST. RIV 089/002.5. N 33°53’50.7” W 117°13’35.0”. (T-0)

2.8.5.1.6. TAC WEST. RIV 190/002.6. N 33°51’57.6” W 117°17’49.2”. (T-0)

2.8.5.2. Instrument. Refer to National Flight Data Center records concerning locations of instrument reporting points listed in Table 2.12. (T-0)

Table 2.12. Relevant Instrument Reporting Points.

AARCI	FARTO	NFG (MCAS CAMP PENDLETON ARPT)
ACINS	FOGSI	NIKKL
ADAMM	FOMIN	NJK (NAF EL CENTRO ARPT)
ADUNE	GARDY	NKX (MCAS MIRAMAR)
AHEIM	GAREY	NOKDE

AKOME	GAUSE	NORDC
ANOTE	GAZOO	NTD (NAS POINT MUGU ARPT)
APLES	GOOBR	NXP (TWENTYNINE PALMS ARPT)
ARKOE	GUMSE	NZY (NAS NORTH ISLAND)
AROWW	HAPPE	OCN (OCEANSIDE VORTAC)
ARRAN	HASSA	OLLIE
ASTRN	HAYOO	OSTOR
BALBO	HDF (HOMELAND VOR)	OTEBE
BALDI	HEMET	PAYIG
BANDS	HENSA	PDZ (PARADISE VORTAC)
BAYJY	HESPE	PERIS
BEMLE	HIGOP	PIRRO
BINDY	HUGDI	PMD (PALMDALE ARPT)
BOGLE	HUMAN	POM (PAMONA VORTAC)
BRIEE	HUMIT	POXKU
BUGBE	ICING	PS1 (PALM SPRINGS VORTAC)
CABVA	IFLEV	RAVON
CALBE	JAKCI	REANS
CARAL	JAPTI	RESOR
CASIT	JEGEX	ROBNN
CASLO	JERUM	SAKQU
CEMBO	JESEX	SETER
CIVET	JLI (JULIAN VORTAC)	SKYES
COMGA	JOGIT	SLI (LOS ALAMITOS)
COMSO	KAYOH	SNA (JOHN WAYNE ARPT)
COREL	KELTE	SNEAK
COVIN	KIMDE	TALKE
CUGVI	KNDAL	TALPE
CULAX	KRATZ	TANNR
DAG (DAGGETT VORTAC)	KRAUZ	TIFNI
DALCO	LAHAB	TIQMU
DANAH	LAX (LOS ANGELES INTL ARPT)	TRAAM
DANNN	LAYEY	TRM (THERMAL VORTAC)
DAPME	LENHO	TUSTI
DAWNA	LETLE	UDHAY
DEGNE	LOGTE	WAREK

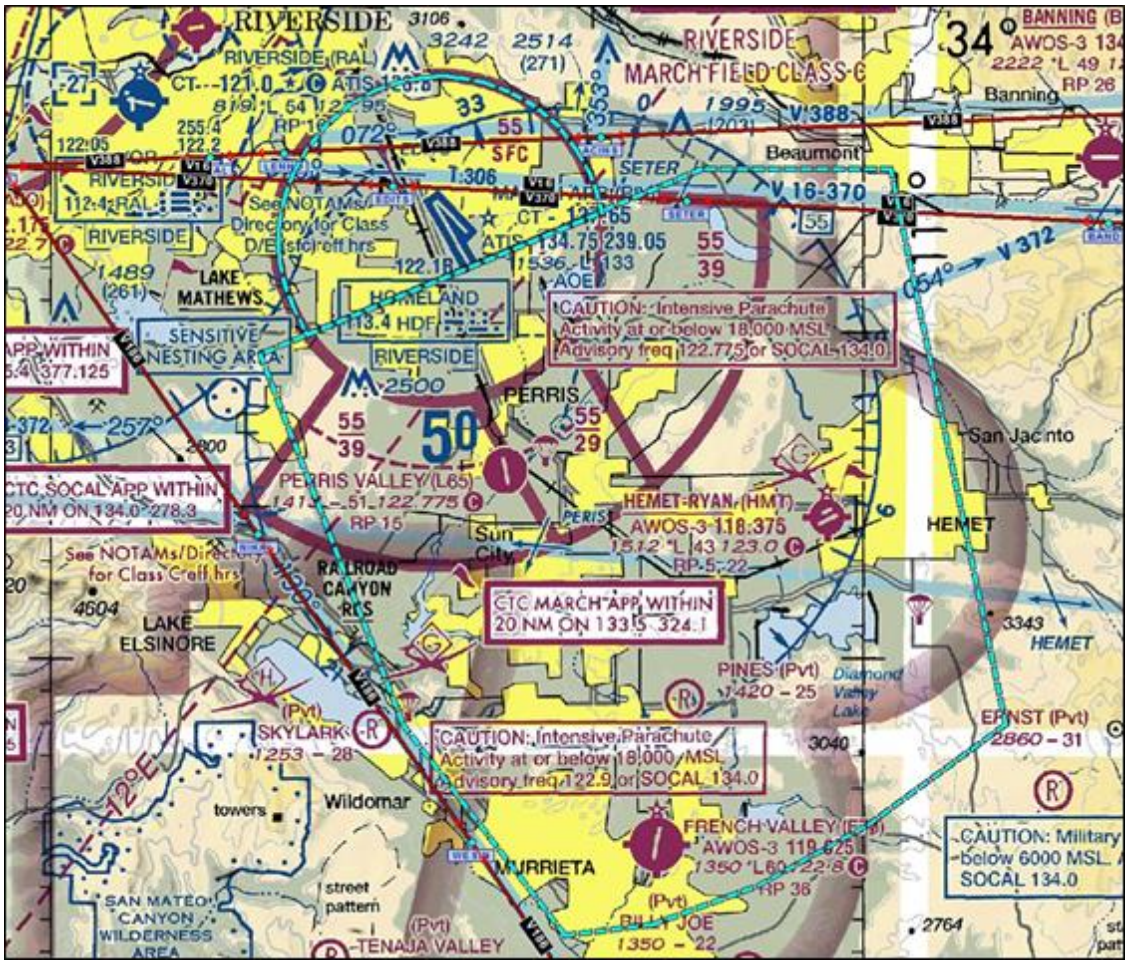
DEHAM	LUHLU	WAYLE
DEJAY	MEANT	WEEDD
DEWAY	MEGOE	WENVA
DIAMD	MEKIE	WESIN
DISEY	MIDDS	WHETO
EBITE	MIRLE	YUCCA
ECULU	MOBBI	ZAGVI
ELB (EL TORO VOR/DME)	MORON	ZALUR
ENUME	MOVLE	ZONEG
ERGOH	MURRE	

2.8.6. Airways.

Table 2.13. Relevant Airways.

V16-370-372	V186	V388
V64	V283-587	

Figure 2.11. Relevant Airways.



2.8.7. Preferred Arrival/Departure Routes.

2.8.7.1. North Arrival (VOR Equipped). Utilize MARCH FOUR ARRIVAL. (T-3)

2.8.7.2. North Arrival (TACAN Only). Utilize HITOP ONE ARRIVAL. (T-3)

2.8.7.3. East Arrival (DME Equipped). Utilize ARKOE ONE ARRIVAL. (T-3)

2.8.8. Local Flying/Training Areas. The local flying area is within a 100 NM radius from the RIV TACAN.

2.8.8.1. Class C Sectorization. The March Class C surface area is divided into designated sectors to support helicopter operations not in a traffic pattern or transitioning through the Class C. (T-0)

2.8.8.1.1. March Sector. Area within the March Class C surface area, bounded by I-215, Cactus Avenue (Ave), Heacock Street (St), Iris Ave, Perris Blvd, and West Markham St.

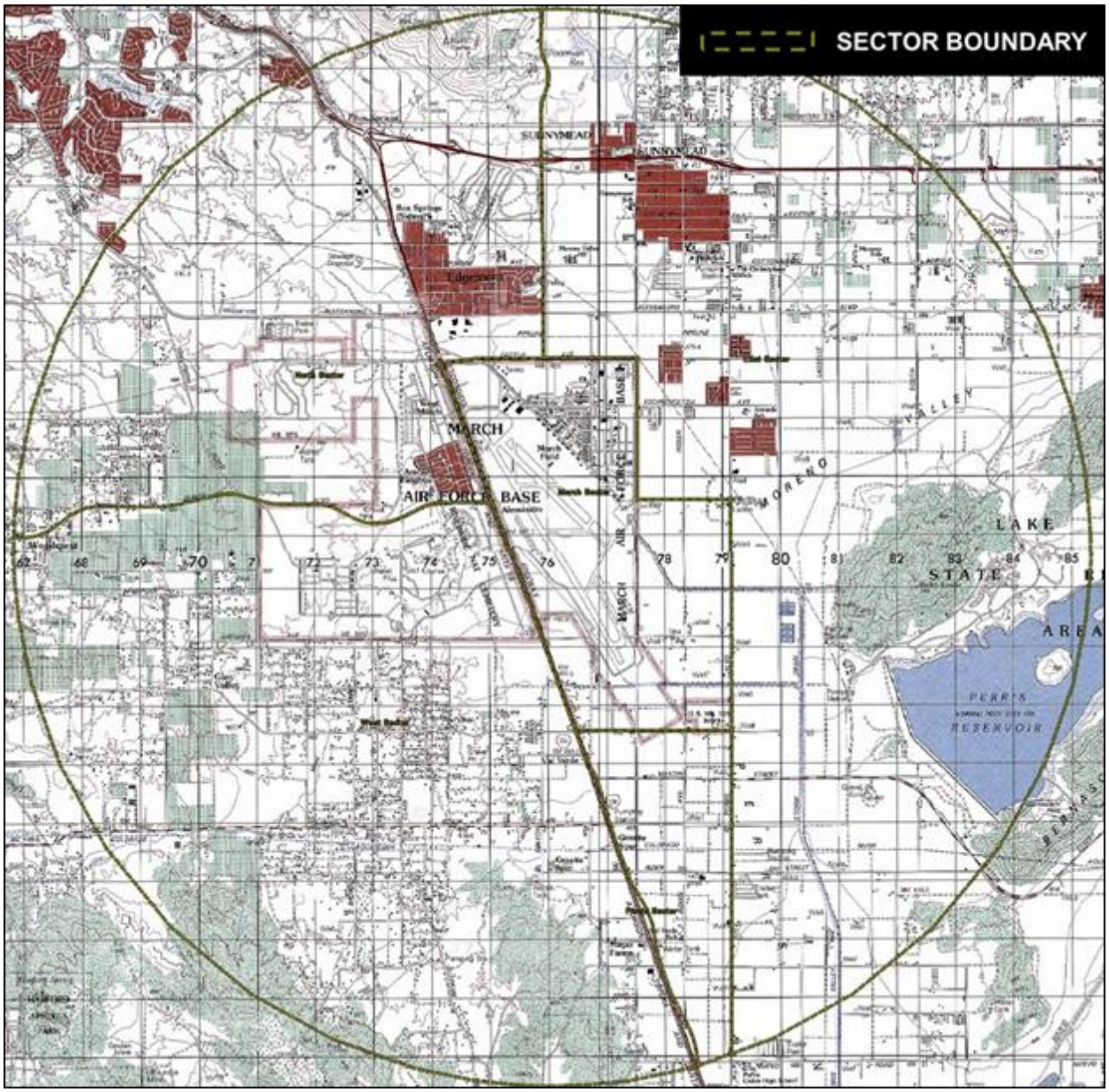
2.8.8.1.2. North Sector. Area within March Class C surface area, bounded by Van Buren Blvd, I-215, Cactus Ave, Frederick St, Pigeon Pass Rd, and the northwest boundary of the March Class C.

2.8.8.1.3. East Sector. Area within March Class C surface area, bounded by Pigeon Pass Rd, Frederick St, Cactus Ave, Heacock St, Iris Ave, Perris Blvd, and the east boundary of the March Class C.

2.8.8.1.4. Perris Sector. Area within March Class C surface area, bounded by I-215, West Markham St, Perris Blvd, and the south boundary of the March Class C.

2.8.8.1.5. West Sector. Area within March Class C surface area, bounded by Van Buren Blvd, I-215, and the southwest boundary of the March Class C.

Figure 2.12. Class C Sectorization.



2.8.8.2. March Aero Club Training Areas.

2.8.8.2.1. East Practice Area. San Jacinto Valley, RIV 076/006.

2.8.8.2.2. West Practice Area. Lake Matthews, RIV 231/009.

Figure 2.13. March Aero Club Training Areas.

2.8.9. High Traffic Areas. (Reserved for future use)

2.8.10. Avoidance Areas. All pilots shall avoid overflight of the following sites below prescribed traffic pattern altitudes:

2.8.10.1. Riverside National Cemetery. (T-3)

2.8.10.2. Lieutenant General Archie J. Old Jr. Golf Course. (T-3)

2.8.10.3. Ben Clark Public Safety Training Center Firing Range. (T-3)

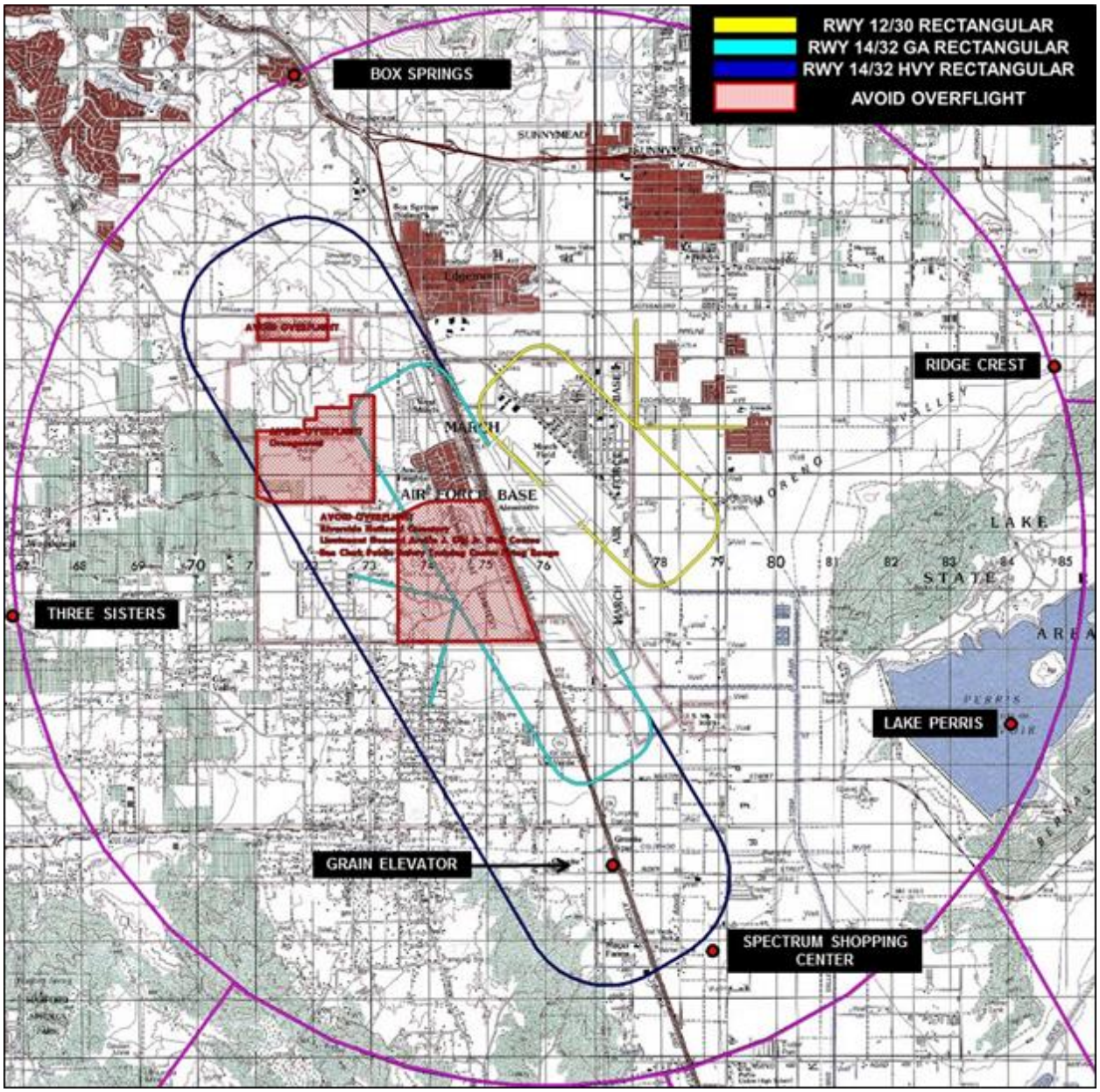
2.9. Terminal Traffic Patterns.

2.9.1. VFR Rectangular Pattern.

2.9.1.1. Runway 12/30. Standard rectangular pattern east of Runway 12/30 at 2,500 ft MSL for light fixed-wing aircraft with downwind parallel and within 1 NM of Runway 12/30 centerline. Pattern altitude may be flown no lower than 1,900 ft MSL for rotary-wing aircraft only. Final or upwind leg north of Runway 12/30 should be parallel to the centerline of Runway 14/32. Base or crosswind leg should be southeast of fuel tanks in the vicinity of Cactus Gate but do not overfly the fuel tanks. Base or crosswind leg should be abeam the southeast corner of the Proctor & Gamble warehouse east-southeast of March ARB's main apron. (T-3)

2.9.1.2. Runway 14/32. Standard rectangular pattern west of Runway 14/32 at 3,500 ft MSL for fighter type/high performance jets and 3,000 ft MSL for heavy/transport aircraft with downwind parallel and within 2 NM of Runway 14/32 centerline. Base or crosswind north of Runway 14/32 should be between the intersection of I-215 and Alessandro Blvd and I-215 and Cactus Ave or abeam the Metropolitan Water District facility on Alessandro Blvd. Base or crosswind south of Runway 14/32 should be abeam the intersection of I-215 and the Spectrum Shopping Center east of I-215. (T-3)

Figure 2.14. VFR Rectangular Patterns.



2.9.1.3. Unmanned Aircraft. See **4.19.1.4.2**.

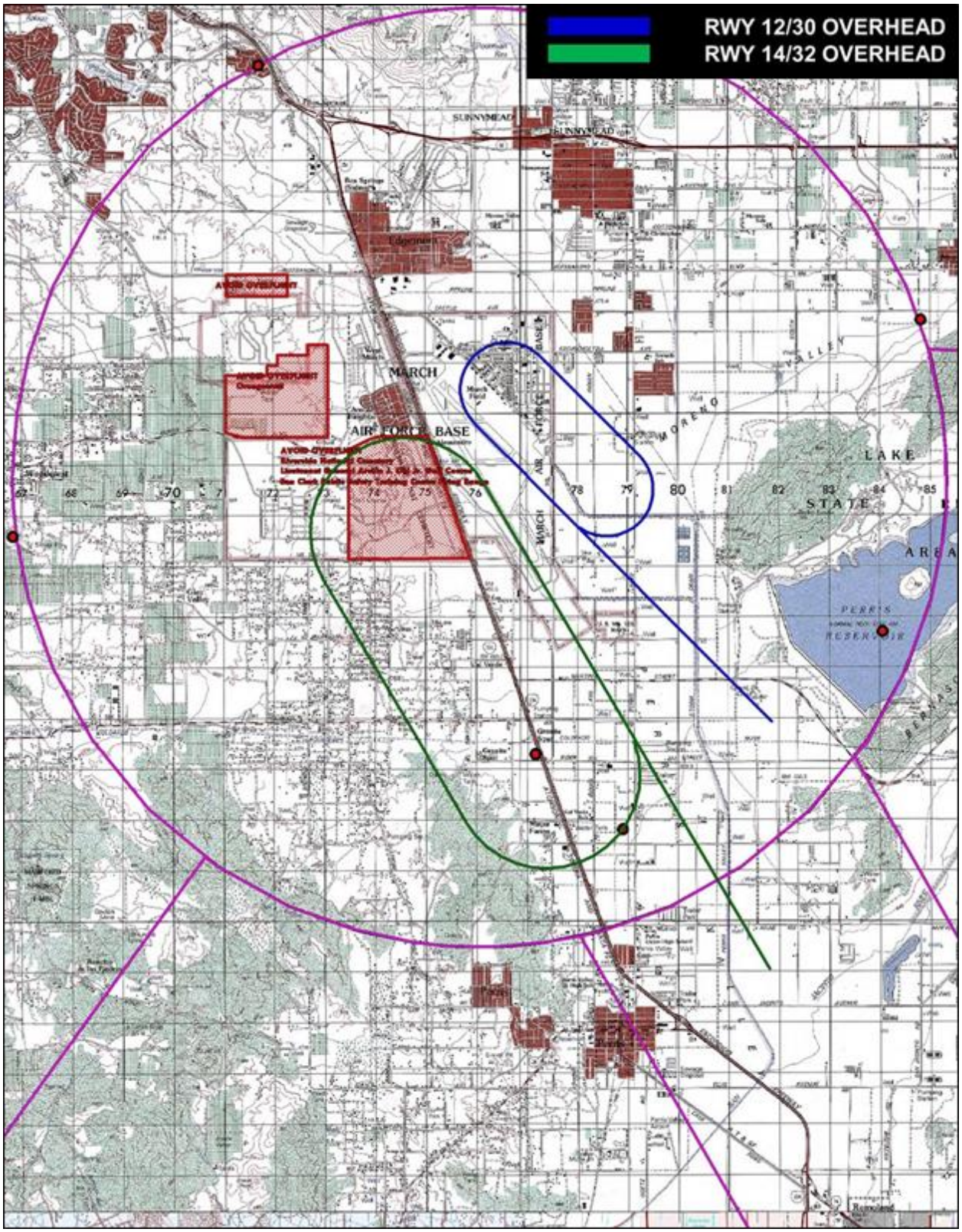
2.9.2. VFR Overhead Pattern.

2.9.2.1. Runway 30. Standard overhead pattern east of Runway 30 at 2,500 ft MSL for all aircraft, initial 2-4 NM from threshold, normal break departure end, downwind parallel and within 1 NM of Runway 30 centerline, and perch/base turn appropriate for type aircraft. (T-3)

2.9.2.2. Runway 14/32. Standard overhead pattern west of Runway 14/32 at 3,500 ft MSL for all aircraft, initial 3-5 NM from threshold, break between Taxiway Bravo and Taxiway Charlie or no earlier than 1 NM from the Runway 32 threshold, downwind

parallel and within 2 NM of Runway 14/32, and perch/base turn appropriate for type aircraft. (T-3)

Figure 2.15. VFR Overhead Patterns.



2.9.3. Simulated Flame-Out Pattern. Patterns are made west of Runway 14/32. Patterns for Runway 12/30 prohibited. (T-3)

2.9.3.1. Manned Fighter Type Aircraft. SFO airspace is designated by SCT as a 2 NM radius of the center of Runway 14/32 surface to up to and including 11,000 ft MSL. SFO patterns begin at the approach end of the runway between 7,000 ft MSL and 11,000 ft MSL, (*HIGH KEY*) with a continuous descent turning west of the runway entering a high altitude downwind to a point abeam the intended touchdown point between 4,000 ft MSL and 6,000 ft MSL, (*LOW KEY*) and with a base turn to final where the mid-point for the base turn is between 2,000 ft MSL and 3,000 ft MSL, (*BASE KEY*) resulting in a low approach to the runway. Airspeed is between 180 knots (kts) and 300 kts. Climb for successive SFOs shall be made west of Runway 14/32 within the SFO airspace. (T-0)

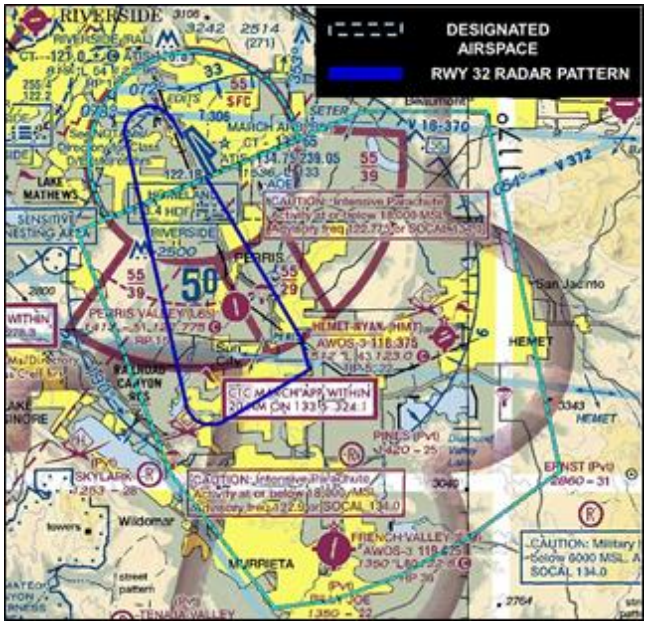
2.9.3.2. Unmanned Aircraft. See **4.19.1.4.4**.

2.9.4. Straight-In Simulated Flame-Out Pattern (SISFO). Pattern prohibited for Runway 12/30 and Runway 14/32. (T-0)

2.9.5. Radar Rectangular Pattern.

2.9.5.1. Runway 14. There is no radar pattern to Runway 14 due to lack of vectoring airspace delegated to March RAPCON. Pilots should expect to fly a published Runway 14 instrument approach procedure or a published Runway 32 instrument approach procedure with a circling approach to Runway 14. (T-0)

Figure 2.16. Radar Rectangular Patterns.



2.9.5.2. Runway 32. The Runway 32 radar pattern is west of Runway 14/32 at 4,000 ft MSL. All aircraft entering the radar pattern on departure or on the go can expect a left turn to 155° M. Radar base turn can be expected at or before overflying Canyon Lake, normally left turn to 050° M. A left turn to 340°-345° M should be expected to intercept the final approach course more than 10 NM from March and prior to crossing the final approach course. Pilots should expect an approach clearance when vectored to intercept

the final approach course. Entry to the radar pattern when arriving from the north and east typically will be vectored to fly 140° M east radar downwind at 6,000 ft MSL. Radar base turn can be expected more than 10 NM from March to 220° M with a descent to 4,000 ft MSL. A right turn to 285°-290° M should be expected to intercept the final approach course more than 10 NM from March and prior to crossing the final approach course. Pilots should expect an approach clearance when vectored to intercept the final approach course. (T-3)

2.9.6. Non-Standard Patterns.

2.9.6.1. Unusual Maneuvers in March Class C Surface Area. Acrobatic and any unusual maneuvers are prohibited in the March Class C surface area. Any waivers to 14 CFR shall be coordinated through the AOM and 452 OG/CC. (T-0)

2.9.6.2. Unmanned Aircraft. See **4.20.1**.

2.10. Local Training Routes.

2.10.1. AR-209. Aerial refueling training is normally conducted in AR-209. Refer to DoD Flight Information Publication (FLIP) Area Planning (AP) Military Training Routes (MTR) North and South America AP/1B for description. (T-0)

Chapter 3

AIRFIELD OPERATIONS

3.1. Airfield Access Procedures. The airfield is a PL-4 area and personnel requiring access shall follow the procedures below. Personnel requiring vehicle access shall follow the procedures outlined in MARBI 13-213, *March Airfield Flightline Driving Program*, in addition to the procedures below. See 3.2. for CMA access requirements. See Tab A to Appendix 2 to Annex C of March ARB Integrated Defense Plan (IDP) 31-101 (FOUO), 4 February 2016 for access to areas on the airfield designated PL-1, PL-2 or PL-3. (T-3)

3.1.1. March ARB Assigned Personnel and Transient Personnel. All March ARB assigned personnel and transient personnel, military, civilian, and contractors are permitted access to the airfield when daily duties require entry. All personnel shall have their government issued CAC on them at all times while on the airfield. Entry to the airfield is permitted through any pedestrian, vehicle or facility access point. (T-3)

3.1.2. Civilians or Contractors. Civilians or contractors without a government issued CAC requiring access to the airfield shall make arrangements through their escorts for entry. Civilians or contractors not assigned to March ARB shall be escorted on the airfield at all times upon entry until exit. Escorts with civilians or contractors are permitted airfield entry at any pedestrian, vehicle or facility access point. Unescorted civilians or contractors without a government issued CAC requiring access to the airfield shall process through AM prior to airfield entry via an appropriate pedestrian, vehicle or facility access point. AM shall notify ECC when unescorted access to the airfield is granted to civilians or contractors without a government issued CAC upon entry and upon exit daily. (T-3)

3.1.3. MIPAA Personnel, Civilians or Contractors. MIPAA personnel, civilians or contractors shall follow MIPAA policies and procedures for airfield access. MIPAA airfield access is limited to the main civilian apron and fixed-base operator apron for those on-foot or operating vehicles. (T-0)

3.2. CMA Access.

3.2.1. General. Tower maintains positive control over the CMA. Any personnel or vehicles requiring access in the CMA shall contact Tower on Frequency Modulation (FM) CMA Net for approval. Personnel on-foot or vehicle operators shall establish and continuously maintain two-way radio contact with Tower while operating in the CMA. All personnel on-foot or vehicle operators shall notify Tower when exiting the CMA. In the event of radio failure for personnel on-foot, vehicle operators radio failure, or Tower radio failure, as applicable, Tower will contact other personnel on-foot or vehicle operators within the CMA for assistance, will flash airfield lighting on and off, use light guns to notify personnel on-foot or vehicle operators to exit the CMA, or will request AM assistance when all means of notification in a radio failure situation is exhausted. Personnel or vehicle operators shall promptly exit the CMA and contact Tower. Vehicles shall not be operated in the CMA nor in precision approach critical areas when Tower FM CMA Net is out of service. See **2.1.2** and **3.3**. (T-3)

3.2.2. Aircraft Operations. Movement of any aircraft, towing or taxi, within or outside of the CMA/MA on any taxiway or apron/ramp requires Tower approval including MIPAA areas. See 3.10. (T-3)

3.2.3. Free Zones. AM may establish free zones in the CMA to efficiently support airfield activities. A free zone suspends the CMA personnel or vehicle radio requirements of **3.2.1** for the area defined as a free zone. AM shall coordinate free zones with affected users prior to recommending approval. AM will recommend free zones for approval by the AOM and defined areas shall be coordinated and submitted as a NOTAM. AM shall perform an airfield check when an approved free zone terminates and rescind the NOTAM. (T-3)

3.3. Protecting Precision Approach Critical Areas.

3.3.1. Vehicle Operations. Vehicle operators are responsible for explicitly stating to Tower of intent to operate in Precision Approach Critical Areas within the CMA and notifying Tower exiting the area but remaining within the CMA. Tower shall restrict vehicle operations within Precision Approach Critical Areas when visibility is less than 3 SM and the lowest ceiling is less than 1,500 ft AGL. Tower shall not clear any aircraft to land on an ILS or localizer approach when any vehicles are within Precision Approach Critical Areas. (T-0)

3.3.2. Aircraft Operations. Tower shall direct aircraft to hold short of any runway at the Instrument Hold Short Line when visibility is less than 3 SM and the lowest ceiling is less than 1,500 ft AGL. Tower shall not clear any aircraft for any ILS or localizer approach when any aircraft are within Precision Approach Critical Areas. The Precision Obstacle Free Zone (POFZ) is protected when aircraft are holding short of the Instrument Hold Short Line on Taxiway Alpha at Runway 32. There is no Instrument Hold Short Line on Taxiway Foxtrot at Runway 14 and Tower shall direct to taxi up to but hold short of Taxiway Foxtrot on Taxiway Alpha when visibility is less than 3 SM and the lowest ceiling is less than 1,500 ft AGL. (T-0)

3.4. Airport Rescue and Fire Fighting (ARFF) Capability Reporting. Fire Emergency Services (FES) shall provide AM a ARFF Capability Report no later than (NLT) 0800L daily with aircraft restrictions to **https://afrc.eim.us.af.mil/sites/452aw/452OG/OSS/OSA/Aircraft%20Rescue%20and%20Fire%20Fighting%20Daily%20Report/Forms/AllItems.aspx** or by email. AM shall publish the ARFF to site above or when received by email and coordinate and submit NOTAM within fifteen minutes of receipt or determination that aircraft are restricted from operating at March ARB. AM shall immediately remove restrictions when ARFF capabilities increase to levels supporting aircraft previously restricted.

3.5. Airfield Maintenance Activities Procedures. All airfield maintenance activities should be coordinated through the AFM at least seven days in advance except **3.5.1**, **3.5.2** and **3.5.3**. The AFM shall coordinate any proposed maintenance activity with ATC, ATOC, MOC, SFS, 452 OSS/OSO, and affected flying units. Personnel performing airfield maintenance activities shall check in and out with AM prior to beginning work and upon conclusion each day. AM shall temporarily issue a serviceable and functional land mobile radio (LMR) if required to perform airfield maintenance at location within the CMA. AM shall coordinate and submit appropriate NOTAMs for approved airfield maintenance activities. (T-3)

3.5.1. Arresting System Maintenance. AM shall report and validate arresting system outages with the CE Work Order Desk daily. AM shall coordinate with CE Work Order Desk and Barrier Maintenance for all routine and emergency repair work. AM shall submit a work order for Barrier Maintenance through the CE Work Order Desk for all BAK-12 outages and/or discrepancies requiring repair during normal duty hours. AM shall notify the CE Work Order Desk after hours point of contact to address outages severely impacting flight safety or mission accomplishment within fifteen minutes; all other work may be deferred for submission to the CE Work Order Desk during normal duty hours. Barrier Maintenance will respond and be on-site within one hour after initial response for after duty hours outages. AM shall notify the AFM on outages impacting flight safety or mission accomplishment. Barrier Maintenance shall coordinate with AM prior to entering airfield for any work on the BAK-12 and notify AM upon completion of maintenance work with corrective actions, current system status, and follow-on work required or pending. AM shall log all work performed on the BAK-12 on the AF Form 3616. Tower shall notify AM when BAK-12 is released to maintenance and returned to service.

3.5.2. Airfield Lighting Maintenance. Airfield Lighting Maintenance shall inspect all airfield lights daily. AM shall report and validate airfield lighting system outages with the CE Work Order Desk daily. AM shall coordinate with CE Work Order Desk and Airfield Lighting Maintenance for all routine and emergency repair work. AM shall submit a work order for Airfield Lighting Maintenance through the CE Work Order Desk for all airfield lighting outages and/or discrepancies requiring repair during normal duty hours. AM shall notify the CE Work Order Desk after hours point of contact to address outages severely impacting flight safety or mission accomplishment; all other work may be deferred for submission to the CE Work Order Desk during normal duty hours. Airfield Lighting Maintenance will respond and be on-site within one hour after initial response for after duty hours outages. AM shall notify the AFM on outages impacting flight safety or mission accomplishment. Airfield Lighting Maintenance shall coordinate with AM prior to entering airfield for any work on the airfield lighting system and notify AM upon completion of maintenance work with corrective actions, current system status, and follow-on work required or pending. AM shall log all airfield lighting work performed on the AF Form 3616. Tower shall notify AM when airfield lighting is released to maintenance and returned to service.

3.5.3. Airfield Sweeping.

3.5.3.1. Scheduled Airfield Sweeping. Airfield Sweeper should report to AM, Monday thru Friday, 0700-0800L daily for FOD removal instructions. Airfield sweeping will be conducted weekly according to the following schedule:

3.5.3.1.1. Monday. Runways, shoulders, and overruns as needed when wing flying permits access to the runway.

3.5.3.1.2. Tuesday. March ARB Main Apron.

3.5.3.1.3. Wednesday. Taxiway Alpha (Taxiway Charlie to Taxiway Foxtrot) including Taxiway Delta and Taxiway Foxtrot.

3.5.3.1.4. Thursday. Taxiway Alpha (Taxiway Charlie to Runway 32 Approach End) including Taxiway Bravo and Taxiway Charlie.

3.5.3.1.5. Friday. Flightline road.

3.5.3.2. On-demand Airfield Sweeping. All agencies shall contact AM for immediate FOD removal. AM shall coordinate with CE Work Order Desk and Airfield Sweeper for all routine and immediate FOD removal. AM shall submit a work order for Airfield Sweeper through the CE Work Order Desk for FOD removal during normal duty hours. AM is responsible for FOD removal after duty hours and may request Airfield Sweeper support when FOD is beyond AM's FOD removal capabilities. AM shall inspect FOD removal upon completion and document in AF Form 3616.

3.5.4. Airfield Vegetation Control. AM shall coordinate with CE Work Order Desk and Grounds Maintenance for all routine and immediate vegetation abatement work. AM shall submit a work order for Grounds Maintenance through the CE Work Order Desk for all vegetation abatement during normal duty hours. AM shall notify the CE Work Order Desk after hours point of contact to address vegetation severely impacting flight safety or mission accomplishment; all other work may be deferred for submission to the CE Work Order Desk during normal duty hours. Grounds Maintenance will respond and be on-site within one hour after initial response after duty hours. AM shall notify the AFM on vegetation impacting flight safety or mission accomplishment. Grounds Maintenance shall coordinate with AM prior to entering airfield for any vegetation abatement work on the airfield and notify AM upon completion of grounds maintenance work with current work status and follow-on work required or pending. AM shall log all vegetation abatement work performed on the airfield on the AF Form 3616.

3.5.4.1. Pavement Vegetation. The AFM shall assess in-pavement vegetation growth and submit work orders with the CE Work Order Desk to remove and eliminate emergent vegetation.

3.5.4.2. Off-Pavement Vegetation. The AFM shall assess off-pavement vegetation growth and submit work orders with the CE Work Order Desk to maintain vegetation according to the March Bird/Wildlife Aircraft Strike Hazard (BASH) Plan 91-202.

3.6. Air Traffic Control and Landing Systems (ATCALS) and Meteorological Systems Maintenance Procedures.

3.6.1. Responsibilities. 452 OSS/OSM (ATCALS MX) and CE are responsible for maintaining the following systems or facilities: (T-3)

3.6.1.1. AN/GPN-30 Digital Airport Surveillance Radar (DASR).

3.6.1.2. AN/FRN-45 Tactical Air Navigation (TACAN).

3.6.1.3. AN/GRN-30 Localizer (LOC).

3.6.1.4. AN/GRN-31 Glideslope (GS).

3.6.1.5. AN/GRT-21 Very High Frequency (VHF) Radio Transmitter.

3.6.1.6. AN/GRR-23 VHF Radio Receiver.

3.6.1.7. AN/GRT-22 Ultra High Frequency (UHF) Radio Transmitter.

3.6.1.8. AN/GRR-24 UHF Radio Receiver.

3.6.1.9. AN/GRC-171 UHF Radio Transceiver.

3.6.1.10. AN/GRC-211 VHF Radio Transceiver.

3.6.1.11. AN/FSC-27 Enhanced Terminal Voice Switch (ETVS).

3.6.1.12. AN/FSQ-204 DoD Advanced Automation System (DAAS)/Standard Terminal Automation Replacement System (STARS).

3.6.1.13. Digital Audio Legal Recorder (DALR).

3.6.1.14. AN/FMQ-19 Automatic Meteorological Station (AMS).

3.6.1.15. Joint Environmental Toolkit (JET) Sensor Collection Appliance (SCA).

3.6.2. NAVAID Temporary Removal from Service. The ATM is the approval authority for temporarily removing two or more facilities from service. The ATM shall notify the AOM whenever two or more facilities are temporarily removed from service. (T-3)

3.6.3. NAVAID Monitoring Facility Responsibility. Tower is the NAVAID monitoring facility for RIV. Tower shall monitor the TACAN and ILS. RAPCON shall monitor the DASR. RAPCON shall notify Tower of DASR interruption/malfunction. Tower shall report all TACAN/ILS/DASR interruptions/malfunctions to SCT (Hemet Sector) and AM and when returned to service times via direct lines. (T-0)

3.6.4. ATCALS MX or CE Availability. Maintenance personnel shall be on-duty and capable of immediate response 0730-1630L, Monday thru Friday (except holidays). Maintenance personnel will be on-call and capable of a two-hour response 1630-0730L, Monday thru Friday (except holidays). Weekends and holidays maintenance personnel will be capable of a four-hour response. ATCALS MX shall provide the ATM a roster of available personnel to respond after hours to maintenance emergencies. (T-3)

3.6.5. Release of Systems for Maintenance Activities. ATCALS MX or CE shall contact the appropriate RAPCON or Tower WS or on-duty meteorological technician prior to beginning maintenance on any on-line equipment. RAPCON or Tower WS or on-duty meteorological technician shall not release any system to ATCALS MX or CE when the observed or forecasted weather conditions are below VFR, emergency/contingency situations exist, or current/forecasted traffic conditions do not permit safe flight operations without that system on-line. RAPCON or Tower WS or on-duty meteorological technician shall notify the ATM whenever exercising professional judgment to withhold a system from maintenance. No work may begin unless released by the appropriate RAPCON or Tower WS or on-duty meteorological technician. RAPCON, Tower, or the Weather Station shall notify affected facilities when a system is released to ATCALS MX or CE. RAPCON WS shall coordinate with SCT prior to releasing the AN/GPN-30 for other than scheduled Preventative Maintenance and Inspections (PMI). ATCALS MX or CE shall ensure the NAVAID identification feature is turned off when a facility is released for maintenance. RAPCON or Tower WS or on-duty meteorological technician shall annotate in the AF Form 3616 whenever a system is released to ATCALS MX or CE. (T-3)

3.6.6. Return of Systems from Maintenance Activities. ATCALS MX or CE shall contact the appropriate RAPCON or Tower WS or on-duty meteorological technician when maintenance is completed and can be returned to service. The appropriate RAPCON or Tower WS or on-duty meteorological technician shall confirm return to service after performing operational checks and verification. ATCALS MX or CE shall ensure the

NAVAID identification feature is turned on when a facility is returned to service. RAPCON or Tower WS or on-duty meteorological technician shall annotate in the AF Form 3616 whenever a system is returned to service by ATCALS MX or CE. (T-3)

3.6.7. Verification of System Outages. Tower and RAPCON shall verify system outages with ATCALS MX Monday thru Friday, except holidays, 0700-0800L. (T-3)

3.6.8. Unscheduled System Outages. RAPCON or Tower WS or on-duty meteorological technician shall notify affected facilities when a system failure is observed or reported, notify ATCALS MX or CE and notify AM to coordinate and submit a NOTAM, if appropriate. RAPCON or Tower WS or on-duty meteorological technician shall log out equipment with ATCALS MX and acquire a work order number. After duty hours, the ATCALS MX on-call technician should be contacted to log out equipment and obtain a work order number. RAPCON or Tower shall immediately notify the other facility and SCT of the failure of primary frequencies and/or the AN/GPN-30. (T-3)

3.6.9. No NOTAM Preventative Maintenance and Inspections (PMIs). Regularly scheduled PMIs shall be performed on the days and times in **Table 3.1**. Extensions of scheduled no NOTAM PMI shall be coordinated with the ATM prior to implementation. The ATM is the approval authority for extensions of scheduled no NOTAM PMIs. The ATM shall notify the AOM whenever an extension of no NOTAM PMIs is granted. ATCALS MX shall notify AM of any approved no NOTAM PMI extensions. AM shall coordinate and submit an appropriate NOTAM within fifteen minutes of notification and notify Tower and RAPCON. Tower shall revise the ATIS to reflect a facility out of service or remove the advisory when returned to service. (T-3)

Table 3.1. PMI Schedule (T-3).

Tuesday	Wednesday	Thursday
ILS LOC/GS 0700-0900L 0700-1500L (Last Tuesday of the Month)	DASR 0700-0900L 0700-1100L (Last Wednesday of the Month)	TACAN 0700-0900L 0700-1500L (Last Thursday of the Month)
Minimum WX for release of ATCALS: Ceiling at or above 1,500 ft and visibility 3 SM or greater. On duty WS shall ensure these conditions are forecast to occur throughout scheduled PMI timeframe(s) + 1 hour prior to releasing any ATCALS for maintenance.		

3.6.9.1. Evacuation Alarm. ATCALS MX shall perform navigational aid evacuation (bail-out) alarm checks weekly IAW schedule above. Prior to initiating check with Tower, the technician initiating the request will ensure all other sites are advised of the impending check. ATCALS MX should ensure the maximum number of sites possible are checked simultaneously to expedite the process. Tower shall document bail-out alarm testing by facility on the AF Form 3616. (T-3)

3.6.9.2. Backup Generator Checks.

3.6.9.2.1. CE shall perform backup generator checks on Bldg 395, Bldg 260, Bldg 1283, Bldg 1300, Bldg 1800, and Bldg 2150 monthly. See **2.6.5** for facility designations. (T-0)

3.6.9.2.2. CE shall obtain approval from the RAPCON or Tower WS prior to manually transferring power from commercial source to generator and returning to commercial for Bldg 395. CE shall notify the RAPCON or Tower WS immediately prior to manually transferring power from commercial source to generator and returning to commercial for Bldg 395. (T-0)

3.6.9.2.3. CE shall obtain approval from ATCALS MX Supervisor prior to manually transferring power from commercial to generator and returning to commercial for Bldg 1283, Bldg 1300, Bldg 1800, and Bldg 2150. CE shall notify the ATCALS MX Supervisor immediately prior to manually transferring power from commercial to generator and returning to commercial for Bldg 1283, Bldg 1300, Bldg 1800, and Bldg 2150. (T-0)

3.6.9.2.4. The facility manager for Bldg 395 during normal duty hours, or CE during non-duty hours, shall manually start generators for Bldg 395 when auto-start fails. The facility manager for Bldg 395 during normal duty hours and on-duty employees during non-duty hours shall notify CE of failure. (T-0)

3.6.9.2.5. RAPCON and/or Tower shall notify and request ATCALS MX to place Bldg 1283 on generator power when auto-start fails. ATCALS MX shall notify CE of failure. (T-0)

3.6.9.2.6. RAPCON, Tower, or the Weather Station shall notify CE when any facility in **3.6.9.2.1** transitions to generator power and when that facility transitions to commercial power. (T-0)

3.6.10. Unscheduled Emergency Maintenance. ATCALS MX or CE shall coordinate all unscheduled emergency maintenance with the RAPCON WS or on-duty weather technician, as appropriate, for maintenance activities that temporarily remove a facility from service fifteen (15) minutes or less. RAPCON WS or on-duty weather technician shall notify the appropriate affected facilities of the temporary outage. ATCALS MX or CE shall notify RAPCON WS or on-duty weather technician when a facility is returned to service. RAPCON WS or on-duty weather technician shall notify the appropriate affected facilities accordingly. (T-0)

3.6.11. Restoral Priorities. ATCALS MX or CE shall adhere to the following priorities when multiple outages occur or as coordinated with the ATM or AOM: (T-3)

3.6.11.1. Communication Systems.

3.6.11.2. Weather Systems.

3.6.11.3. Navigation Systems.

3.6.11.4. Landing Systems.

3.6.11.5. Surveillance Systems.

3.6.11.6. Automation Systems.

3.6.12. Special Maintenance. ATCALS MX or CE shall coordinate any special maintenance that temporarily removes a facility or major capability/function/component from service for an extended period of time at least fourteen (14) days in advance with the ATM and AOM. (T-0)

3.6.13. Flight Check. ATCALS MX shall track and notify the ATM and AOM of any upcoming flight check activities. RAPCON or Tower WS shall immediately notify ATCALS MX, TERPS, ATM, and AOM when a flight check aircraft intends to perform an inspection on any supported facility with or without prior notice. RAPCON or Tower WS shall document all flight checks in the daily AF Form 3616 with start/end times, NAVAID facility or procedure checked, identifier, and reported results. ATCALS MX shall forward all final flight check reports to TERPS, ATM, and AOM upon receipt. (T-1)

3.7. Transient Alert Services. TA will meet all transient aircraft outside of the CMA on Taxiway Alpha upon arrival. Tower will direct transient aircraft via progressive taxi to an appropriate location for TA to provide "Follow Me" to the parking apron. (T-0)

3.8. Aircraft Parking Procedures. All aircraft should be parked in the direction specified in **Table 2.4**. (T-3)

3.8.1. Transient Aircraft Arrivals. If a transient aircraft arrives and TA is not available, Tower shall direct the arrival to park on the PHCP. AM shall close Taxiway Charlie until aircraft is repositioned or an evaluation by on-duty AM personnel determines Taxiway Charlie or Runway 12/30 or both may be used safely. If the PHCP is scheduled for use, Tower shall direct the transient aircraft to park on the AHCP and AM shall close Taxiway Delta until the aircraft is relocated. (T-0)

3.8.2. MIPAA Aircraft Arrivals. Aircraft inbound for MIPAA shall be provided progressive taxi instructions by Tower upon arrival unless the pilot indicates familiar with the airfield layout. (T-0)

3.9. Taxi Routes/Restrictions.

3.9.1. Control Tower Visual and Radio Blind Spots. March Tower has a visual and radio blind spot in the vicinity of the adjacent apron of the intersection of Runway 32 and Taxiway Alpha southeast of the visual hold short line. The visual and radio blind spot extends to the northeast towards MIPAA apron areas in the general direction of March Tower.

3.9.2. Runway Crossing Restrictions. Aircraft shall not cross Runway 12/30 on Taxiway Charlie or Delta without Tower or Ground Control approval. See **3.9.3.1**. (T-3)

3.9.3. Taxiway Restrictions.

3.9.3.1. Taxiway Alpha. Aircraft taxiing south-bound on Taxiway Alpha shall not cross the extended centerline of Runway 12/30 without Tower or Ground Control approval and hold short at the hold short markings east of the extended centerline. Aircraft taxiing north-bound on Taxiway Alpha shall not cross the extended centerline of Runway 12/30 without Tower or Ground Control approval and hold short at the hold short markings west of the extended centerline. (T-3)

3.9.3.2. Taxiway Bravo. Aircraft taxiing east-bound on Taxiway Bravo are prohibited from making a right turn on Taxiway Alpha. Aircraft taxiing north-bound on Taxiway Alpha from the Runway 32 approach end are prohibited from making a left turn on Taxiway Bravo. (T-3)

3.9.3.3. Taxiway Charlie. Non-base assigned aircraft taxiing east-bound on Taxiway Charlie are prohibited from making a right turn on Taxiway Alpha. Non-base assigned

aircraft taxiing north-bound on Taxiway Alpha are prohibited from making a left turn on Taxiway Charlie. (T-3)

3.9.3.4. Taxiway Golf. Aircraft taxiing south-bound on Taxiway Alpha are prohibited from making a left turn north-bound onto Taxiway Golf. Aircraft taxiing south-bound on Taxiway Golf are prohibited from making a right turn north-bound onto Taxiway Alpha. Aircraft taxiing south-bound on Taxiway Golf are required stop at the hold short line on Taxiway Golf at the south intersection convergence of Taxiway Golf and Taxiway Alpha and obtain Tower approval to proceed to Runway 32. (T-3)

3.9.4. Rotary-Wing Aircraft. Rotary-wing aircraft with wheels should taxi on the ground. Rotary-wing aircraft with skids should hover taxi on taxiways and aprons. Rotary-wing aircraft shall not air taxi on any taxiways, aprons or unpaved surface at March ARB. (T-3)

3.9.5. Apron Choke Points. Departing aircraft assigned parking spots in row Alpha and Bravo should not taxi southwest simultaneously from row Alpha and Bravo interior taxilanes due to the convergence of interior taxilanes from row Alpha to row Bravo to the peripheral taxilane southeast of the Alert Facility. (T-3)

3.9.6. Aero Club. Aircraft parked in the Aero Club apron shall use the taxi lane north of row Hotel when taxiing to Taxiway Alpha. Aircraft arriving shall use the taxi lane between row Hotel and row India when taxiing to the Aero Club apron. (T-3)

3.9.7. RPA Launch and Recovery (MQ-9). (T-0)

3.9.7.1. Departure. A 163 OG operated vehicle, callsign UAV OPS, shall escort RPA from launch spot to runway and remain with RPA until aircraft enters runway for takeoff. 163 OG operated vehicles shall not enter the runway at any time without Tower approval. 163 OG operated vehicles shall obtain all appropriate Tower approvals for entering the CMA or crossing/entering any runway. 163 OG operated vehicles shall notify MOC for ECC approval to cross restricted area boundaries prior to taxi or tow.

3.9.7.1.1. Reaper Spot. Departing RPA will be towed to designated launch spot, named Reaper, on taxilane between Bldg 2305 and Bldg 2303 (See **Figure 3.1**, Reaper Inset) for engine start and taxi to runway. Runway 14 departures will taxi from Reaper spot to Runway 14 via taxilane fronting Bldg 2305/2306/2312, around the Alert Facility to join Taxiway Foxtrot and hold short of runway. Runway 32 departures will taxi from Reaper spot to Runway 32 at Taxiway Bravo via taxilane fronting Bldg 2305/2306/2312, around the Alert Facility to join Taxiway Alpha, then Taxiway Bravo and hold short of runway.

3.9.7.1.2. Romeo Spot. Departing RPA will be towed to designated launch spot, named Romeo, on taxilane west of Bldg 1246, between row Papa and row Romeo (See **Figure 3.1**, Romeo Inset) for engine start and taxi to runway. Runway 14 departures will taxi from Romeo spot to Runway 14 via Taxiway Alpha, then Taxiway Foxtrot and hold short of runway. Runway 32 departures will taxi from Romeo spot to Runway 32 at Taxiway Bravo via Taxiway Alpha, then Taxiway Bravo and hold short of runway.

3.9.7.1.3. Alpha Spot. Departing RPA will be towed to designated launch spot, named Alpha, on taxilane between Bldg 2303 and Spot A-1 (See **Figure 3.1**, Alpha

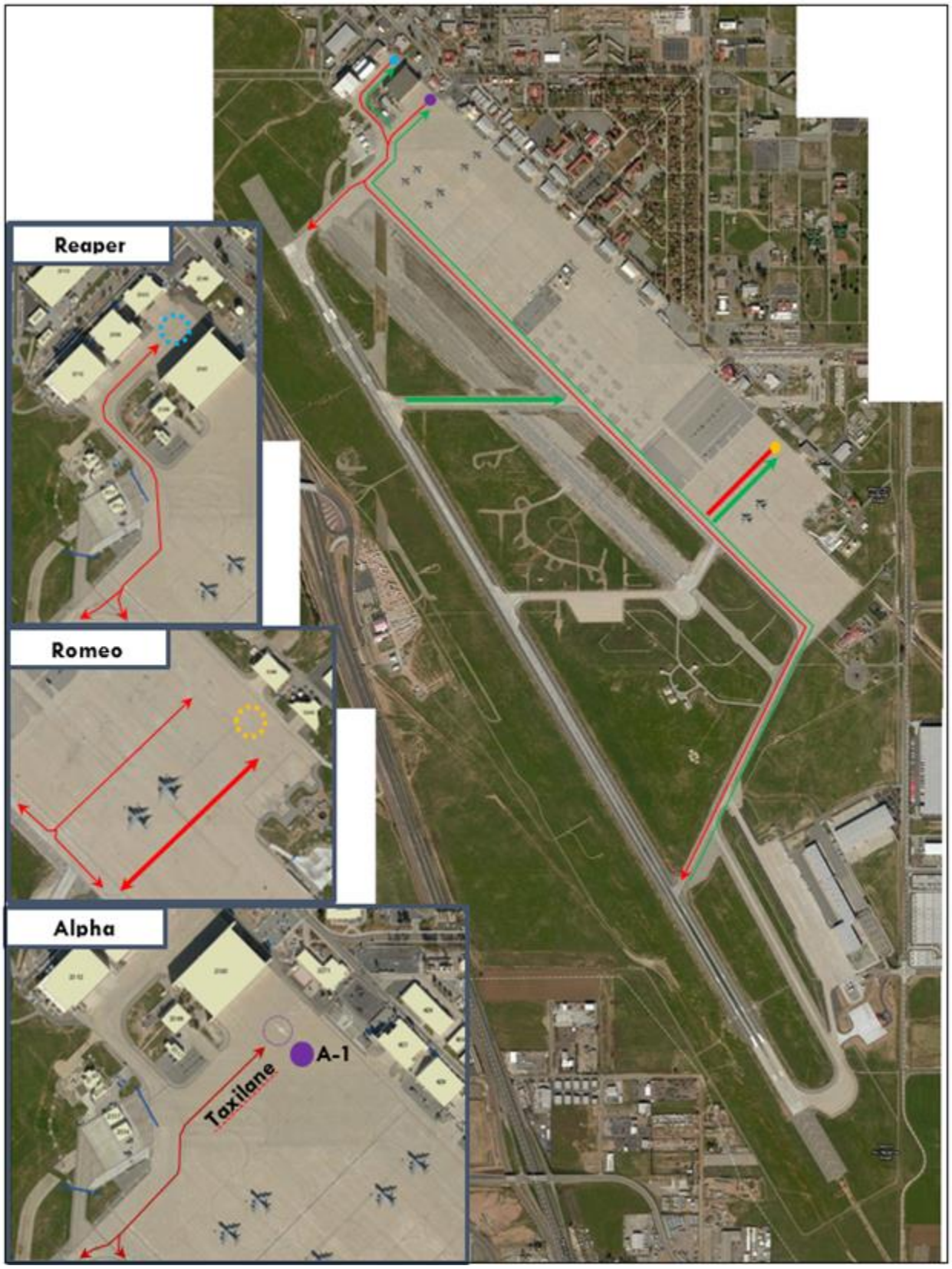
Inset) for engine start and taxi to runway. Runway 14 departures will taxi from Alpha spot to Runway 14 via Taxiway Foxtrot and hold short of runway. Runway 32 departures will taxi from Alpha spot to Runway 32 at Taxiway Bravo via Taxiway Alpha, then Taxiway Bravo and hold short of runway.

3.9.7.2. Arrival. Arriving RPAs shall be escorted by 163 OG operated vehicle for taxi to designated recovery spot for engine shutdown and RPA will be towed to assigned parking location. Arriving RPAs shall taxi off the runway and hold position if no 163 OG operated vehicle is immediately available for escort. 163 OG operated vehicles shall not enter the runway at any time without Tower approval. 163 OG operated vehicles shall obtain all appropriate Tower approvals for entering the CMA or crossing/entering any runway. 163 OG operated vehicles shall notify MOC for ECC approval to cross restricted area boundaries prior to taxi or tow.

3.9.7.2.1. Reaper Spot. Runway 14 arrivals will taxi from Runway 14 at Taxiway Bravo to Reaper spot via Taxiway Bravo, Taxiway Alpha, taxilane around the Alert Facility, then taxilane fronting Bldg 2305/2306/2312. Runway 32 arrivals will taxi from Runway 32 at Taxiway Delta to Alpha spot via Taxiway Delta, Taxiway Alpha, taxilane around the Alert Facility, then taxilane fronting Bldg 2305/2306/2312.

3.9.7.2.2. Romeo and Alpha Spot. Runway 14 arrivals will taxi from Runway 14 at Taxiway Bravo to Romeo or Alpha spot via Taxiway Bravo, then Taxiway Alpha. Runway 32 arrivals will taxi from Runway 32 at Taxiway Delta to Romeo or Alpha spot via Taxiway Delta, then Taxiway Alpha.

Figure 3.1. MQ-9 Taxi Routes and Launch and Recovery Spot.



3.10. Aircraft Relocation.

3.10.1. Normal Procedures. Tower approval is required prior to relocating any aircraft on the flight line via tow or maintenance powered taxi. Maintenance supervisor shall coordinate aircraft relocation through MOC prior to contacting Tower. MOC shall obtain ECC approval prior to allowing a tow or maintenance powered taxi crossing any restricted area boundary. MOC shall contact AM with maintenance team callsign, type aircraft, tail number, current location, intended destination, and any other pertinent information. AM shall pass all information provided by MOC to Tower. The maintenance team supervisor shall initiate radio contact using the FM Ramp Net or published Ground frequency, obtain approval, and maintain two-way radio contact with Tower while relocating aircraft. The maintenance supervisor will provide the type aircraft, tail number, current location, intended destination, and any other pertinent information. Members of the maintenance team shall continuously monitor the FM Ramp Net or published UHF/VHF Ground Control frequency while aircraft relocation is in progress. The maintenance team supervisor shall notify Tower when aircraft relocation is complete. (T-3)

3.10.2. Lost Radio Contact. If contact with Tower is lost at any time after aircraft relocation is approved, the maintenance team supervisor should continue to the approved destination and be vigilant for visual light gun signals from the Tower. Any other deviations while relocating without radio contact shall be relayed through MOC or AM to Tower for further instructions. (T-3)

3.10.3. RPA Towing Operations (MQ-9). 163 MXG tow crews will coordinate approval through MOC. MOC shall obtain ECC approval prior to allowing a tow or maintenance powered taxi crossing any restricted area boundary. MOC shall notify AM via landline of approved tow operation with aircraft type, tail number, present location, and destination location. AM will notify Tower of tow. MOC will notify tow crew of completed tow coordination and approval. Tow crews shall contact Tower for approval to commence tow operations via FM Ramp Net, continuously monitor FM Ramp Net, comply with all instructions from Tower, and notify Tower upon completion of tow operation. Initial information provided to Tower by tow crew shall include aircraft tail number, present location, and request for tow to desired destination. (T-0)

3.10.4. MIPAA. MIPAA tenants and business invitees shall follow the procedure in 3.10.1. when towing between the FBO apron and the Taxiway Golf apron or whenever a tow will be through the CMA. (T-0)

3.11. AGE Storage.

3.11.1. All AGE shall be stored in marked AGE storage areas (see **2.4.1.1**) when not prepositioned for arrivals, supporting departures, or maintenance is actively being performed. AGE shall not be prepositioned earlier than three hours prior to arrival or remain in place later than three hours after departure. (T-1)

3.12. Refueling Procedures. No special procedures.

3.13. Fuel System Repair Procedures. The appropriate Pro Super will coordinate fuel system repair. See 2.4.7. (T-3)

3.14. Aircraft Jacking and Landing Gear Retraction Procedures. Maintenance personnel intending to perform aircraft jacking on non-approved areas shall obtain approval from the AFM prior to aircraft jacking. (T-1)

3.15. Engine Start Procedures.

3.15.1. March ARB. Aircraft on March ARB aprons shall contact Tower prior to engine start for approval. (T-3)

3.15.2. MIPAA. Aircraft on MIPAA aprons shall contact Tower prior to engine start for approval. (T-0)

3.16. Engine Run-up Procedures.

3.16.1. General. Tower approval is required prior to conducting any aircraft engine runs on the flight line. Maintenance personnel shall coordinate engine runs through MOC or MIPAA Airport Manager prior to contacting Tower. MOC or MIPAA Airport Manager shall contact AM with callsign, type aircraft, tail number, and current location. AM shall pass all information provided by MOC or MIPAA Airport Manager to Tower. Maintenance supervisor shall initiate radio contact using the FM Ramp net or published Ground Control frequency, obtain approval, and maintain two-way radio contact with Tower while conducting engine runs. The maintenance supervisor will provide the type aircraft, tail number, and current location. Members of the maintenance team shall continuously monitor the FM Ramp net or published Ground Control frequency while engine runs are in progress. The maintenance supervisor shall notify Tower when engine runs are complete. (T-3)

3.16.2. Restrictions. Engine runs are not authorized between the hours of 2200L and 0600L daily without 452 MXG/CC approval for March ARB areas and MIPAA Airport Manager approval for MIPAA areas. Requests for approval shall be made through the MOC or CP or MIPAA Airport Manager. MOC or CP or MIPAA Airport Manager shall relay approvals to AM who will relay approval to Tower. (T-3)

3.16.3. Lost Radio Contact. If contact with Tower is lost at any time after an engine run is approved, the maintenance supervisor should discontinue the engine run and obtain a replacement radio. Engine runs are prohibited when two-way radio contact can't be maintained with Tower. (T-3)

3.16.4. Unsuppressed Power Check Pad. Follow procedures in 3.16.1. thru 3.16.3. Maintenance Teams intending to use the Unsuppressed Power Check Pad shall coordinate through MOC prior to placing aircraft in ready position. MOC shall validate with AM no aircraft are on spot H-1 and JI yard is clear of parked AGE fronting the pad. AM shall provide validation and if clear, will grant approval to MOC and notify Tower, ATOC and ECC. If not clear, AM shall inform MOC. Tower shall re-route aircraft to avoid taxiing on Taxiway Alpha while an engine run is in progress. (T-3)

3.16.5. MIPAA. General aviation aircraft at MIPAA do not need to coordinate with AM and Tower for engine runs except per **3.16.2**. Other aircraft at MIPAA shall coordinate engine runs per 3.16.1. to 3.16.3. (T-0)

3.17. Arm/De-Arm Procedures. Aircraft required to be armed or de-armed on the Runway 32 approach end arm/de-arm area shall orient their aircraft to a heading of 320° M. Aircraft utilizing all other arm/de-arm areas shall orient their aircraft to a heading of 300° M. (T-3)

3.18. Hazardous Cargo Procedures.

3.18.1. General. AM shall annotate type and quantity of the most demanding hazardous cargo when recording a PPR. ATOC is responsible for determining the full cargo manifest for any hazardous cargo movements. Any hazardous cargo notifications shall include AM, ECC, and CP. (T-0)

3.18.2. Arrival. Tower shall notify AM when an aircraft with hazardous cargo is 15 NM from March ARB. AM shall notify TA, ATOC, CP, and ECC in turn. Tower shall taxi arriving aircraft via Taxiway Charlie or Delta to the PHCP or AHCP to the maximum extent possible. Tower may taxi aircraft with hazardous cargo on Taxiway Alpha along the main apron, Taxiway Alpha to Bravo, Taxiway Charlie, Taxiway Delta, and Taxiway Foxtrot. TA shall notify AM when the arriving aircraft is parked on either PHCP or AHCP. AM shall coordinate and submit a NOTAM suspending Runway 12/30 operations and suspending Taxiway Charlie or Delta operations, as appropriate, when notified by TA the aircraft with hazardous cargo is parked on either the PHCP or AHCP. (T-0)

3.18.3. Departure. AM shall perform a Taxiway and HCP check when notified by Tower the aircraft with hazardous cargo has departed. AM shall cancel the NOTAM suspending Runway 12/30 operations after performing the check. AM shall notify CP and ECC when either HCP is vacated of aircraft containing hazardous cargo. (T-0)

3.19. Crew Change Procedures.

3.19.1. Engine Running Crew Change (ERCC). ERCCs shall only be performed on Row Lima. Crews intending to perform a ERCC should inform Tower prior to initial departure. Tower shall keep flight plan open when a crew intends to perform a ERCC. (T-3)

3.19.2. Non-Engine Running Crew Change (NERCC). NERCCs may be performed on any spot. Crews intending to perform a NERCC should inform Tower prior to initial departure. Tower shall keep flight plan open when a crew intends to perform a NERCC. (T-3)

3.20. Combat Offload Training Procedures.

3.20.1. General Information. Combat offload training is conducted on the apron mid-way and south of Taxiway C and is marked with a 740 ft white line for aircraft alignment. A reference marking consisting of a 300 ft white line is 90 ft south and parallel to the combat offload white line to facilitate ground maneuvering training. (T-3)

3.20.2. Restrictions. Runway 30 operations are prohibited while conducting combat offload training. Taxiway C is closed to non-participating aircraft during and after combat offload training until AM inspects the area after training is completed. (T-3)

3.20.3. Day and Night Visual Combat Offload Procedures. Planned combat offload training shall be noted on the wing flying schedule in advance. Crews will annotate combat off-load training on their filed flight plan. AM will notify Tower of planned combat off-load training annotated on any flight plan filed and at least 1 hour prior to scheduled day or night operations, visually check the training area is free of FOD and taxiway lighting is fully operational. AM will notify ATOC of training event. Crews shall advise Tower prior to commencing training operations and when complete. Tower will notify AM of completion of combat off-load training. AM will notify ATOC of required pallet pickup. Taxiway C will

remain closed until AM ensure adequate wingtip clearance exists or pallets are removed. (T-0)

3.20.4. NVD Combat Offload Procedures. Follow procedures noted above and outlined in **4.16.3**. (T-3)

3.21. Airfield Operations Internal Procedures.

3.21.1. Processing AF Form 3616. AM, Tower, and RAPCON shall upload the daily AF Form 3616 to **https://afrc.eim.us.af.mil/sites/452aw/452OG/OSS/OSA/SitePages/Home.aspx** NLT one hour after the changeover to a new day. AF Form 3616 shall be digitally signed prior to upload and shall be signed by the AFM or ATM as appropriate NLT five calendar days after closeout.

Chapter 4

AIR OPERATIONS

4.1. Airfield Opening/Closing Procedures.

4.1.1. Closures Other Than Holidays. The AOM shall obtain approval from 452 AMW/CC via 452 OG/CC recommending curtailment of RAPCON services for closures other than holidays. If approved, AM shall coordinate and submit a NOTAM for the closed period and the ATM shall inform SCT of the closure. (T-3)

4.2. Runway Operations Temporary/Permanent Curtailment Procedures.

4.2.1. Runway Operations Temporary/Permanent Curtailment Authority. AM, Tower, or SEF may temporarily curtail runway operations. AM may temporarily curtail use of any apron or taxiway from operational use. The AOM, AFM, 452 OG/CC, or 452 AMW/CC may permanently curtail runway operations. (T-3)

4.2.2. Notification Required. When runway operations are temporarily curtailed, Tower shall notify AM, RAPCON, and SCT. AM shall make situation appropriate notifications when notified by Tower. AM shall coordinate and submit a NOTAM when any runway, taxiway or apron is curtailed from use. The AOM shall make appropriate notifications when runway operations are permanently curtailed. (T-3)

4.2.3. Resuming Runway Operations. AM shall perform an airfield check before resuming runway operations. AM shall notify Tower the status of the runway upon completion of the airfield check and prior to releasing to runway operations. (T-3)

4.3. Airfield Inspections and Runway Conditions.

4.3.1. Airfield Inspections. The AFM or Assistant Airfield Manager (AAFM) shall inspect the airfield at least once per day, Monday thru Friday. Airfield Management Shift Lead (AMSL) shall perform the airfield inspection at least once per day Sundays, Saturdays, and holidays. AM personnel shall perform an airfield check (including FOD/BASH) daily prior to 0700L, within the first hour past official sunset, and at least once every four hour period. Personnel performing the airfield check shall provide Tower a status upon completion of the check. (T-1)

4.3.1.1. Monthly Joint Airfield Inspections. The AFM shall schedule and perform monthly joint airfield inspections when needed and include the AOM, TERPS, SEF, 452 AMW/SEG (SEG), and CE.

4.3.1.2. Quarterly Joint Airfield Inspections. The AFM shall schedule and perform quarterly joint airfield inspections in March, June, September, and December. The AFM shall include the AOM, TERPS, SEF, SF, CE, and MIPAA at a minimum. The AFM shall brief the results of the inspection to the AOB. (T-3)

4.3.2. Runway Surface Condition (RSC). AM shall check the RSC at least once per hour when precipitation is occurring or forecasted to occur until the RSC is determined to be "Dry". AM shall provide Tower, RAPCON, WX and CP the RSC immediately upon determination. (T-0)

4.3.3. Runway Condition Reading (RCR). March ARB's historic climatology precludes the requirement for RCRs and maintenance of friction measuring equipment IAW and AFI 13-204v3 and AFRC Supplement 1, paragraph 18.1.2.1. (T-0)

4.3.4. Braking Action Reporting/Advisories. Pilots shall describe the quality of braking action using the terms "good," "good to medium," "medium,", "medium to poor," "poor," or "nil." Tower shall immediately notify SCT and AM of the reported braking action and amend the ATIS. AM shall send a safety NOTAM immediately upon notification of poor braking action. (T-1)

4.4. Runway Selection Procedures. Runway 32 is the calm wind runway up to eight kts and the primary instrument runway. Runway 30 is the calm wind runway for authorized operations. Tower determines the active runway in use. Tower shall coordinate with RAPCON, SCT, AM, and WX prior to initiating a runway change. Tower shall notify RAPCON, SCT, AM, and WX when runway change begins and is complete. CP directs participating aircraft which runway to use during emergency war order (EWO) launches. (T-3)

4.5. Arresting System Procedures.

4.5.1. Normal Operations. Tower shall maintain the BAK-12 in the down position for all aircraft operations except during Det 1, 144 FW arrivals, departures, and pattern operations. Det 1, 144 FW pilots shall state "*REQUEST CABLE DOWN*" when BAK-12 should be lowered. Tower shall confirm BAK-12 is lowered with "*CABLE INDICATES DOWN*" when BAK-12 raising mechanism indicates in the down position. If the BAK-12 is engaged, 15 minutes is normally required to reset the BAK-12. Tower shall activate the Primary Crash Net (PCN), suspend runway operations, and notify RAPCON and SCT if the BAK-12 is engaged. Tower shall notify Barrier Maintenance at 655-4880 or on the CE Net via LMR if the BAK-12 is engaged (M-F, 0700-1600L). AM shall perform a runway check whenever the BAK-12 is engaged and reset. (T-3)

4.5.2. Abnormal Operations. If a C-17 lands on or rolls over a raised BAK-12 at high speed at the approach end, Tower shall suspend use of that BAK-12 and notify AM. AM shall initiate NOTAM coordination of the out of service BAK-12 delaying submittal until Barrier Maintenance inspects and provides an estimated return to service repair duration. AM shall notify Tower when the BAK-12 is returned to service and cancel the NOTAM. (T-1)

4.6. Operational Weather Procedures. March ARB weather procedures are outlined in MARBI 15-101, *Base Operational Weather Support*.

4.6.1. Aviation Routine Weather Report (METAR) & Aviation Selected Special Weather Report (SPECI). Tower shall update the ATIS and input data into FDIO immediately or as soon as practical whenever a METAR or SPECI is received from WX. (T-3)

4.6.2. PMSV Use. Pilots should use PMSV to the maximum extent possible for detailed weather information and assistance. Tower shall provide current weather information whenever workload permits and IAW FAA JO 7110.65. (T-3)

4.6.3. Operational Restrictions. The following weather conditions require 452 OG/CC approval for any takeoffs or landings. Tower shall implement these restrictions and coordinate approvals through the ATM and AOM when requested. (T-3)

4.6.3.1. Observed ceiling <300 ft AGL and/or visibility <1 SM.

4.6.3.2. Observed crosswinds >15 but <25 kts.

4.6.3.3. Observed crosswinds >25 kts.

4.7. Bird/Wildlife Control. March ARB bird/wildlife control procedures are outlined in the March Bird/Wildlife Aircraft Strike Hazard (BASH) Plan 91-202. (T-3)

4.7.1. Local Bird Watch Condition (BWC) Definitions.

4.7.1.1. BWC SEVERE. Wildlife activity on or immediately above the active runway or on the arrival/departure corridor near the runway representing high potential for strikes. As a guide, this wildlife activity is represented by more than 15 large birds (waterfowl, raptors, gulls, etc.) or 30 small birds (terns, swallows, etc.). However, could be caused by only a single bird in a critical location. Supervision and aircrews must thoroughly evaluate mission need before conducting operations in areas under condition SEVERE.

4.7.1.1.1. Traffic Pattern. Do not conduct flight operations except in an emergency. Arriving aircraft will either hold awaiting a lower BWC or divert. Non-emergency landings in BWC SEVERE require approval by 452 OG/CC (or designated representative). Launches under an Emergency War Order using Emergency Action Messages are considered "emergencies" for this paragraph. Launches under Mandatory Scramble will comply with NORAD ACA and CONR SPINS guidance. All other departures require a waiver from 452 AMW/CC (or designated representative). A bird control unit (AM and/or USDA) will immediately respond to disperse birds from the airfield.

4.7.1.1.2. Training Areas/Transition Airfields (452 AMW). Use of transition areas may be authorized, but aircrews should check conditions using the BAM/AHAS system and request information from airfield operations or ATC to determine observed conditions. Aircrews will terminate training if SEVERE hazards are observed or forecasted.

4.7.1.1.3. Low-Level Training (452 AMW). The PIC will obtain 452 OG/CC approval prior to commencing any flight on affected route segments. Restrict speed to 250 kts and fly no lower than 1,000 ft AGL (3,000 ft AGL at night) on the affected route segments.

4.7.1.2. BWC MODERATE. Wildlife activity near the active runway, runway pattern, or arrival/departure routes representing increased potential for strikes. As a guide, this wildlife activity is represented by approximately 5 to 15 large birds or 15 to 30 small birds. However, could be caused by only a single bird in a critical location. This condition requires increased vigilance by all agencies and supervisors and caution by aircrews.

4.7.1.2.1. Traffic Pattern. All local IFR/VFR approach and traffic pattern activity for aircraft ceases. No formations in the March ARB patterns. Airborne aircraft/crews will terminate transition training in the March local pattern. Initial takeoffs and full-stop landings allowed only when departure and arrival routes will avoid bird activity and as approved by 452 OG/CC. For training missions 452 OG/CC (or higher authority), or the 452 OG/CC designated representative, will be the final approval authority for initial takeoffs and full-stop landings during BWC MODERATE.

Aircraft commanders on training missions will call CP to request 452 OG/CC approval for initial takeoffs and/or full-stop landings during BWC MODERATE. For alert, CBP RAU, and other high priority missions permission for takeoffs and landings will still be obtained through CP unless a time-critical departure or landing is required. In a time critical situation, the aircraft commander may execute a takeoff or landing at their own unit commander's or management's discretion after evaluating the increased bird hazard reported. Aircraft commanders may request reassessment of bird conditions at any time by calling March ATC or AM. March ATC, CP, and AM will advise aircraft on the anticipated delay, if known, for a return to BWC LOW. Pilots will modify events in order to avoid bird activity. A bird control unit (AM and/or USDA) will immediately respond to disperse birds from the airfield.

4.7.1.2.2. Training Areas (452 AMW). Use of transition areas is authorized, but aircrews should keep training events to a minimum to accomplish mission objectives if MODERATE conditions are observed or forecasted. Mission profiles may be altered to mitigate risk. Changes include avoidance of known/observed concentrations, raising flight altitudes, and reducing airspeed.

4.7.1.2.3. Low-Level Training (452 AMW). Restrict speed to 250 kts on the affected route segments. No altitude restrictions.

4.7.1.3. BWC LOW. Wildlife activity on and around the airfield representing low potential for strikes. As a guide, this wildlife activity is represented by fewer than 5 large birds or fewer than 15 small birds. However, a single bird in a critical location may elevate the BWC to moderate or severe. No restrictions to the traffic pattern, training areas and low-level routes. Continue with normal operations.

4.8. Local Aircraft Priorities. The listed local aircraft operational priorities immediately follow the operational priorities listed in FAA JO 7110.65. Aircraft requiring immediate takeoff priority shall contact CP to coordinate approval. CP shall coordinate approval through 452 OG/CC. If approval is granted, CP shall notify AM which in turn shall notify Tower. CP shall notify aircraft of approval or disapproval. (T-3)

4.8.1. KC-135 Alert Missions.

4.8.2. Det 1, 144 FW Active Air Scramble.

4.8.3. CBP RAU active missions.

4.8.4. Named operational missions.

4.8.5. DVs.

4.8.6. Det 1, 144 FW practice scramble.

4.8.7. Named exercise missions.

4.8.8. AMC contract carriers.

4.8.9. 452 AMW ORI flights.

4.8.10. Tenant ORE/ORI flights.

4.8.11. Tactical Arrivals.

4.8.12. Military IFR arrivals.

4.8.13. 452 AMW assigned aircraft on local training flights.

4.8.14. Det 1, 144 FW local training flights.

4.8.15. CBP RAU aircraft other than active mission.

4.8.16. Transient military departures.

4.8.17. Transient military pattern training.

4.8.18. Aero Club aircraft.

4.9. Supervisor of Flying (SOF). A SOF concept is employed in the Tower to support 163 OG assigned MQ-9s in fulfilling the requirements of 14 CFR §91.113(b). The SOF is only available when MQ-9 operations are being conducted and IAW the MQ-9 LOA. See **2.7.6** for the dedicated SOF frequency. (T-0)

4.10. Flight Following.

4.10.1. AM shall forward all flight plan information for all aircraft arriving and departing March ARB. Tower shall forward all aircraft arrival and departure times. Tower shall not authorize a departure taxi or takeoff clearance without a valid flight plan except for CBP RAU aircraft and VFR aircraft departing from MIPAA apron areas. (T-0)

4.10.2. AM shall forward specific information to Tower on all aircraft arriving or departing March ARB that are aeromedical evacuation, carrying hazardous cargo, transporting distinguished visitors (DV Code 7 or above), or as requested by Tower. Tower shall provide a 15 NM notification to AM on all aircraft arriving March ARB that are aeromedical evacuation, carrying hazardous cargo, transporting distinguished visitors (DV Code 7 or above), or as requested by AM. (T-0)

4.11. General Procedures.

4.11.1. Intersecting Runway/Intersecting Flight Path Operations. Runway 12/30 and Runway 14/32 are considered intersecting runways for the purposes of simultaneous operations, simultaneous opposite direction operations, separation and wake turbulence criteria application. Tower and RAPCON shall implement prescribed procedures outlined in FAA JO 7110.65. (T-0)

4.11.2. AM and Tower Coordination. (T-0)

4.11.2.1. Tower shall provide AM:

4.11.2.1.1. As soon as practical, notification on all transient aircraft planning a full stop landing if not already approved by AM (including all unauthorized inbound transient aircraft).

4.11.2.1.2. All reported or observed abnormal field conditions.

4.11.2.1.3. Malfunctions of airfield lighting.

4.11.2.1.4. Malfunctions of the BAK-12.

4.11.2.1.5. ETA and any other pertinent information concerning aircraft carrying hazardous cargo.

4.11.2.2. AM shall provide Tower:

4.11.2.2.1. RSC and changes in BAK-12 status.

4.11.2.2.2. Closing or opening of runways or taxiways.

4.11.2.2.3. Information on personnel and/or equipment operating within the CMA and priority activities have in relation to flight operations.

4.11.2.2.4. Abnormal field conditions or information directed by the AOM and/or designated representative.

4.12. Distinguished Visitor (DV) Procedures.

4.12.1. General. Wing Protocol (452 AMW/CCP) is the focal point for all DVs inbound, transiting, or departing March ARB. All other agencies provide crucial team roles and shall fully support DV movements by remaining informed, proactive, and flexible to changing mission requirements. (T-3)

4.12.2. Required Coordination. Wing Protocol shall notify CP, AOM and AM of any DV movements or events on the airfield. AM shall notify Wing Protocol and CP of any DV movements or events on the airfield not provided same. AM shall ensure DV movements are annotated in the PPR log. (T-3)

4.12.3. Initial Arrival Notification. Inbound aircraft with DVs shall contact CP no later than 60 minutes prior to ETA. CP shall pass 60 minute out call to Wing Protocol and AM. AM shall notify TA, RAPCON and Tower. (T-3)

4.12.4. Imminent Arrival Notification. Tower shall notify AM when an inbound aircraft with DVs are 15 NM out. AM, in turn, shall notify Wing Protocol, CP and TA. (T-3)

4.13. Visual Procedures.

4.13.1. Visual Pattern Weather Requirements. Use of visual patterns are prohibited when the lowest ceiling is less than 500 ft above the applicable traffic pattern altitude and/or less than 3 SM visibility. (T-0)

4.13.2. Runway 12/30 Restrictions. Runway 12/30 is limited to day, VMC use only. Wind information provided is estimated only. Aircraft operations are authorized for CBP RAU, Aero Club, and public and military rotary-wing aircraft. Public and military rotary-wing aircraft may operate on Runway 12/30 under special VFR. All other operations shall be coordinated through the AOM for 452 OG/CC approval. No intersection departures are authorized due to no existing intersections on Runway 12/30. (T-3)

4.13.3. Runway 14/32 Intersection Departures. Pilots may request or Tower may suggest intersection departures for Runway 14/32 upon initial contact with Ground Control. Tower shall provide intersection distance available whenever a pilot requests or inquires on the availability of an intersection departure. (T-3)

4.13.4. Protection of the Overhead Pattern. Aircraft performing successive VFR patterns to Runway 14/32 shall maintain at or below 3,000 ft MSL between the approach end threshold and departure end threshold of the runway. Tower shall advise all departing VFR aircraft to maintain at or below 3,000 ft MSL until the departure end of the runway. Tower instructions approving closed implies 3,000 ft MSL restriction waived on-the-go to turn crosswind at

pilot's discretion but does not waive the restriction for the successive departure in the pattern. (T-3)

4.13.5. March Class C Entry Procedures. All aircraft should establish and maintain two-way radio contact prior to March Class C entry. Pilots are expected to verify receipt of the current ATIS code, provide current location and altitude, and state intentions and/or type landing requested. Aircraft should be at the appropriate altitude for the intended traffic pattern upon March Class C entry. (T-3)

4.13.6. VFR Rectangular Pattern Procedures. (T-3)

4.13.6.1. Runway 12/30. Standard entry will be 45° to mid-field downwind from east. Enter as directed by Tower from all other directions. Standard pattern position radio call should be made on downwind and base with gear down call and type landing on base.

4.13.6.2. Runway 14/32. Standard entry will be 45° to mid-field downwind from west. Enter as directed by Tower from all other directions. Standard pattern position radio call should be made on downwind and base with gear down call and type landing on base.

4.13.7. Fighter East Recovery. Fighter aircraft approaching March Class C should establish two-way radio contact with Tower or RAPCON prior to entering the airspace and maintain 4,500 ft MSL until instructed to descend. (T-0)

4.13.8. VFR Overhead Pattern. Carrier breaks for any runway are prohibited at March ARB. (T-3)

4.13.8.1. Runway 30. Overhead pattern for Runway 12 prohibited. Request initial upon establishment of two-way radio communication with Tower or RAPCON. Standard pattern position radio call should be made at initial and leaving the perch with gear down call and type landing.

4.13.8.2. Runway 14/32. Request initial upon establishment of two-way radio communication with Tower or RAPCON. Standard pattern position radio call should be made at initial and leaving the perch with gear down call and type landing. Radio call reporting initial will be considered cancellation of IFR and entering the VFR pattern. Tower shall coordinate overhead traffic patterns prior to commencement.

4.13.9. Reduced Same Runway Separation (RSRS). (T-1)

4.13.9.1. Applicability. (T-1)

4.13.9.1.1. Det 1, 144 FW assigned and sponsored aircraft.

4.13.9.2. Restrictions.

4.13.9.2.1. RSRS standards are not authorized when an emergency aircraft is involved. (T-2)

4.13.9.2.2. Aircrews will not overfly other aircraft on the runway; separation rests with the pilot. Controllers must provide appropriate traffic advisories. (T-2)

4.13.9.2.3. RSRS will not be applied when the runway is reported as wet. (T-1)

4.13.9.2.4. RSRS not authorized for transient aircraft or transient aircraft deployed to March ARB. (T-1)

4.13.9.3. Procedures.

4.13.9.3.1. General Provisions.

4.13.9.3.1.1. Aircrews and/or air traffic controllers may refuse RSRS based upon safety of flight. (T-2)

4.13.9.3.1.2. When RSRS is not applied, separation must be IAW FAA JO 7110.65. (T-2)

4.13.9.3.1.3. Pilots are responsible for wake turbulence separation when maintaining visual separation or operating under VFR. When operating IFR or under ATC instructions, controllers must ensure standard wake turbulence separation exists. (T-2)

4.13.9.3.2. Tower shall apply RSRS minima specified in **Table 4.1** and **Table 4.2**. (T-1)

4.13.9.3.3. Pilots of trailing aircraft conducting a Touch & Go or Low Approach shall offset to left or right of runway centerline when following an aircraft approved for a Full Stop landing. Tower shall issue runway appropriate offset instructions to trailing aircraft with clearance. (T-1)

Table 4.1. Similar fighter type aircraft RSRS minima (T-1).

Similar fighter type aircraft RSRS minima:				
		Lead Aircraft		
		Full Stop	Touch & Go	Low Approach
Trail Aircraft	Full Stop	3,000 ft or 6,000 ft behind a formation landing	3,000 ft	3,000 ft
	Touch & Go	6,000 ft if day, VFR and runway is dry	3,000 ft	3,000 ft
	Low Approach	3,000 ft	6,000 ft	3,000 ft
NIGHT: 6,000 ft is the minimum spacing for all similar night operations if ATC can safely determine distances; otherwise standard FAA JO 7110.65 separation standards apply.				

Table 4.2. Dissimilar fighter type aircraft RSRS minima (T-1).

Dissimilar fighter type aircraft RSRS minima:				
		Lead Aircraft		
		Full Stop	Touch & Go	Low Approach
Trail Aircraft	Full Stop	6,000 ft or 8,000 ft behind a formation landing	6,000 ft	6,000 ft
	Touch & Go	6,000 ft if day, VFR and runway is dry	6,000 ft	6,000 ft
	Low Approach	6,000 ft	6,000 ft	6,000 ft
NIGHT: 8,000 ft is the minimum spacing for all dissimilar night operations if ATC can safely determine distances; otherwise standard FAA JO 7110.65 separation standards apply.				

4.13.10. Breakout/Go Around. Pilots should announce "*BREAKING OUT*" or "*GOING AROUND*" when performing a breakout or go around as described below. (T-1)

4.13.10.1. Runway 14/32. Aircraft executing a breakout or go around shall fly runway heading and maintain at or below 3,000 ft MSL until departure end of the runway, turn west crosswind while climbing to pattern altitude, then re-enter the pattern via west downwind, departure end of the runway.

4.13.10.2. Runway 12/30. Aircraft executing a breakout or go around shall fly runway heading and maintain at or below 2,500 ft MSL until departure end of the runway, turn east crosswind while climbing to pattern altitude, then re-enter the pattern via east downwind, departure end of the runway.

4.13.11. Simulated Flame Out (SFO).

4.13.11.1. Applicability. (T-0)

4.13.11.1.1. Det 1, 144 FW assigned and sponsored aircraft.

4.13.11.2. Restrictions. (T-0)

4.13.11.2.1. SFOs between sunset and sunrise are prohibited.

4.13.11.2.2. Ceiling shall be at least 1,000 ft above approved HIGH KEY altitude and flight and ground visibility at least 5 SM.

4.13.11.2.3. VFR pattern shall be open.

4.13.11.2.4. Climbs to HIGH KEY shall be made west and within 2 NM of the runway.

4.13.11.2.5. Aircraft operations are not authorized within the March Class C surface area between RIV/140 and RIV/320 radial 2 NM west of Runway 14/32 while SFO is in progress.

4.13.11.2.6. SFO shall not be approved or commence from HIGH KEY with any other aircraft at or inside ten mile final and/or initial or a departing aircraft has not crossed the departure end threshold of Runway 14/32.

4.13.11.3. Procedures. Aircraft under Tower control shall request SFOs with as much advance notice as possible to properly coordinate approval. Aircraft under SCT or RAPCON control may request a SFO if intending on conducting SFOs upon arrival at March ARB. Pilots shall use the following phraseology, "*REQUEST S-F-O (Altitude)*" or "*REQUEST HIGH KEY (Altitude)*." Tower will coordinate with SCT or RAPCON the requested altitude. SCT or RAPCON will advise of any delays, traffic in the vicinity of the maneuvering area, and provide approval for SFO when all conflicts are resolved. Tower will issue approval by stating "*SFO APPROVED REPORT HIGH KEY (Altitude)*" or if delayed and at HIGH KEY, "*ORBIT HIGH KEY, EXPECT (Time) DELAY*." Pilots shall report 30 seconds (3 NM) to HIGH KEY with "*(Number) SECONDS/MILES TO HIGH KEY*." Pilots shall report at HIGH KEY, LOW KEY, BASE KEY with gear down, and report completing or abandoning the approach. (T-0)

4.13.12. Straight-in Simulated Flame Out (SISFO). Not authorized at March ARB. (T-0)

4.13.13. Rotary-Wing Aircraft. (T-3)

4.13.13.1. Restrictions. Rotary-wing aircraft shall not overfly aprons or parked aircraft below 500 ft AGL.

4.13.13.2. Procedures. Follow procedures in **4.13.6**.

4.14. Instrument Procedures.

4.14.1. Radar Vectors to Initial. Aircraft requesting "*RADAR VECTORS TO INITIAL*" are considered cancelling IFR upon reporting "*INITIAL*" and will proceed VFR for pattern entry. (T-0)

4.14.2. Local Climb-Out. March ARB assigned aircraft remaining within the RAPCON radar pattern may execute the local climb-out described below. RAPCON shall use "*EXECUTE LOCAL CLIMB-OUT*" when issuing departure instructions. When PDZ is not available, RAPCON will provide radar vectors. Tower shall notify RAPCON when an aircraft on a local climb-out departs. Tower and RAPCON shall issue the restriction, "*MAINTAIN AT OR BELOW THREE THOUSAND UNTIL DEPARTURE END OF RUNWAY*," with all local climb-out instructions. (T-0)

4.14.2.1. Runway 14. Climb and maintain 4,000 ft MSL. Upon leaving 2,200 ft MSL, turn right heading 200° M. Maintain 250 ft per nautical mile minimum climb rate and do not exceed 250 kts. (T-0)

4.14.2.2. Runway 32. Climb and maintain 4,000 ft MSL. At departure end, turn left heading 155° M. Remain within 3 DME of RIV until established on 155° M heading to remain within March Class C. Maintain 210 ft per nautical mile minimum climb rate. (T-0)

4.14.3. Missed Approach. Pilots executing a missed approach shall announce "*MISSED APPROACH*" when able and execute the published missed approach for the approach procedure. (T-0)

4.14.4. Radar Pattern Operations. Aircraft practicing successive instrument approaches are expected to perform the appropriate local climb-out described in **4.14.2**. Pilots should notify RAPCON on initial contact and on-the-go with type landing desired. (T-3)

4.14.4.1. East Pattern. North entry to downwind will remain at or above 6,000 ft MSL until clear of Hemet and glider area. Radar downwind is 130° M at 5,000 ft MSL. Base turn is to 220° M at 4,000 ft MSL. Turn to intercept final is to 290° M at 4,000 ft MSL. (T-3)

4.14.4.2. West Pattern. Entry to radar downwind is via local climb-out described in **4.14.2.2**. Base turn is to 050° M at 4,000 ft MSL. Turn to intercept final is to 340° M at 4,000 ft MSL. (T-3)

4.14.5. IFR Departures. No special instructions for ARROW1 or SKYES3 departure procedure. MIPAA aircraft shall only be issued SKYES3 due to noise abatement. (T-0)

4.14.5.1. Runway 32. Tower shall obtain IFR release from SCT and RAPCON and SCT only when RAPCON is closed for all IFR departures from Runway 32. (T-0)

4.14.5.2. Runway 14. Tower shall provide RAPCON IFR departure callsign prior to aircraft taxiing for departure for Runway 14. Tower shall request release from RAPCON prior to obtaining release from SCT. RAPCON shall notify Tower with "*RELEASED*"

when traffic conditions permit Runway 14 departure and Tower may obtain release from SCT. If RAPCON traffic conditions prevent Runway 14 departure, RAPCON shall direct "*HOLD FOR RELEASE, (REASON WHEN POSSIBLE)*". When RAPCON is closed, Tower shall obtain release from SCT. (T-0)

4.14.6. IFR Arrivals. No special instructions for ARKOE.ARKOE1, HITOP.HITOP1 or PMD.MARCH4 arrival procedures.

4.14.6.1. Communications Changeover. RAPCON shall direct communications changeover for all IFR arrivals no later than 10 NM from the runway and no later than 5 NM from the runway with prior coordination with Tower. (T-3)

4.14.6.2. Circling Approaches. RAPCON and Tower shall not authorize simultaneous circling approaches when weather is less than VMC. Pilots can expect the following terminology to be issued by RAPCON when approved for a circling approach to Runway 14 via an approach to Runway 32, "*CIRCLE WEST OF THE AIRPORT/RUNWAY FOR A RIGHT BASE/DOWNWIND TO RUNWAY ONE FOUR.*" Pilots can expect the following terminology to be issued by RAPCON when approved for a circling approach to Runway 32 via an approach to Runway 14, "*CIRCLE WEST OF THE AIRPORT/RUNWAY FOR A LEFT BASE/DOWNWIND TO RUNWAY THREE TWO.*" (T-3)

4.15. Opposite Direction Same Runway Operations.

4.15.1. Pilots intending to depart opposite direction shall advise Clearance Delivery or Ground Control on initial contact. (T-0)

4.15.2. Tower and RAPCON shall use the terminology, "*OPPOSITE DIRECTION (DEPARTURE or ARRIVAL), RUNWAY (ONE FOUR or THREE TWO)*" in all coordination. (T-0)

4.15.3. An arrival shall not proceed closer than 10 NM to the runway threshold until an opposite direction arrival has landed. (T-0)

4.15.4. An arrival shall not proceed closer than 10 NM to the runway threshold until an opposite direction departure is turned and on a diverging heading or applicable vertical separation can be maintained. (T-0)

4.16. Special Air Operations.

4.16.1. Alert Exercise Procedures.

4.16.1.1. Vehicle Operations. Alert vehicles responding to an alert exercise shall not stop prior to entering the airfield and use a vehicle speed appropriate to maintaining safety of non-participating personnel and equipment. (T-3)

4.16.1.2. Exercise Actions. Tower shall advise all aircraft of alert exercise on Local Control and Ground Control frequencies when notified by the applicable C2 agency an alert exercise is in progress. Tower shall notify RAPCON and SCT of the alert exercise. Tower will immediately clear all runways and taxiways of aircraft and/or vehicles that may impede successful and immediate launch of the alert exercise aircraft. Aircraft airborne in the local traffic patterns or Class C shall be instructed by Tower to hold at traffic pattern altitude clear of the approach and departure corridor. The waiver authority to preempt an alert exercise is through 452 OG/CC via Tower. (T-0)

4.16.2. Tactical Arrival and Departure Procedures. (T-0)

4.16.2.1. Restrictions.

4.16.2.1.1. VMC and reported ceiling must be at least 500 ft above the initial altitude.

4.16.2.1.2. Formations of two or more aircraft are prohibited except the heavy overhead pattern.

4.16.2.2. WOLFSKILL HIGH Departure.

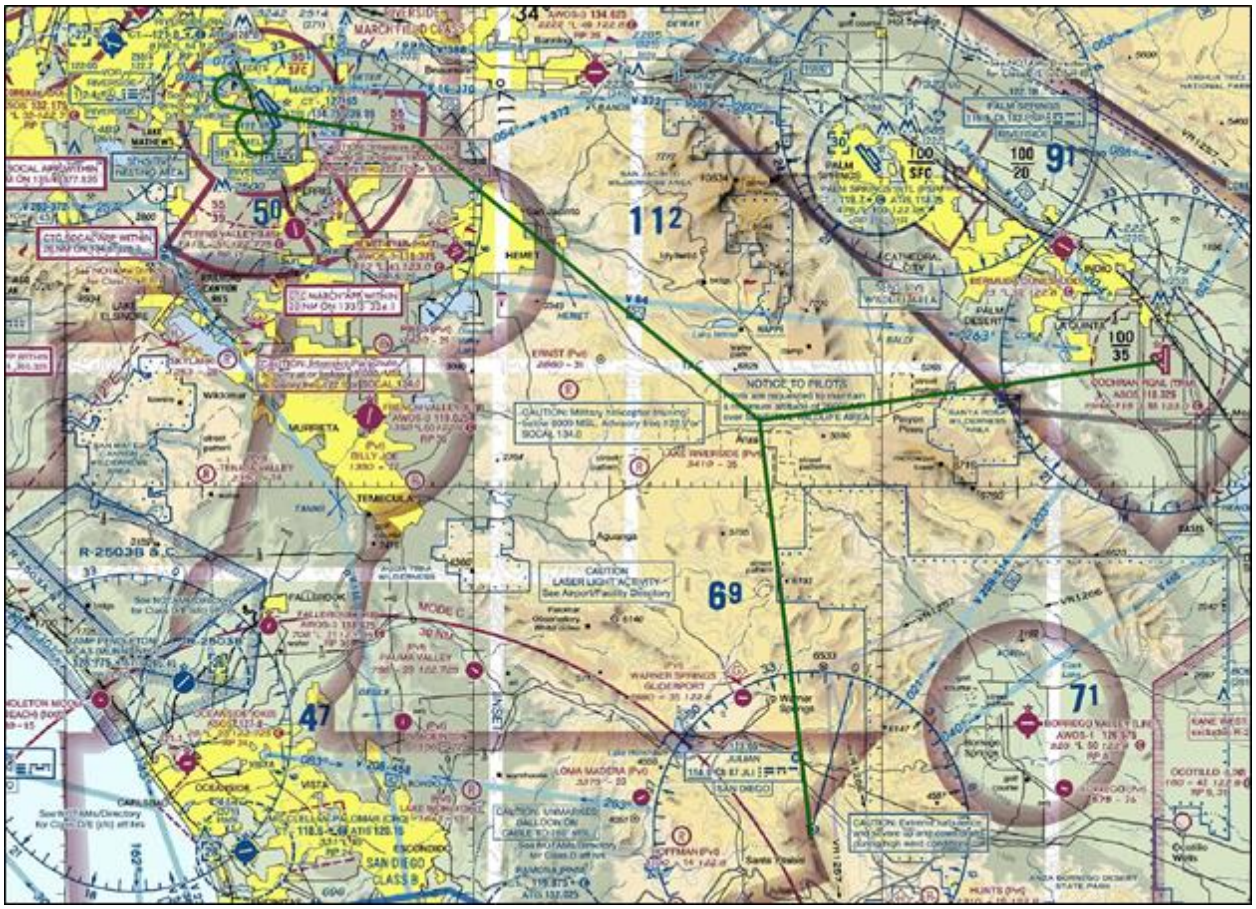
4.16.2.2.1. Restrictions.

4.16.2.2.1.1. Climb/turn shall remain within March Class C surface area lateral boundary.

4.16.2.2.1.2. Tower shall not approve a WOLFSKILL HIGH departure if a Tactical Arrival is in progress.

4.16.2.2.2. Procedure. Pilots shall request WOLFSKILL HIGH departure upon initial contact with Ground Control using phraseology, "*REQUEST WOLFSKILL HIGH DEPARTURE (requested altitude).*" Tower shall coordinate with RAPCON and SCT no later than 5 minutes prior to proposed departure. Tower will approve the departure procedure by stating "*WOLFSKILL HIGH DEPARTURE APPROVED, MAINTAIN (assigned altitude)*" with takeoff clearance. Aircraft approved for the procedure departing the runway shall make a VFR climbing turn west of Runway 14/32 and remain at or below 8,500 ft MSL until overhead mid-field eastbound. Runway 32 departure shall begin the turn no later than 1 DME of RIV and complete a 360° turn within 2 NM of the departure end of the runway. Runway 14 departure shall fly runway heading until 400 ft AGL, then perform a climbing turn west of the runway and within 4 DME of RIV. Tower will direct transfer of communications to SCT after departing Runway 14/32. From mid-field, aircraft will proceed 088° M for 9.7 NM to N 33°51'10.15" W 117°04'05.49" while remaining at or below 9,500 ft MSL then head 117° M for 27 NM to N 33°34'06.23" W 116°38'58.78" while continuing to climb to assigned altitude. If transitioning to TRM, aircraft will proceed 066° M for 25 NM until over TRM and request IFR clearance airborne with SCT. If transitioning to JLI, aircraft will proceed 161° M for 25 NM until over JLI and request IFR clearance airborne with SCT.

Figure 4.1. WOLFSKILL HIGH and WOLFSKILL Departure.



4.16.2.3. WOLFSKILL Departure.

4.16.2.3.1. Restrictions.

4.16.2.3.1.1. WOLFSKILL departure shall be under VFR below 4,500 ft MSL at an altitude appropriate for the direction of flight.

4.16.2.3.1.2. Pilots shall be at or above the minimum IFR altitude for the route of flight before requesting IFR clearance.

4.16.2.3.2. Procedure. Pilots shall file a composite flight plan with RIV as the departure point and the point where IFR clearance will be obtained as the second point. Pilots shall request WOLFSKILL departure upon initial contact with Ground Control using phraseology, "*REQUEST WOLFSKILL DEPARTURE*." Tower shall coordinate with RAPCON and SCT for release, using phrase "*WOLFSKILL DEPARTURE*," prior to approving departure. RAPCON or SCT will provide release approval or delay release. Tower will approve the departure procedure by stating "*WOLFSKILL DEPARTURE APPROVED*" with takeoff clearance when released by RAPCON or SCT. Aircraft approved for the procedure departing the runway shall make a VFR climbing turn west of Runway 14/32 and remain at or below 4,000 ft MSL until overhead mid-field eastbound. Runway 32 departure shall fly runway heading until abeam Alessandro Blvd, turn left to cross Runway 14/32 mid-field and

climb and maintain 4,000 ft MSL until 5 DME of RIV. Runway 14 departure shall fly runway heading until abeam Ramona Expressway, then turn right to cross Runway 14/32 mid-field and climb and maintain 4,000 ft MSL until 5 DME of RIV. From mid-field, aircraft will proceed 088° M for 9.7 NM to N 33°51'10.15" W 117°04'05.49" then head 117° M for 27 NM to N 33°34'06.23" W 116°38'58.78" (while remaining at or below 6,000 ft MSL until 10 NM from March ARB for night departures and remaining at or below 8,900 ft MSL after 10 NM for night departures). Pilots shall report reaching 5 NM from March ARB. Tower will direct transfer of communications to RAPCON or SCT when pilot reports 5 NM. If transitioning to TRM, aircraft will proceed 066° M for 25 NM (and climb and maintain 10,800 ft MSL for night departures) until over TRM and request IFR clearance airborne with SCT. If transitioning to JLI, aircraft will proceed 161° M for 25 NM (and climb and maintain 8,600 ft MSL for night departures) until over JLI and request IFR clearance airborne with SCT.

4.16.2.4. Tactical Arrival.

4.16.2.4.1. Restrictions.

4.16.2.4.1.1. Conduct all operations within March Class C surface area lateral limits under VFR; pilots shall cancel IFR not later than RIV 6 DME.

4.16.2.4.1.2. Tower shall not approve a Tactical Arrival when a overhead, heavy overhead, or simulated flameout pattern is in use.

4.16.2.4.1.3. Tower shall not approve a Tactical Arrival when a WOLFSKILL HIGH departure is in progress.

4.16.2.4.1.4. Tower shall not approve a Tactical Arrival when a full stop IFR arrival is on 15 NM final.

4.16.2.4.1.5. Pilots shall abort the Tactical Arrival when two-way radio communications are lost with SCT, RAPCON or Tower.

4.16.2.4.2. Procedure. Pilots shall request a Tactical Arrival with SCT upon initial contact. Successive Tactical Arrival requests may be made with Tower. Tower shall coordinate with SCT and RAPCON all Tactical Arrivals. Pilots shall advise SCT when March ARB is visually acquired. SCT will coordinate with Tower and/or RAPCON at least 15 NM from March ARB. SCT will approve procedure with "*TACTICAL ARRIVAL (TAC EAST/TAC WEST APPROVED).*" Aircraft will cross TAC EAST/WEST at or below 8,500 ft MSL or assigned, then commence a high altitude VFR arrival east or west of Runway 14/32 as prior coordinated with Tower within the lateral limits of March Class C surface area. SCT will direct transfer of communications to Tower prior to entering March Class C ceiling boundary and no later than 6 NM from March ARB. Pilot shall report to Tower on initial contact *"APPROACHING TAC EAST/WEST, EIGHT THOUSAND FIVE HUNDRED (OR ASSIGNED ALTITUDE) REQUEST (RIGHT OR LEFT) BASE RUNWAY (ONE FOUR OR THREE TWO)"* and other intentions as appropriate. Tower may hold a Tactical Arrival at an appropriate VFR altitude temporarily for sequencing and separation. Tower shall coordinate holding with RAPCON and SCT and notify both facilities Tactical Arrival is resuming procedure.

Figure 4.2. TAC EAST Arrival.

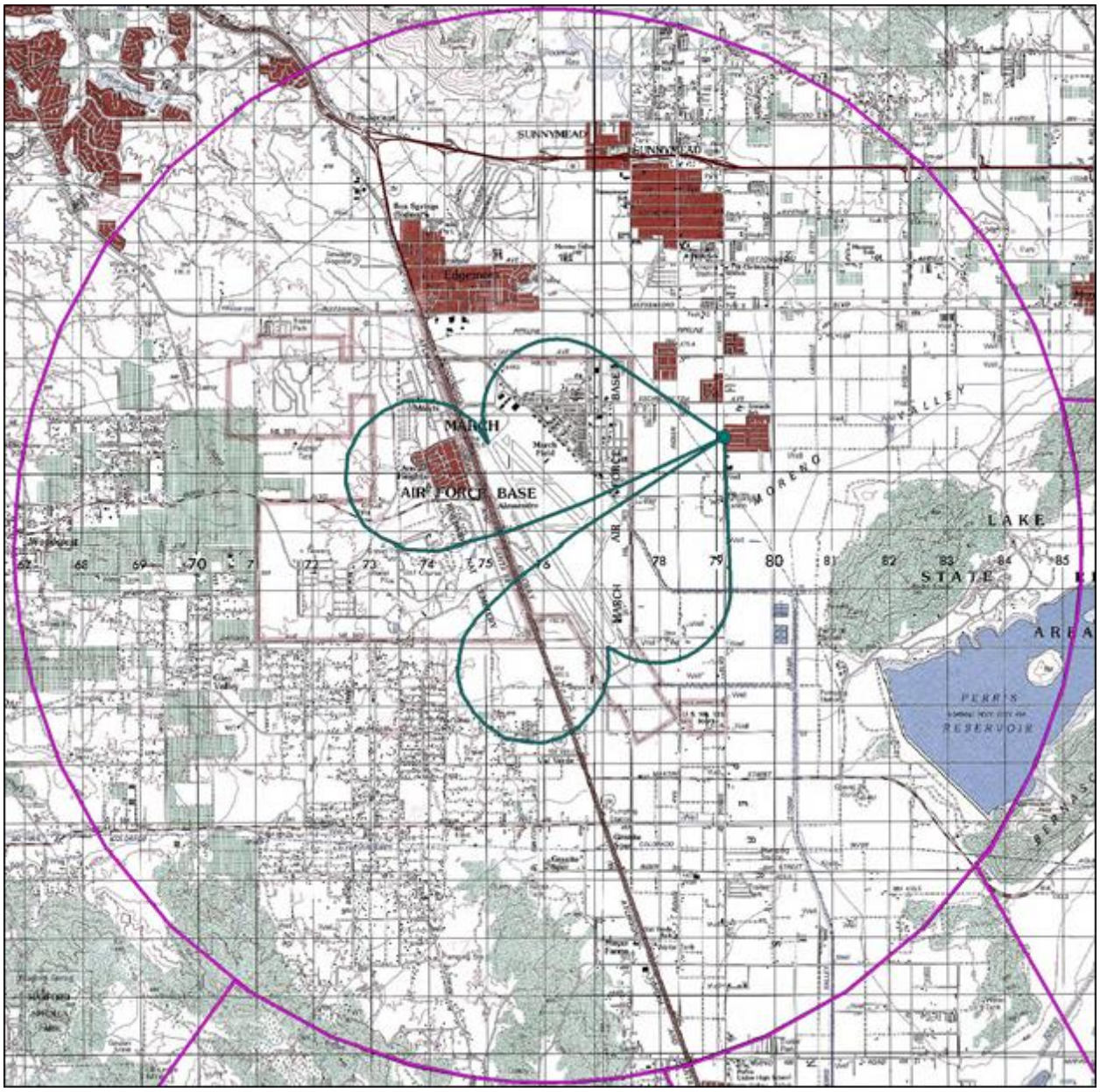
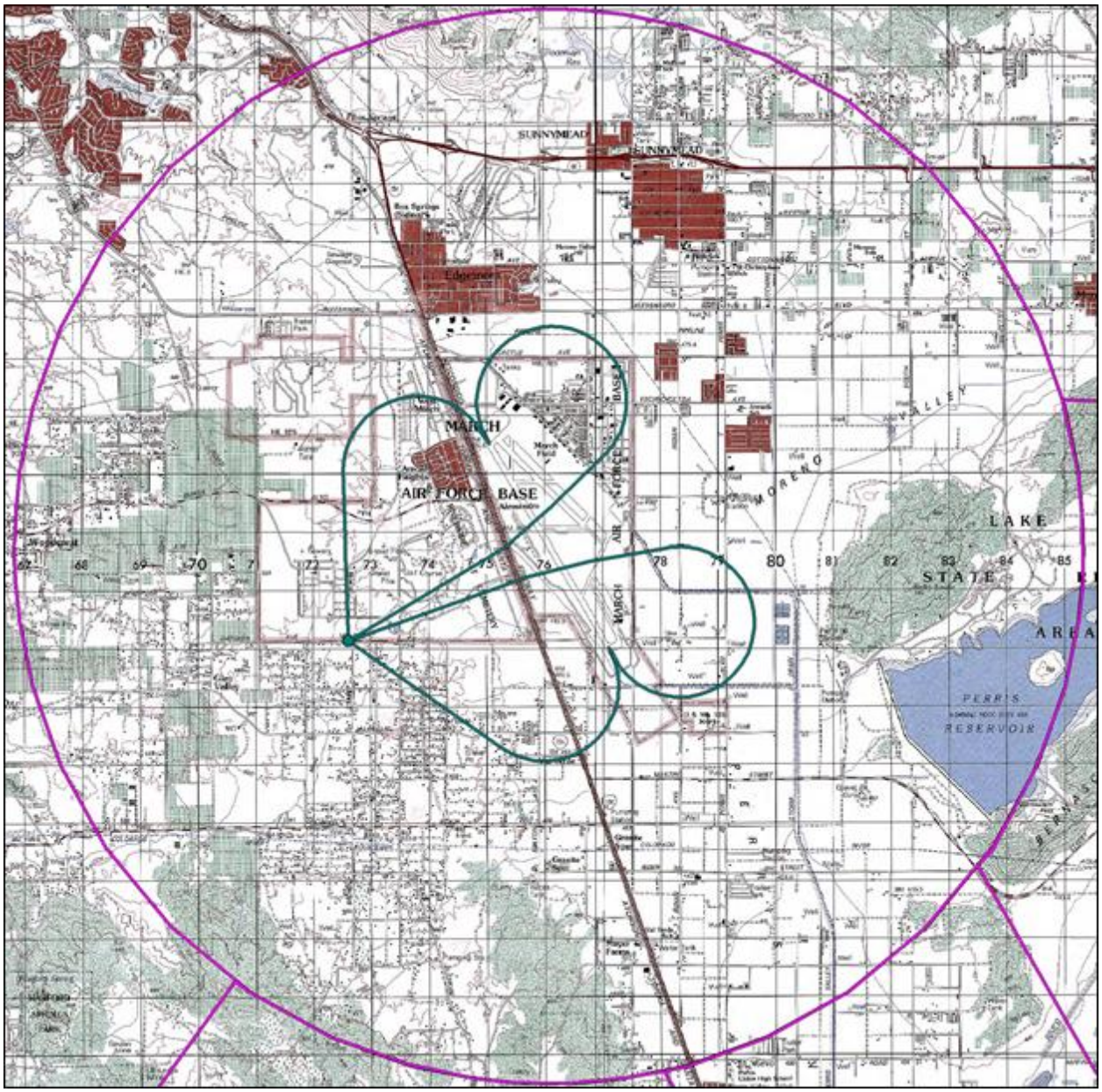


Figure 4.3. TAC WEST Arrival.



4.16.2.5. Heavy Overhead Pattern Arrival.

4.16.2.5.1. Restrictions.

4.16.2.5.1.1. Tower shall not approve a Heavy Overhead Pattern arrival if a Tactical Arrival is in progress.

4.16.2.5.2. Procedure. Pilots shall request vectors for the Heavy Overhead Pattern with RAPCON or SCT when RAPCON is not available. Pilots of multi-aircraft formations should advise SCT or RAPCON if non-standard and block altitudes assigned. Single aircraft shall utilize a standard overhead pattern arrival at or below 5,500 ft MSL. Non-standard multi-aircraft formations shall have lead at 3,500 ft MSL for the initial. Succeeding aircraft in the formation shall be at block altitude 500

ft above the preceding aircraft and 1 NM in trail. RAPCON or SCT will clear the formation for a visual approach and transfer communications to Tower no later than 6 NM. Lead pilot shall contact Tower and report initial 3-5 NM from approach end threshold. Lead aircraft shall break within the first 3,000 ft of the approach end threshold of the runway. Tower may adjust break for lead aircraft only as appropriate to traffic conditions. Succeeding aircraft shall break 1 NM beyond the break point of the preceding aircraft. Succeeding aircraft other than the lead aircraft shall not descend to overhead pattern altitude, 3,500 ft MSL, until established on downwind. Base turns will be made appropriate to ensure spacing between aircraft crossing the runway threshold. Tower may adjust spacing necessary to ensure separation.

4.16.3. Night Vision Device (NVD) Procedures. (T-0)

4.16.3.1. Applicability.

4.16.3.1.1. C-17s assigned to 729 AS.

4.16.3.1.2. Aircraft assigned to CBP RAU.

4.16.3.1.3. Other USG-owned aircraft when coordinated through the AOM via LOA, and approved by 452 OG/CC and HQ AFRC/A3OA.

4.16.3.2. Restrictions.

4.16.3.2.1. Tower shall not use NVDs to control aircraft.

4.16.3.2.2. Tower shall not afford NVD operations priority over non-NVD operations except as directed in **4.8.3** or **4.16.3.3.3**.

4.16.3.2.3. Tower shall not mix non-participating aircraft and participating NVD aircraft in any traffic pattern or on any controlled movement area.

4.16.3.2.4. Tower shall not provide visual separation between NVD aircraft.

4.16.3.2.5. Tower shall not make airfield lighting adjustments without notifying NVD aircraft.

4.16.3.2.6. The airport rotating beacon shall not be turned off for NVD operations.

4.16.3.2.7. Tower shall not authorize successive NVD aircraft departures from same, parallel or crossing flight paths unless the trailing aircraft reports lead aircraft in sight.

4.16.3.2.8. NVD operations shall not be conducted with aircraft lighting out IAW 14 CFR §91.209.

4.16.3.2.9. NVD pattern operations are limited to two NVD aircraft.

4.16.3.2.10. NVD operations to any runway shall not be conducted simultaneously with combat offload training on Taxiway C.

4.16.3.2.11. Vehicle operations, other than AM operated vehicles, are prohibited in the CMA during NVD operations. Any vehicles operating in the CMA while NVD operations are in progress are required to have NVD compatible lights.

4.16.3.3. Procedures.

4.16.3.3.1. Scheduling. 452 OSS/OSO shall indicate on the daily flying schedule all C-17 sorties involving operational/training use of NVDs. AM shall coordinate and submit a NOTAM indicating scheduled NVD operations including phrase *"NON-BASE ASSIGNED AIRCRAFT WILL NOT BE GRANTED TRANSITION TRAINING UNTIL NVD OPS IS COMPLETE."* 452 OSS/OSO shall not schedule combat offload training simultaneously with NVD operations. All missions and/or training sorties conducted by CBP RAU at night will be assumed to be capable of, and using NVDs.

4.16.3.3.2. Weather Requirements. Reported weather shall not be lower than:

4.16.3.3.2.1. Fixed-wing Aircraft. Lowest ceiling 1,500 ft AGL; visibility 3 SM.

4.16.3.3.2.2. Rotary-wing Aircraft. Lowest ceiling 1,000 ft AGL; visibility 3 SM.

4.16.3.3.3. NVD operations will be conducted and approved on a non-interference basis and without priority above non-NVD operations (CBP RAU only). Tower will apply priority **4.8.13** as appropriate.

4.16.3.3.4. Pilots of NVD aircraft shall request NVD operations using the phrase, "*REQUEST COVERT LIGHTING*" upon initial contact or when already in contact with Tower.

4.16.3.3.5. Tower shall notify AM of NVD operations. Tower shall amend the ATIS with remarks of NVD operations in progress for the duration of operations and remove when NVD operations cease. Tower cab lighting may remain in a normal configuration.

4.16.3.3.6. Tower shall resolve all conflicts with non-participating aircraft prior to approving NVD operations. Tower will approve NVD operations using the phrase "*COVERT OPERATIONS APPROVED, ALL LANDINGS WILL BE AT YOUR OWN RISK, RUNWAY XX, REPORT GEAR DOWN PRIOR TO EACH LANDING*" and adjust airfield lighting. Landing clearance will not be issued due to Tower unable to assure a visually cleared landing surface without adequate airfield and ambient lighting. Tower may taxi/hover taxi NVD aircraft as needed. Tower will issue safety advisories IAW FAA JO 7110.65.

4.16.3.3.7. Pilots of NVD aircraft may utilize any VFR pattern with Tower approval described in this Instruction and shall fly patterns as described including reporting position at appropriate times. Pilots of rotary-wing aircraft shall conduct NVD operations at or below 1,000 ft AGL unless in the traffic pattern. Pilots of NVD aircraft shall immediately notify Tower if visual contact of previously issued traffic is lost. Pilots may request normal airfield lighting while remaining under NVD operations for the purposes of training multiple pilots on the same aircraft. Pilots of NVD aircraft shall terminate NVD operations immediately when Tower states, "*TERMINATE, TERMINATE, TERMINATE COVERT OPERATIONS.*" Pilots or Tower may terminate NVD operations at any time.

4.16.3.3.8. Pilots of NVD aircraft may perform NVD combat offload training on Taxiway Charlie IAW 3.18.

4.16.3.3.9. Tower shall issue "*TERMINATE, TERMINATE, TERMINATE COVERT OPERATIONS*," whenever a situation develops precluding safe execution of NVD procedures. Tower shall terminate NVD operations whenever an emergency is declared in the air or on the ground. Tower will implement and apply standard separation between all aircraft IAW FAA JO 7110.65 whenever NVD operations are terminated or complete. Tower will provide specific instructions to all aircraft as necessary to maintain safety and return airfield lighting to normal configuration.

4.16.3.3.10. Tower shall suspend NVD operations for non-participating aircraft and return to the normal airfield lighting configuration:

4.16.3.3.10.1. IFR Departure. Prior to taxi to runway.

4.16.3.3.10.2. IFR Arrival. Prior to establishment on an instrument approach final segment.

4.16.3.3.10.3. VFR Departure. Prior to taxi to runway.

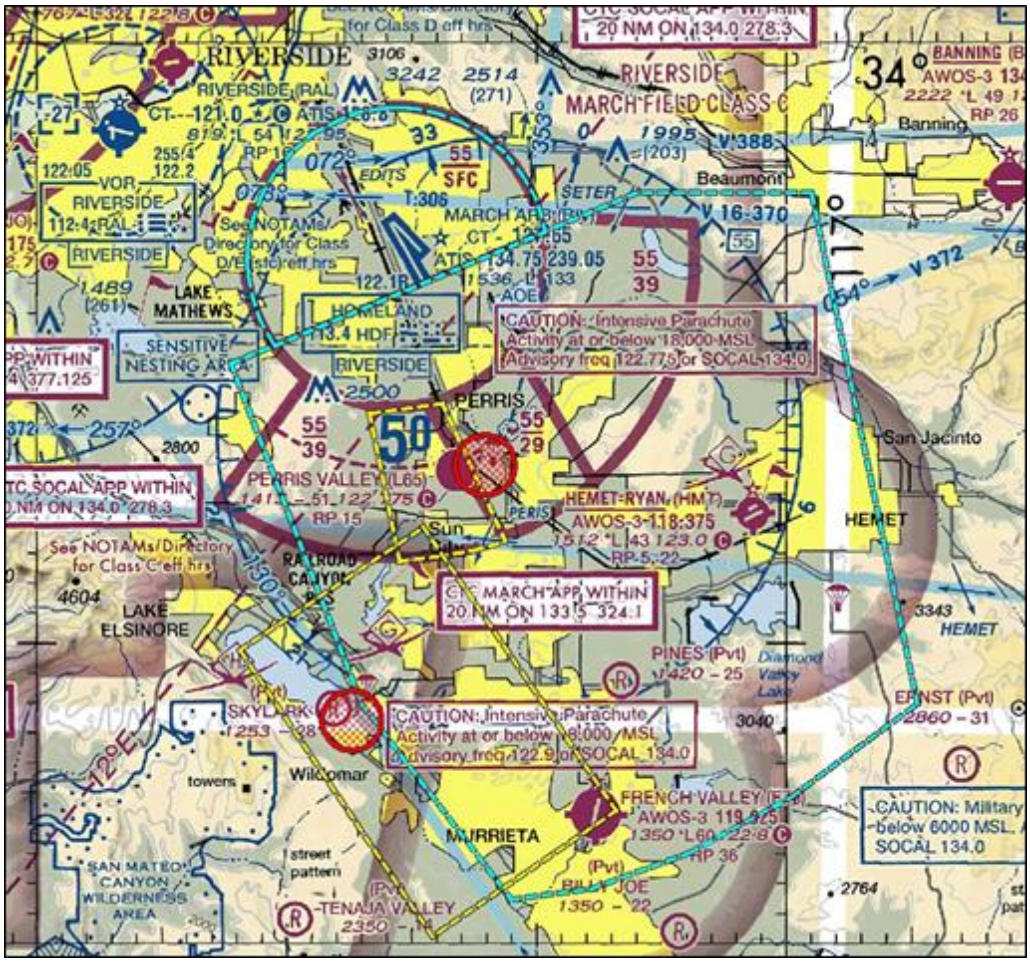
4.16.3.3.10.4. VFR Arrival. Prior to entering March Class C surface area.

4.16.3.3.11. Pilots of NVD aircraft shall notify Tower when NVD operations are complete by stating, "*COVERT OPERATIONS COMPLETE FOR THE REMAINDER OF THE SORTIE.*" Tower shall notify AM when NVD operations are complete.

4.16.4. Paradrop/Jump Procedures. No areas are designated for paradrops/jumps at March ARB. Paradrops/jumps shall be conducted only when approved by 452 OG/CC and coordinated through the AOM. (T-0)

4.16.4.1. Perris Jump Zone. The Perris jump zone is open daily, weekends, and holidays from sunrise to 30 minutes past sunset and may be open other days and hours, as coordinated. Pilots shall be in contact at least 5 minutes before parachute operations begin. Once the last skydiver has departed the aircraft, the aircraft will no longer be considered to be conducting parachute operations. Pilots shall remain within the Perris Jump Zone Climb/Descent Area while in Class C airspace. Pilots shall utilize the pre-assigned beacon code on departure. Pilots shall contact the appropriate ATC facility for VFR traffic advisories and advise of planned jump altitude(s), and any other pertinent information. Pilots shall advise the appropriate ATC facility two minutes prior to releasing jumpers, advise when last jumper is away, and aircraft is descending. Aircraft shall remain above the highest jumper until below 4,000 ft MSL. Jump activity shall be discontinued if two-way radio contact is lost prior to any jump activity. If two-way radio contact is lost after release of jumpers, jump activity may continue to conclusion. Pilots shall alternate beacon code between pre-assigned and 7600 until aircraft is on the ground. (T-0)

Figure 4.4. Perris and Skylark Jump Zones.



4.16.4.2. Skylark Field Jump Zone. The Skylark Field jump zone is open daily, weekends, and holidays from sunrise to 30 minutes past sunset and may be open other days and hours, as coordinated. Pilots shall be in contact at least 5 minutes before parachute operations begin. Once the last skydiver has departed the aircraft, the aircraft will no longer be considered to be conducting parachute operations. Pilots shall request approval prior to operating outside the Skylark Field Jump Zone Climb/Descent Area. Pilots shall utilize the pre-assigned beacon code on departure. Pilots shall contact the appropriate ATC facility for VFR traffic advisories and advise of planned jump altitude(s), and any other pertinent information. Pilots shall advise the appropriate ATC facility two minutes prior to releasing jumpers, advise when last jumper is away, and aircraft is descending. Aircraft shall remain above the highest jumper until below 4,000 ft MSL. Jump activity shall be discontinued if two-way radio contact is lost prior to any jump activity. If two-way radio contact is lost after release of jumpers, jump activity may continue to conclusion. Pilots shall alternate beacon code between pre-assigned and 7600 until aircraft is on the ground. (T-0)

4.16.5. Drag Chute Procedures. Runway 32 is the preferred runway for aircraft arriving with drag chutes. Aircraft with drag chutes will be directed to Taxiway Delta and release drag

chute on the taxiway between Runway 14/32 and Runway 12/30. TA will retrieve drag chute and return it to supporting maintenance personnel. (T-0)

4.16.6. AR-209 Procedures. (T-0)

4.16.6.1. Applicability. March ARB assigned KC-135 aircraft.

4.16.6.2. Restrictions.

4.16.6.2.1. Simultaneous operations are not authorized or permitted to be scheduled. Operations shall be conducted or scheduled with a minimum of 45 minutes between the exit of a preceding operation and entry of a succeeding operation.

4.16.6.2.2. Refueling is authorized FL230 and below and shall consist of 3,000 ft block altitudes.

4.16.6.3. Procedures.

4.16.6.3.1. Aircraft shall obtain an oceanic release with IFR clearance through Ground Control (Clearance Delivery) using the phrase "AR-209."

4.16.6.3.2. AR-209 westbound operations shall be in cell formation from departure. Holding at FICKY will be authorized as required.

4.16.6.3.3. Aircraft will establish AF communications with San Francisco ARINC (frequency to be provided) prior to receiving clearance into AR209. Aircraft operating in AR209 will be VHF and High Frequency (HF) equipped.

4.16.6.3.4. Aircraft will remain on their assigned Mode 3 transponder code, even after radar service termination, to assist in radar identification on the inbound route for AMIS purposes.

4.16.6.3.5. Aircraft will provide estimated times for the planned turn around point, inbound (FICKY), and exit (ROSIN) to the center prior to radar service termination and then normal oceanic reporting procedures apply.

4.16.6.3.6. When reversing course, maneuvering or orbiting for rendezvous, all turns shall be made south of the published AR-209 track.

4.17. Aeromedical Evacuation Operations.

4.17.1. Base Assigned Missions. Home station generated aeromedical evacuation missions shall be listed on the daily flying schedule. Arriving aircraft shall provide a 60 minute prior to ETA out call to AM. AM shall notify CP, MOC, ATOC, ECC, Tower and RAPCON. (T-0)

4.17.2. Transient Missions. AM shall notify CP, TA, ATOC, ECC, Tower and RAPCON when receiving a PPR for an aeromedical evacuation mission. Arriving aircraft shall provide a 60 minute prior to ETA out call to AM. AM shall notify CP, TA, ATOC, ECC, Tower and RAPCON. RAPCON, or Tower when RAPCON is closed, shall notify AM when an arriving aircraft is 15 NM from March ARB. AM shall notify CP, TA, ATOC, and ECC of 15 NM out call. (T-0)

4.18. Helicopter Operations.

4.18.1. Arrival and Departure Restrictions. Helicopter arrivals or departures are not authorized on any apron area northeast of Taxiway Alpha.

4.18.2. Operations in Class C Surface Area. Helicopter operators not conducting traffic patterns to Runway 12/30 or 14/32 or transiting through March Class C surface area will normally be assigned a Class C Sector (see **2.8.8.1**). When assigned a sector, under VFR or Special Visual Flight Rules (SVFR), helicopters shall maintain at or below 1,000 ft AGL and maintain visual reference to the surface at all times. Assignment to a sector constitutes approval by Tower to transition through all other sectors to enter the assigned sector unless otherwise directed. (T-0)

4.19. Unmanned Aircraft Operations.

4.19.1. MQ-9 Operations. (T-0)

4.19.1.1. General. RPAs will operate at March ARB using two alternate means of compliance for 14 CFR Part 91 §91.113(b). A Supervisor of Flying (SOF) concept is utilized to satisfy 14 CFR Part 91 §91.113(b) requirements to provide visual separation from other aircraft during RPA flying operations in March Class C airspace traffic pattern and during day taxi operations at March ARB. The SOF is the dedicated observer located in the Control Tower in direct communication with the pilot. An Apple Valley Airport (APV)-based chase aircraft is used to satisfy 14 CFR Part 91 §91.113(b) requirements to provide visual separation from other aircraft while operating outside of March Class C airspace and R-2515. RPA operations include departure from March ARB, transit to/from R-2515, arrival at March ARB, and closed pattern operations at March ARB. RPA operations are conducted in VMC and under VFR only. Emergency procedures are delineated as appropriate to phase of flight or pattern flown.

4.19.1.2. Applicability. 163 OG (CA ANG) assigned MQ-9 aircraft and contracted chase aircraft.

4.19.1.3. Restrictions. Unmanned aircraft and/or RPA procedures are provided for operational awareness. These procedures do not supersede any amended or revised procedures contained in the most current FAA Certificate of Authorization/Waiver (COA) that pertains to this operation.

4.19.1.3.1. 163 OG shall operate RPAs only when RIV is providing Class C services and approach control services 0700-2300L. 163 OG shall not plan or schedule RPA departures or VFR closed pattern work between Sunday thru Saturday, 0900-1100L. Saturday and Sunday operations will not normally be scheduled 0900-1100L unless prior coordinated with 452 OSS/OSO.

4.19.1.3.2. 163 OG shall maintain a SOF position in the Control Tower when RPA taxi and flight operations are in progress. SOF shall utilize designated frequency for all communications with RPA crew or as permitted by the Control Tower WS/Controller-in-Charge (CIC). SOF when assigned as a visual observer, shall be assigned one RPA and have no additional responsibilities. SOF as visual observer assists the Unmanned Aircraft System (UAS) Pilot-in-Command (PIC) during all UAS operations in the duties associated with see-and avoid responsibilities and navigational awareness. SOF and PIC shall coordinate properly to ensure control

instructions are complied with, flight path is adjusted, and visual separation is maintained from other traffic.

4.19.1.3.3. 452 OSS/OSAB duty priority and operational priority shall favor manned aircraft over unmanned aircraft (RPA) unless specifically directed by 452 OG/CC.

4.19.1.3.4. Arresting cables shall remain in the down position for all RPA operations.

4.19.1.3.5. RPAs shall not use Runway 12/30 due to insufficient runway length and deteriorating pavement conditions.

4.19.1.3.6. Multiple RPAs are prohibited from operating in the same closed traffic pattern. A single RPA may operate in the closed traffic pattern when one or more RPAs are either departing the runway/Class C airspace or arriving to the same runway for a full-stop landing. Control Tower will issue control instructions to ensure separation is maintained IAW FAA JO 7110.65.

4.19.1.3.7. Civil aircraft and RPAs in same closed traffic patterns are prohibited.

4.19.1.3.8. Single or multiple manned military aircraft with single or multiple RPAs in same closed traffic patterns are prohibited. Single or multiple manned military aircraft in west closed traffic pattern with single RPA in east closed traffic is permitted. A manned military aircraft or a RPA departure or arrival is permitted with single or multiple manned military aircraft in west closed traffic pattern with single RPA in east closed traffic. Control Tower will issue control instructions to ensure separation is maintained IAW FAA JO 7110.65.

4.19.1.3.9. 163 OG RPAs and chase aircraft shall use only VHF radio frequencies to communicate with ATC when operating in Class C, D, E or G airspace delegated to March Tower and RAPCON, and any Special Use Airspace (Regulatory and Non-Regulatory), and Temporary Flight Restriction (TFR); unless radio frequencies are otherwise directed specifically for that TFR within same airspace.

4.19.1.3.10. RPAs limited to Airport Surveillance Radar (ASR) and Precision Approach Radar (PAR) Instrument Approach Procedure (IAP) during RPA emergencies only. All other IAPs and SVFR are not authorized.

4.19.1.3.11. RPAs shall not be scheduled nor fly during scheduled and unscheduled preventative maintenance periods for the AN/GPN-30 Digital Airport Surveillance Radar (DASR) or when DASR is unusable by ATC. DASR no-NOTAM maintenance is 0700-0900L every Wednesday.

4.19.1.4. Procedures.

4.19.1.4.1. General. ATC shall describe RPA to other aircraft as "*UMANNED AIRCRAFT*" or "*UNMANNED MQ-9*" in all communications. RPAs will be assigned discrete Mode 3/A transponder code by ATC and shall broadcast assigned code and Mode C in all airspace detailed in 4.19.1.3.9. or as directed by appropriate authority. SOF will notify Tower Watch Supervisor or Controller-in-Charge of initiation and completion of daily flight operations. Tower will notify SCT prior to commencing RPA operations and upon termination. SOF notification shall be no later than engine start for the first scheduled RPA operation of the day or engine shut down for the last scheduled RPA operation of the day as appropriate. Tower will include the following

advisory on the ATIS, "*UNMANNED AIRCRAFT OPERATIONS ARE IN PROGRESS,*" when RPA requests to taxi or 15 minutes prior to its ETA, if operating outside of March airspace. Tower will terminate advisory when RPA operations are complete; RPA is not returning for over one hour, or when RPA lands, exits the runway, and no longer poses a potential impact to taxi operations.

4.19.1.4.2. Rectangular Pattern. RPAs shall fly an east rectangular pattern for Runway 14 and Runway 32 (See **Figure 4.5**). Runway 14 rectangular pattern is left closed traffic east of March ARB and pattern altitude is 3,000 ft MSL. Runway 32 rectangular pattern is right closed traffic east of March ARB and pattern altitude is 3,000 ft MSL. Tower shall restrict any TAC EAST arrival and departure to cross mid-field of Runway 14/32 at or above 4,000 ft MSL. Tower shall not authorize a GRZLY arrival or departure or any airborne pickup when a TAC EAST arrival or departure has been approved or in progress and an RPA is in the east rectangular pattern.

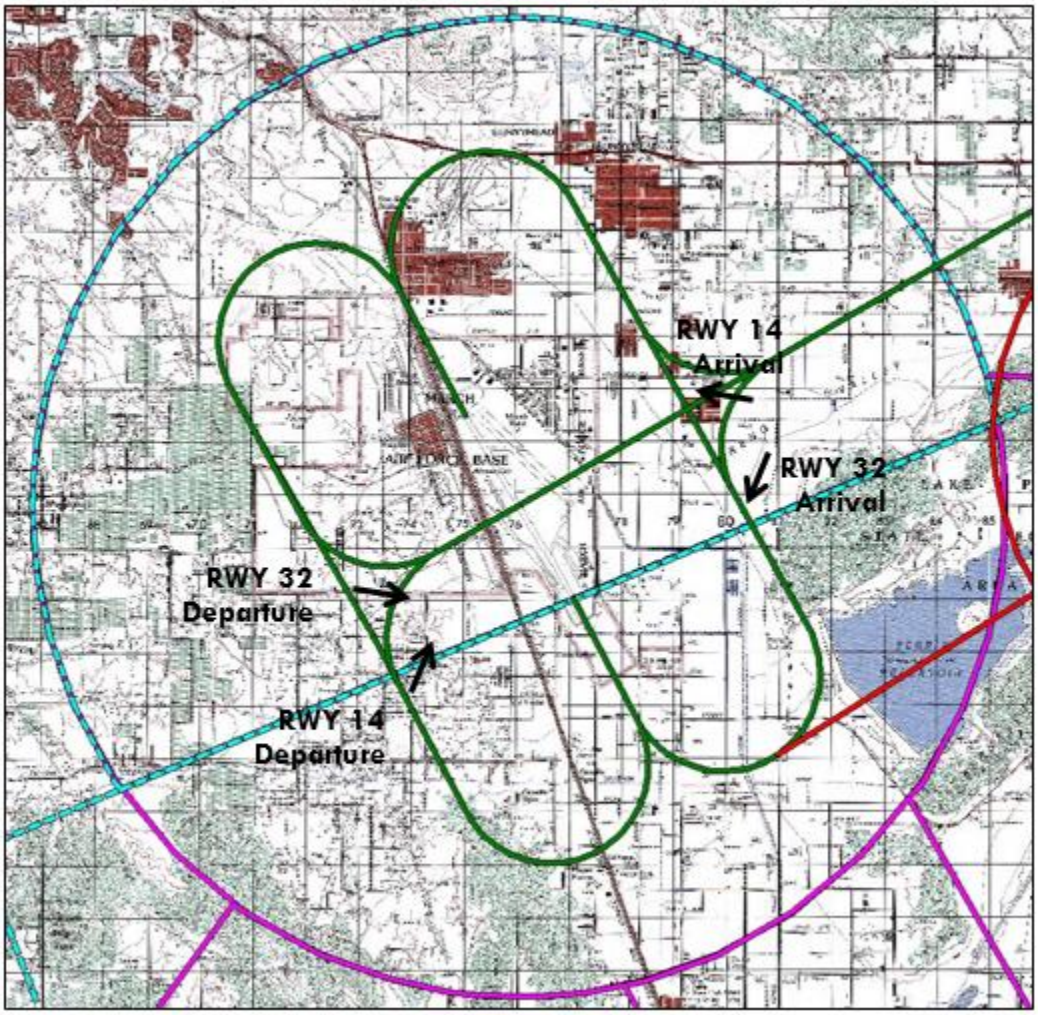
4.19.1.4.2.1. A west pattern to Runway 14 and Runway 32 may be flown when no other aircraft are in the west pattern and directed by Tower using phraseology, "*FLY WEST PATTERN.*" Tower shall direct transition back to the east pattern when any other aircraft intends to depart, arrive, or enter any pattern to Runway 14/32 and by directing, "*FLY EAST PATTERN.*" Transitions will be directed prior to crossing runway threshold and RPAs are expected to transition by flying upwind and making the appropriate turn into the pattern directed.

4.19.1.4.2.2. Typical pattern airspeed for RPA is 110-115 knots indicated airspeed (KIAS). RPAs shall climb at a minimum of 1,200 ft/min upon departure and airborne and shall descend at a rate appropriate for the aircraft. RPA crews shall report established in the downwind leg and on base leg on every circuit of the rectangular pattern unless otherwise directed by Tower.

4.19.1.4.2.3. Tower may adjust length of rectangular pattern by directing, "*CONTINUE UPWIND/DOWNWIND, I'LL CALL YOUR CROSSWIND/BASE TURN,*" and the instruction to "*TURN CROSSWIND*" or "*BASE TURN APPROVED.*" RPAs are expected to either continue flying upwind on departure and make the crosswind turn as directed or continue flying downwind and make the base turn as directed. SOF shall immediately notify Tower, before losing visual contact, when any pattern adjustments prevents maintaining visual contact on the RPA or visual separation from other aircraft. Tower will amend instructions as necessary.

4.19.1.4.2.4. Entry to rectangular pattern for a GRZLY arrival is from Point Golf via left mid-field downwind entry for Runway 14 and right mid-field downwind entry for Runway 32 at 3,000 ft MSL or as directed by Tower. Follow GRZLY VFR Departure procedure to depart rectangular pattern.

Figure 4.5. MQ-9 Runway 14/32 Rectangular Pattern.

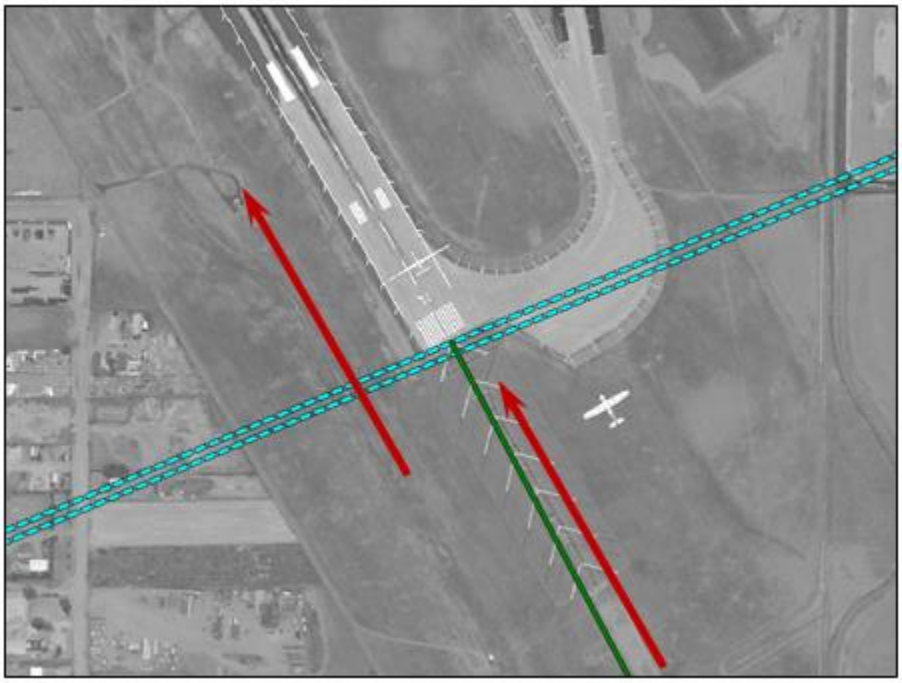


4.19.1.4.3. Airborne Pickup. RPAs departing March ARB using a chase aircraft with a dedicated visual observer as the alternate means of compliance to 14 CFR Part 91 §91.113(b) requirements shall follow these procedures to obtain and maintain chase aircraft formation flight. Tower shall not approve west pattern airborne pickups. Chase aircraft shall communicate for both aircraft when established in formation flight. RPA crew shall verbally indicate successfully established in formation. Chase aircraft and RPA crew shall indicate operating as single individual aircraft when standard separation is assured. March ATC shall treat RPA and chase aircraft as a formation when indicated by chase aircraft and treat RPA and chase aircraft separately as single individual aircraft when standard separation is assured and indicated by crews of both aircraft. Normally, airborne pickup is utilized for GRZLY VFR departure. Tower shall not authorize a GRZLY arrival or departure or any airborne pickup when a TAC EAST arrival or departure has been approved or in progress and an RPA is in the east rectangular pattern.

4.19.1.4.3.1. Formation Departure. RPA and chase aircraft will taxi to runway together and be treated as a formation flight. After clearance for takeoff is issued

by Control Tower, RPA and chase aircraft will line up and wait on runway. Chase aircraft will begin takeoff roll and depart the runway in the closed east rectangular pattern while RPA remains in position. Chase aircraft will communicate with RPA crew to indicate when to begin departure roll. Chase aircraft will fly a low approach parallel and offset to the runway centerline (See **Figure 4.6**), at or above 200 ft AGL, and the pilot/observer shall maintain proper visual separation from the RPA. RPA will takeoff, fly runway heading, and accelerate until chase is established in formation. If another RPA is in the east rectangular pattern closed traffic, that RPA shall be directed by Tower to overfly the runway at pattern altitude or adjust the pattern as needed to effect a successful airborne pickup. Tower shall issue traffic advisories to pilot/visual observers for each RPA.

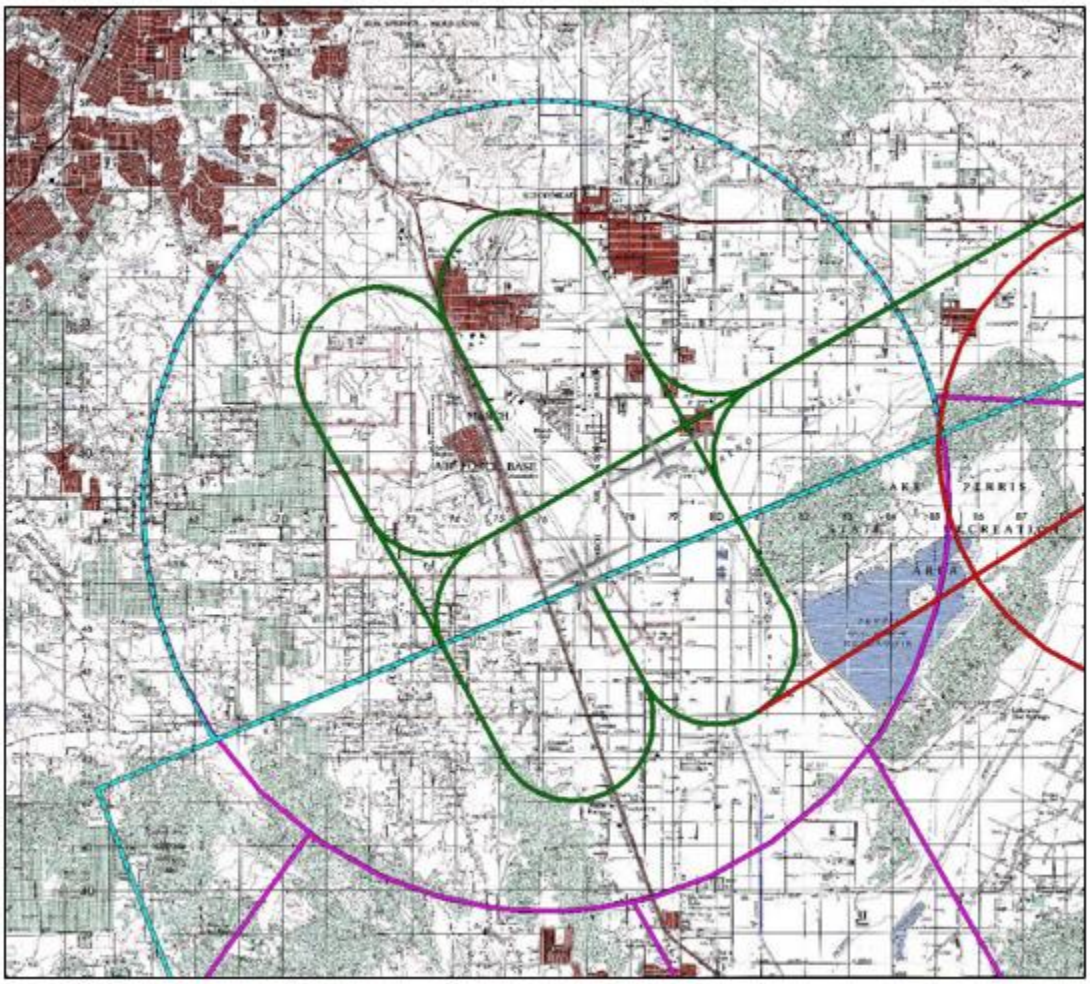
Figure 4.6. MQ-9 Formation Departure.



4.19.1.4.3.2. Closed Traffic Departure RPA on Ground. RPA will taxi to runway without chase aircraft. Chase aircraft will fly closed traffic east rectangular pattern without descending to the runway for landing until RPA is cleared for takeoff (See **Figure 4.7**). Tower will clear RPA for takeoff and issue approval for airborne pickup. RPA will taxi and line up and wait. Chase aircraft will communicate with RPA crew to indicate when to begin departure roll. Chase aircraft pilot/observer shall maintain visual separation from the RPA. Chase aircraft will fly a low approach parallel and offset to the runway centerline at or above 200 ft AGL. RPA will takeoff, fly runway heading, and accelerate until chase is established in formation. Tower will treat RPA and chase aircraft as separate individual aircraft until chase aircraft crew indicates established in formation. If another RPA is in the east rectangular pattern closed traffic, that RPA shall be directed by Tower to overfly the runway at pattern altitude or adjust

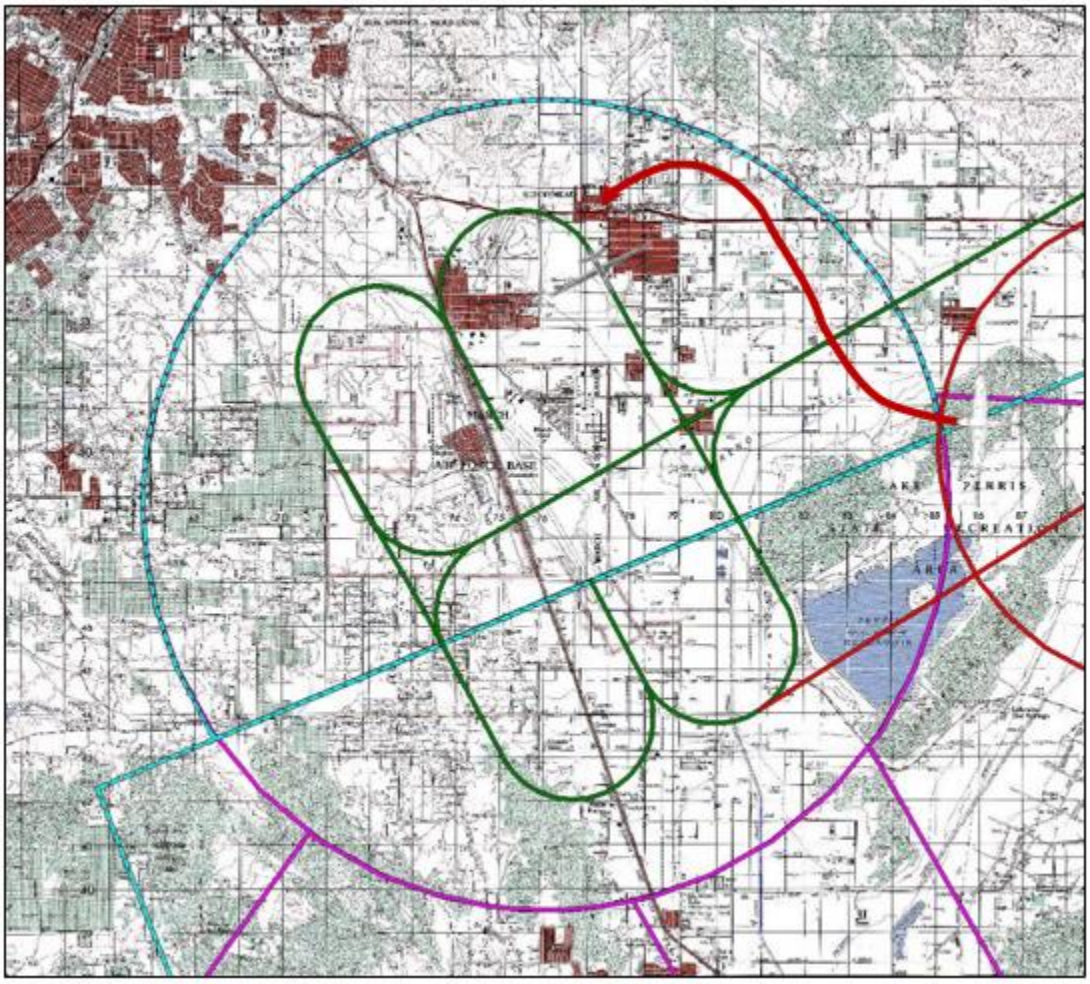
the pattern as needed to effect a successful airborne pickup. Tower shall issue traffic advisories to pilot/visual observers for each RPA.

Figure 4.7. MQ-9 Closed Traffic Departure RPA on Ground.



4.19.1.4.3.3. RPA in Closed Rectangular Traffic Airborne. RPA will fly closed rectangular pattern. Tower will provide the RPA's location to the chase aircraft. Chase aircraft shall verify visual identification of RPA to Tower, obtain Tower approval to join the RPA in formation at a location in the traffic pattern, and obtain Tower approval to fly directly to RPA (See **Figure 4.8**). Chase aircraft shall maintain visual separation from RPA at all times. RPA crew and chase crew may coordinate verbally over ATC frequency as necessary for airborne pickup but should be brief as possible. Tower may approve an airborne pickup while RPA is departing the rectangular pattern on the GRZLY route. Tower will treat RPA and chase aircraft as separate individual aircraft until chase aircraft crew indicates established in formation.

Figure 4.8. MQ-9 in Closed Rectangular Traffic Airborne.

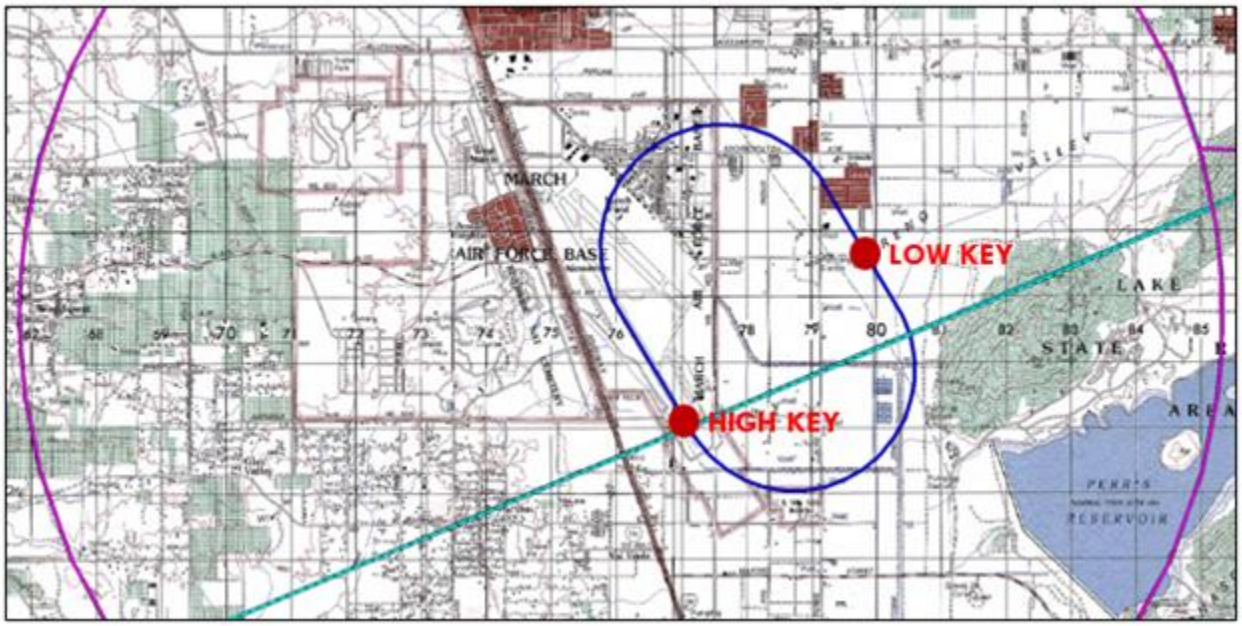


4.19.1.4.4. Simulated Flameout (SFO) Pattern.

4.19.1.4.4.1. Restrictions. RPAs are prohibited from flying a SFO pattern when visibility is less than 3 SM and ceiling is less than 3,000 ft AGL. SFOs are prohibited between official sunset and sunrise. SFOs shall not be performed with chase aircraft. SFOs are not authorized for Runway 14. SFOs shall be terminated and RPA directed to rectangular pattern when any other aircraft intends to depart, arrive, or enter any pattern to Runway 14/32.

4.19.1.4.4.2. The SFO pattern for RPAs will be flown similar to the SFO pattern described in FAA JO 7110.65. The SFO pattern is east of Runway 14/32 (See **Figure 4.9**). HIGH KEY is flown on runway heading, on centerline, entered at the approach end of the runway, at or above 4,000 ft MSL. LOW KEY is between the first one third of the runway and half mile of the approach end of the runway approximately 2,800 ft MSL. Maneuver shall be limited to a low approach to the runway. RPAs shall remain within 2 NM of the runway during the maneuver.

Figure 4.9. MQ-9 Simulated Flameout (SFO) Pattern.



4.19.1.4.4.3. RPA crews shall obtain approval for SFOs from Tower prior to entering SFO pattern using the phraseology, "*REQUEST HIGH KEY AT (ALTITUDE).*" Tower will either approve SFO by stating, "*REPORT HIGH KEY*", or disapprove by providing alternate instructions. RPA crew will enter SFO pattern if approved and indicate at HIGH KEY by transmitting, "*c/s HIGH KEY.*" Tower will direct RPA to proceed with SFO to LOW KEY with, "*REPORT LOW KEY*" or if unable to proceed with SFO to hold at HIGH KEY with directive, "*ORBIT AT HIGH KEY.*" RPA crew will indicate reaching LOW KEY by stating, "*LOW KEY.*" Tower shall issue an appropriate clearance to the runway or alternate instructions and departure instructions. Successive SFOs are authorized; RPA crews shall indicate intentions prior to reaching LOW KEY.

4.19.1.4.5. En Route Transition Operations. RPAs will follow the prescribed routes when en route between March ARB and R-2515.

4.19.1.4.5.1. GRZLY VFR Departure. Procedure will be flown using basic radar advisory service and Class C separation requirements throughout entire transit through NAS airspace to R-2515 (See **Figure 4.10** and **Table 4.3**) with chase aircraft (see **4.19.1.4.3**). RPA crew and chase aircraft crew shall follow and comply with all ATC instructions on directed frequencies. RPAs shall fly a minimum airspeed of 110 KIAS and climb at a minimum of 1,200 ft/min. Tower shall not authorize a GRZLY arrival or departure or any airborne pickup when a TAC EAST arrival or departure has been approved or in progress and an RPA is in the east rectangular pattern. Tower shall issue a GRZLY departure restriction to the RPA to cross mid-field at or above 3,500 ft MSL or an appropriate altitude restriction when traffic conditions permit when an RPA is in the east rectangular pattern.

Table 4.3. En Route Transition from KRIV to R-2515 and Reverse.

NAME	FRD	COORDINATES	Remarks
KRIV	RIV141002	N 33°52'51.93" W 117°15'33.70”	
Golf	RIV056010	N 33°57'39.00" W 117°05'29.40"	
Yucaipa	RIV040012	N 34°01'19.80" W 117°05'03.60"	
Mill Creek	RIV036015	N 34°04'09.00" W 117°02'22.20"	
Canyon	RIV034017	N 34°06'06.00" W 117°00'56.40"	
River	RIV023018	N 34°09'09.00" W 117°03'11.40"	
Arrowhead	RIV001019	N 34°12'34.02" W 117°10'23.09"	
Cajon Pass	VCV153019	N 34°17'11.71" W 117°18'05.27"	
Farmington	VCV167013	N 34°22'32.40" W 117°23'34.20"	
VCV	VCV024000	N 34°35'59.40" W 117°23'04.80"	
Grizzly	EDW088026	N 34°53’09.00” W 117°13’16.20”	
R2515/4Cnrs			**Delay for mission**
Grizzly	EDW088026	N 34°53’09.00” W 117°13’16.20”	
VCV	VCV167013	N 34°35'59.40" W 117°23'04.80"	
Farmington	VCV167013	N 34°22'32.40" W 117°23'34.20"	
Cajon Pass	VCV153019	N 34°17'11.71" W 117°18'05.27"	
Arrowhead	RIV001019	N 34°12'34.02" W 117°10'23.09"	
River	RIV023018	N 34°09'09.00" W 117°03'11.40"	
Canyon	RIV034017	N 34°06'06.00" W 117°00'56.40"	
Mill Creek	RIV036015	N 34°04'09.00" W 117°02'22.20"	
Yucaipa	RIV040012	N 34°01'19.80" W 117°05'03.60"	
Golf	RIV056010	N 33°57'39.00" W 117°05'29.40"	
KRIV	RIV141002	N 33°52'51.93" W 117°15'33.70”	

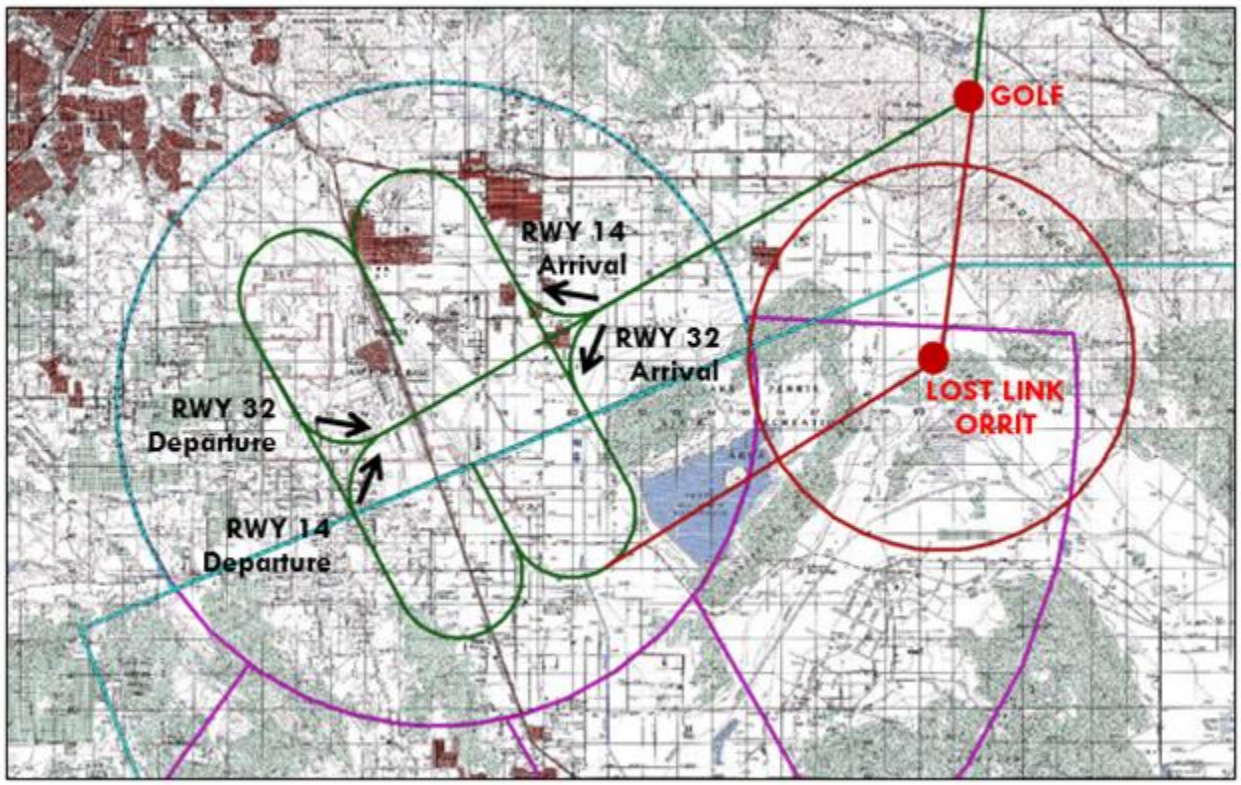
Figure 4.10. GRZLY Route (March Class C to R-2515).

4.19.1.4.5.1.1. Runway 14 (See **Figure 4.11**). RPA will fly runway heading until over the intersection of the extended runway centerline and the Ramona Expressway (N 33°50’40.23” W 117°14’06.62”) and climb to 3,000 ft MSL.

Turn right heading 320° M while remaining within 2 NM of runway centerline and fly downwind to turn right and overfly mid-field (N 33°52’51.93” W 117°15’33.70”) to a heading of 048° M. Cross mid-field at or above 3,500 ft MSL or as otherwise directed by Tower. Climb and maintain 8,500 ft MSL and fly direct to point Golf (N 33°57'39.00" W 117°05'29.40") then route detailed in **Table 4.3**. RPA and chase aircraft shall remain on Tower frequency until point Golf, then directed by Tower to contact SCT for remaining transit to R-2515 or as directed.

4.19.1.4.5.1.2. Runway 32 (See **Figure 4.11**). RPA will fly runway heading until over the intersection of the extended runway centerline and Alessandro Blvd (N 33°55’00.49” W 117°17’00.77”) and climb to 3,000 ft MSL. Turn left heading 140° M while remaining within 2 NM of runway centerline and fly downwind to turn left and overfly mid-field (N 33°52’51.93” W 117°15’33.70”) to a heading of 048° M. Cross mid-field at or above 3,500 ft MSL or as otherwise directed by Tower. Climb and maintain 8,500 ft MSL and fly direct to point Golf (N 33°57'39.00" W 117°05'29.40") then route detailed in **Table 4.3**. RPA and chase aircraft shall remain on Tower frequency until point Golf, then directed by Tower to contact SCT for remaining transit to R-2515 or as directed.

Figure 4.11. GRZLY Route (Class C Detail).



4.19.1.4.5.2. GRZLY VFR Arrival. Procedure will be flown using basic radar advisory service throughout entire transit through NAS airspace to March ARB with chase aircraft. RPA crew and chase aircraft crew shall follow and comply

with all ATC instructions on directed frequencies. RPAs shall fly a minimum airspeed of 110 KIAS and descend at a rate appropriate for the aircraft. RPAs shall fly the reverse route from R-2515 to March ARB detailed in **Table 4.3** at 9,500 ft MSL. RPA crew and chase aircraft crew shall initiate and maintain two-way radio contact with SCT at point Grizzly until point Golf or as directed by ATC. RPAs will proceed direct to March ARB from Golf per instructions from Tower and begin decent to 3,000 ft MSL to enter rectangular pattern. RPAs may request or ATC may direct holding or pattern entry via RIV Lost Link Orbit point 4,500 ft MSL or above. If RPAs approved to arrive via RIV Lost Link Orbit, entry to the rectangular pattern is via HIGH KEY at 4,000 ft MSL. Tower shall not authorize a GRZLY arrival or departure or any airborne pickup when a TAC EAST arrival or departure has been approved or in progress and an RPA is in the east rectangular pattern.

4.19.2. Recreational or Hobbyist Unmanned Aircraft Operations. (T-0)

4.19.2.1. Applicability. Unmanned aircraft operations within March Class C. Unmanned aircraft operations within hangars or offices are excluded.

4.19.2.2. Restrictions. Operators of recreational or hobbyist unmanned aircraft shall not operate within the installation boundary of March ARB without approval of the AOM.

4.19.2.3. Procedures. Operators of recreational or hobbyist unmanned aircraft shall notify AM at (951) 655-8427 IAW 14 CFR Part 101 guidance prior to initiating flight and when concluding flight within the March Class C airspace. AM shall notify Tower and ECC upon notification and conclusion. Tower shall revise the ATIS with an unmanned aircraft advisory and notify any aircraft under their control of unmanned aircraft operations. Tower shall remove the unmanned aircraft advisory from the ATIS upon notification that flight has been terminated.

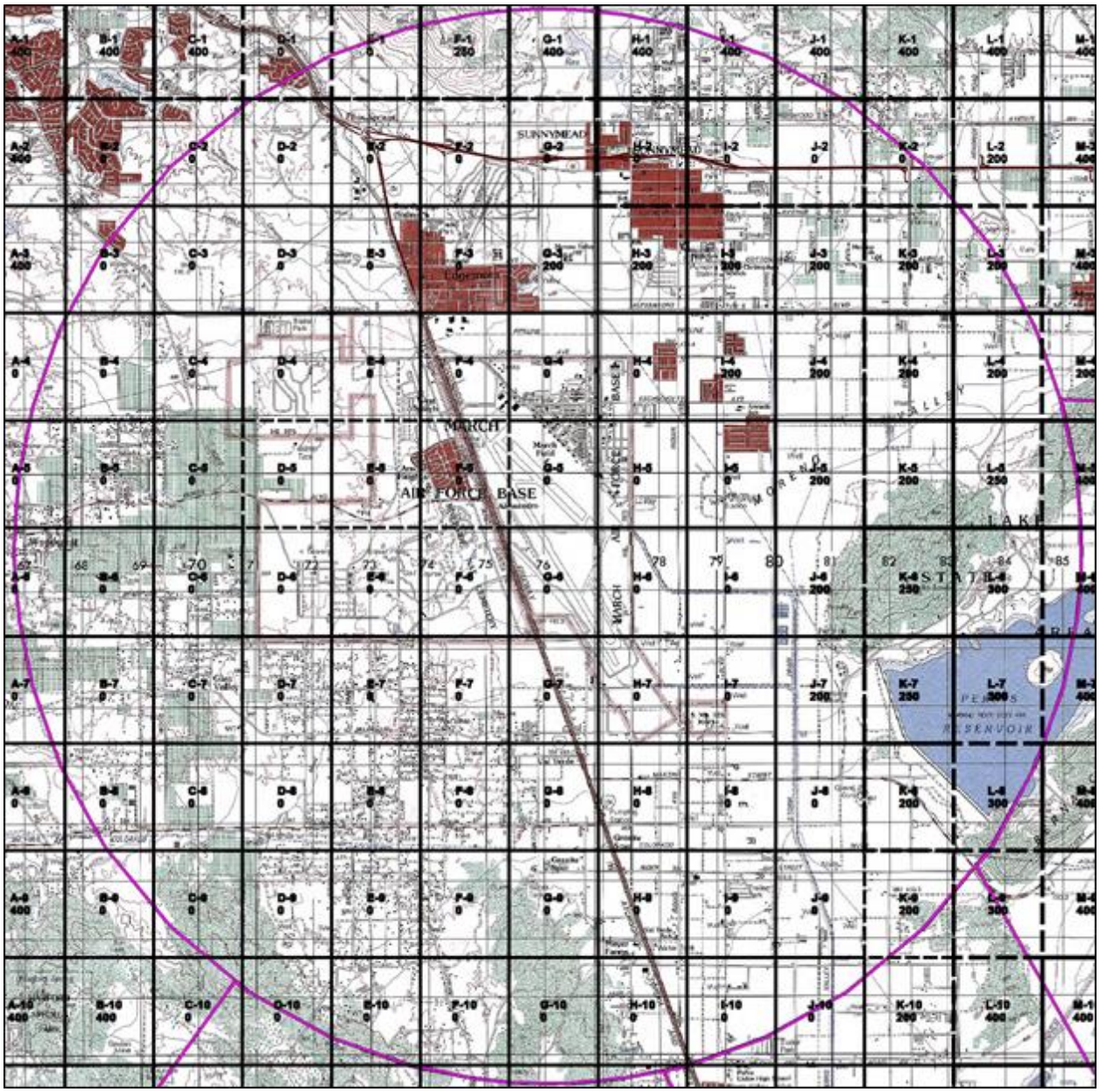
4.19.3. Commercial Unmanned Aircraft Operations. (T-0)

4.19.3.1. Applicability. Commercial operators intending to operate an Unmanned Aircraft within March Class C.

4.19.3.2. Restrictions. FAA COA directs restrictions.

4.19.3.3. Procedures. Operators shall submit a FAA COA request for all operations within March Class C surface area. FAA will review request to determine area of operation and/or altitude requires March ATC approval. If area of operation and/or altitude is below altitude (ft AGL) depicted in Figure 4.8., FAA will issue a COA for the operation. If area of operation and/or altitude is above altitude (ft AGL) depicted in Figure 4.8., FAA will coordinate with March ATC to obtain a feasibility assessment which may or may not lead to issuance of a COA and/or modification to the requested operation. If a COA is issued in either case, FAA will provide the operator and March ATC a copy. AM shall coordinate and submit a NOTAM at least 24 hours in advance of the operation. Tower shall amend the ATIS with a UAS advisory at least 15 minutes prior to operation and remove the advisory when concluded and no other UAS operations are in progress.

Figure 4.12. Small Unmanned Aircraft Commercial Operations Within March Class C.



4.19.4. Public Unmanned Aircraft Operations. Public unmanned aircraft operators shall follow operational procedures directed in their FAA COA. (T-0)

4.20. U.S. Customs and Border Protection (CBP) Riverside Air Unit (RAU) Operations.

4.20.1. Callsign Use. CBP RAU aircraft shall use OMAHAXX when law enforcement operational priority is required. CBP RAU aircraft shall use SIERRAXX for all other operations. (T-0)

4.20.2. Operations. CBP RAU using OMAHAXX callsigns may conduct operations regardless of quiet hours and regular airfield no NOTAM closure. (T-0)

4.20.3. VFR. CBP RAU should utilize THREE SISTERS, BOX SPRINGS, RIDGE CREST reporting points for entry and exit of March Class C or as directed inbound or bound from the south. (T-3)

4.21. Aero Club Operations.

4.21.1. Runway Use. Aero Club aircraft should use Runway 12/30 as the preferred runway for day VMC operations only. Runway 14/32 may be used for day and night VMC operations, when no higher priority traffic is operating on Runway 14/32 and Tower grants approval. Tower may direct use of Runway 12/30 for day VMC operations. Aero Club aircraft shall use Runway 14/32 for all IMC operations, day or night. (T-3)

4.21.2. VFR. Aero Club aircraft should utilize THREE SISTERS, BOX SPRINGS, or RIDGE CREST reporting points for entry and exit of March Class C or as directed inbound or bound from the south. (T-3)

4.21.3. IFR. Aero Club aircraft should notify Tower prior to departure when intending to conduct practice instrument approaches to Runway 32. No practice approaches to Runway 14 are permitted. (T-3)

Chapter 5

EMERGENCY PROCEDURES

5.1. Emergency Notification.

5.1.1. General Responsibilities. All personnel on the airfield have a collective responsibility to monitor operations and immediately report an aircraft incident, mishap or accident that constitutes an emergency situation. Aircraft emergencies or ground emergency on the airfield should be reported to Tower which will activate the Primary Crash Alarm System (PCAS)/Primary Crash Net (PCN) prompting AM to activate the Secondary Crash Net (SCN). If unable to report an emergency to Tower, personnel should contact AM. AM will relay to Tower and then activate the SCN. (T-3)

5.1.2. Primary Crash Net (PCN).

5.1.2.1. General. Tower is responsible for operation of the PCN, initiating the PCN for potential and actual emergencies, providing relevant updates on situations resulting in PCN activation, and providing termination of emergencies over the PCN. The PCN shall be a dedicated phone line with push-to-talk for all agencies on the PCN. Agencies on the PCN are approved by the AOM. (T-1)

5.1.2.2. Authorized Agencies on the PCN include: (T-3)

5.1.2.2.1. ECC.

5.1.2.2.2. AM.

5.1.2.3. Daily PCN Checks. Tower shall conduct a daily check of the PCN between 0700 and 0730L. Tower shall check all agencies are on the PCN and clarity of voice communications using the following verbiage, "*THIS IS A TEST OF THE PRIMARY CRASH NET, PLEASE RESPOND WITH CLARITY AND OPERATING INITIALS*." Agencies shall respond with, "*LOUD AND CLEAR, (OPERATING INITIALS)*," or "*(SPECIFIC PROBLEM), (OPERATING INITIALS)*." Tower shall log the check in the facility AF Form 3616 and any discrepancies. If any issues with proper operation of the PCN are observed or reported, Tower shall log a work order with CS to restore the full functionality of the PCN and annotate the work order on AF Form 3616. (T-1)

5.1.2.4. PCN Backup Capability. Tower shall maintain a backup capability to contact all agencies on the PCN in the event of primary PCN failure. PCN backup procedures shall be checked monthly on the first duty day of the month immediately after the daily PCN check and annotated on AF Form 3616. (T-1)

5.1.3. Secondary Crash Net (SCN).

5.1.3.1. General. AM is responsible for operation of the SCN, initiating the SCN for potential and actual emergencies, providing relevant updates on situations resulting in SCN activation, and providing termination of emergencies over the SCN. The SCN shall be a dedicated phone line with push-to-talk capability for all agencies on the SCN. Agency requests for inclusion or removal from the SCN shall be coordinated through the AFM and are considered for approval or disapproval by the AOM as delegated by 452 OSS/CC. (T-1)

5.1.3.2. Agencies Available Continuously. Authorized agencies on the SCN available 24/7 include: (T-1)

5.1.3.2.1. CP.

5.1.3.2.2. ECC.

5.1.3.2.3. WX.

5.1.3.3. Agencies Available Intermittently. Authorized agencies on the SCN available during normal duty hours and UTA weekends include: (T-1)

5.1.3.3.1. Emergency Management (EM).

5.1.3.3.2. SEF.

5.1.3.3.3. MOC

5.1.3.3.4. PA

5.1.3.3.5. CE.

5.1.3.3.6. MIPAA.

5.1.3.4. Daily SCN Checks. AM shall conduct a daily check of the SCN at 0800L but no later than 0815L. AM shall check all agencies are on the SCN and clarity of voice communications using the following verbiage, "*THIS IS A TEST OF THE SECONDARY CRASH NET, PLEASE RESPOND WITH CLARITY AND OPERATING INITIALS*." Agencies shall respond with, "*LOUD AND CLEAR, (OPERATING INITIALS)*," or "*(SPECIFIC PROBLEM), (OPERATING INITIALS).*" AM shall log the check in the facility AF Form 3616 and any discrepancies. If any issues with proper operation of the SCN are observed or reported, AM shall log a work order with CS to restore the full functionality of the SCN and annotate the work order on AF Form 3616. (T-1)

5.1.3.5. SCN Backup Capability. AM shall maintain a backup capability to contact all agencies on the SCN in the event of primary SCN failure. SCN backup procedures shall be checked monthly on the first duty day of the month immediately after the daily SCN check and annotated on AF Form 3616. (T-1)

5.1.4. PCN/SCN Notification During Airfield Closures. PCN/SCN shall be activated normally when the airfield is closed. The agencies listed in **5.1.3.3** are not available when the airfield is closed. (T-1)

5.1.5. Situations Requiring PCN/SCN Activation. (T-1)

5.1.5.1. Tower shall activate the PCN when:

5.1.5.1.1. An In-flight Emergency (IFE) is declared.

5.1.5.1.2. A Ground Emergency (GE) is declared.

5.1.5.1.3. An aircraft incident, mishap, or accident is observed or reported.

5.1.5.1.4. A pilot or crewmember associated with an aircraft in flight under Tower or RAPCON control that may be inbound for landing at March ARB reports an emergency or a 7700 transponder code is observed.

5.1.5.1.5. A pilot or crewmember associated with an aircraft in flight under Tower or RAPCON control that may be inbound for landing at March ARB reports interference with a crewmember in the operation of a aircraft in flight, disturbance on board, hijacking or a 7500 transponder code is observed.

5.1.5.1.6. An aircraft anywhere on the airfield starts engines and/or is moved without authorization, stolen, or hijacked.

5.1.5.1.7. An aircraft lands without Tower authorization.

5.1.5.1.8. A unplanned or unscheduled cable engagement occurs or is requested.

5.1.5.1.9. A pilot or crewmember reports hot brakes.

5.1.5.1.10. A pilot or crewmember reports hung ordnance or hot guns.

5.1.5.1.11. A pilot or crewmember reports a situation involving hydrazine EPU use, activation, leak, or suspected leak.

5.1.5.1.12. Bldg 395 requires evacuation.

5.1.5.1.13. A PCN activation is necessary to fully participate in operational exercises or inspections.

5.1.5.1.14. Air traffic controllers determine PCN activation is required based on the situation.

5.1.5.1.15. Directed by 452 AMW/CC/CV, 452 OG/CC/CD, AOM, ATM, AFM or AM.

5.1.5.2. AM shall activate the SCN when:

5.1.5.2.1. PCN is activated.

5.1.5.2.2. An aircraft incident, mishap, or accident is observed or reported.

5.1.5.2.3. A weather warning is issued.

5.1.5.2.4. Bldg 395 requires evacuation.

5.1.5.2.5. Force Protection Condition (FPCON) level changes.

5.1.5.2.6. Disaster Response Force (DRF) activation/recalls.

5.1.5.2.7. Emergency Operations Center (EOC) is activated or members are recalled.

5.1.5.2.8. A bomb threat or terrorist activity is reported.

5.1.5.2.9. A SCN activation is necessary to fully participate in operational exercises or inspections.

5.1.5.2.10. AMSL determine SCN activation is required based on the situation.

5.1.5.2.11. Directed by 452 AMW/CC/CV, 452 OG/CC/CD, AOM, ATM, AFM or Tower.

5.1.6. Information for PCN/SCN Activation. (T-0)

5.1.6.1. Tower Responsibilities.

5.1.6.1.1. Tower will immediately activate the PCN for any of the reasons listed in **5.1.5.1** declare an In-flight Emergency (IFE) or Ground Emergency (GE) and provide at a minimum:

5.1.6.1.1.1. Callsign.

5.1.6.1.1.2. Type aircraft.

5.1.6.1.1.3. Number of personnel on board.

5.1.6.1.1.4. Fuel remaining in hours or ETA.

5.1.6.1.1.5. Nature of emergency.

5.1.6.1.1.6. Pilot intentions.

5.1.6.1.1.7. Runway in use.

5.1.6.1.1.8. Current wind direction and velocity.

5.1.6.1.2. Tower should obtain and relay:

5.1.6.1.2.1. Hazardous cargo (type, classification, quantity).

5.1.6.1.2.2. Ammunition and/or explosives (HD & NEW).

5.1.6.1.2.3. Position or location.

5.1.6.1.2.4. Altitude, if applicable.

5.1.6.1.2.5. Tail number of aircraft.

5.1.6.1.2.6. Home station, last station, and destination.

5.1.6.1.2.7. Any other information germane for adequate emergency response.

5.1.6.1.3. Tower shall provide updates such as emergency aircraft arrival, additional information, or termination over the PCN. Termination of emergency PCN activation shall include emergency termination time and authority terminating emergency. Tower shall provide clarifying information on any emergency when by requested by any agency on the PCN.

5.1.6.2. AM Responsibilities.

5.1.6.2.1. AM will immediately activate the SCN when the PCN is activated or for any of the reasons listed in **5.1.5.2** and relay information verbatim.

5.1.6.2.2. AM should obtain information appropriate to activation of the SCN and any other information germane for adequate emergency response. AM shall notify Tower if SCN is activated and pass all information transmitted over the SCN.

5.1.6.2.3. AM shall provide updates, additional information, or termination over the SCN. Termination of SCN activation shall include termination time and authority terminating response requiring SCN activation. AM shall provide clarifying information on any emergency when requested by any agency on the PCN or SCN.

5.1.7. Notifying ATCALS Personnel Performing Work on ATCALS Facilities. Tower shall immediately contact ATCALS personnel performing work on any ATCALS facility in the CMA or a facility required for use by emergency aircraft. Tower should utilize the bail-out

alarm to alert ATCALS personnel to immediately exit the CMA. Tower shall direct ATCALS personnel to immediately exit the CMA and restore a facility to service, if possible. ATCALS personnel shall be responsive to Tower direction and immediately exit the CMA if bail-out alarm is activated. Tower shall confirm all ATCALS personnel have exited the CMA prior to an emergency aircraft landing. (T-3)

5.2. Emergency Response.

5.2.1. Vehicle Operations. FES and alert vehicles do not need to stop prior to entering the airfield when responding to a real world emergency or alert. Tower shall use their best judgement to stop movement or move away all aircraft in the path of responding FES and alert vehicles. Civil emergency response vehicles shall be escorted by FES, SFS or AM at all times while on the airfield. Authorized first responders include FES, AM, SFS, and civil emergency response vehicles. Follow-on authorized responders include SEF, Incident Commander (IC), 452 AMW/CC/CV, 452 GP/CC/CDs, Maintenance (MX), TA, and Emergency Management (EM) team. (T-3)

5.2.2. Emergency Procedures.

5.2.2.1. In-flight Emergencies (IFE).

5.2.2.1.1. Pilots of aircraft experiencing an emergency are expected to declare an emergency with ATC. Tower and RAPCON shall provide maximum assistance to the pilot in resolving an emergency situation safely. Tower shall activate the PCN per **5.1.5.1**. AM shall activate the SCN per **5.1.5.2**. (T-3)

5.2.2.1.2. Pilots should provide the minimum information to ATC: (T-3)

5.2.2.1.2.1. Callsign.

5.2.2.1.2.2. Type aircraft.

5.2.2.1.2.3. Number of personnel on board.

5.2.2.1.2.4. Fuel remaining in hours or ETA.

5.2.2.1.2.5. Nature of emergency.

5.2.2.1.2.6. Pilot intentions.

5.2.2.1.2.7. Position or location.

5.2.2.1.2.8. Altitude, if applicable.

5.2.2.1.3. Pilots should provide the following, if time and situation permits: (T-3)

5.2.2.1.3.1. Hazardous cargo (type, classification, quantity).

5.2.2.1.3.2. Ammunition and/or explosives (HD & NEW).

5.2.2.1.3.3. Tail number of aircraft.

5.2.2.1.3.4. Home station, last station, and destination.

5.2.2.1.3.5. Any other information germane for adequate emergency response.

5.2.2.2. Ground Emergencies (GE).

5.2.2.2.1. Pilots of aircraft not in flight, on the ground at March ARB, experiencing an emergency are expected to declare an emergency with Tower. Tower shall activate the PCN per **5.1.5.1**. AM shall activate the SCN per **5.1.5.2**. (T-3)

5.2.2.2.2. Pilots or any other personnel should provide available information listed **5.2.2.1.2** and **5.2.2.1.3** to Tower via any means possible. (T-3)

5.3. Personnel/Crash Locator Beacon Signal/Emergency Locator Transmitter (ELT) Response. Tower or RAPCON shall notify Los Angeles Air Route Traffic Control Center (ARTCC) and AM, of an ELT activation. AM shall notify CP and obtain confirmation through MOC, MIPAA, CBP RAU, Aero Club, Det 1, 144 FW that an ELT may be active on the airfield. MOC, MIPAA, CBP RAU, Aero Club, Det 1, 144 FW shall verify all aircraft within their maintenance purview do not have ELTs activated and report to AM on the status of the review. AM shall notify Tower or RAPCON with confirmation ELT is either on March ARB or signal is originating from off installation. Tower or RAPCON shall follow-up with Los Angeles ARTCC (ZLA) of ELT activation upon completion of AM audit and provide any other pertinent details since notification. (T-0)

5.4. Gate Runner. See Appendix 21 to Annex M of March ARB Integrated Defense Plan (IDP) 31-101 (FOUO), 4 February 2016. (T-3)

5.5. Unlawful Seizure of Aircraft. See Appendix 3 to Annex M of March ARB IDP 31-101 (FOUO), 4 February 2016. (T-0)

5.6. Aircraft Abandonment. March ARB has no designated aircraft abandonment area. Pilots should notify ATC if aircraft abandonment is necessary. Tower and RAPCON shall notify SCT of an impending or actual aircraft abandonment. (T-3)

5.7. Fuel Jettison. Pilots of aircraft requiring airborne fuel jettison shall notify ATC of intentions, altitude, and location. Tower or RAPCON shall notify SCT and/or ZLA of requirement and make arrangements to jettison fuel. Pilots should attempt to jettison fuel above FL180 or lower over unpopulated areas if an emergency situation dictates. Pilots shall file an AF Form 813, *Request for Environmental Analysis* with 452 MSG/CEV upon landing and detailed report with 452 OG/OGV. (T-1)

5.8. Hung Ordnance/Hot Armament/Hung Flares. Aircraft with hung ordnance, hot armament, and/or hung flares shall be directed by Tower to land on Runway 14/32 via a straight-in approach. Tower shall notify 452 CES/CED (Explosive Ordnance Disposal/EOD) during PCN activation. Tower will direct the aircraft to the primary arm/de-arm area on either Taxiway Alpha or Taxiway Foxtrot clear of the runway. Aircraft should be positioned to a heading parallel to Runway 14/32 orientation. Responding MX and FES personnel shall verify aircraft is safe and ordnance/armament is secure prior to terminating emergency. Tower shall suspend runway and affected taxiway operations until terminated and an airfield check is performed. (T-3)

5.9. External Stores Jettison.

5.9.1. Live Stores. March ARB has no live stores jettison areas. Pilots should attempt to land at March ARB with hung ordnance and follow procedures in **5.8**. (T-3)

5.9.2. Inert Stores. Pilots shall declare an emergency with Tower or RAPCON if inert stores are required to be jettisoned. Inert stores may be jettisoned 800 ft west of Runway 14/32

pavement edge between Taxiway B and Taxiway C. Pilots will be directed to overfly the jettison area on runway heading and jettison stores when approved by Tower. Pilots shall report all inert external stores jettison incidents to SEF. (T-3)

5.10. Dropped Objects.

5.10.1. Departed Aircraft. All agencies receiving a report of a dropped object from an aircraft departed March ARB shall notify AM. AM shall suspend runway operations, perform an airfield check for FOD, and notify MOC and 452 MXG/MXQ. AM shall prioritize runways and taxiways ahead of all other airfield areas. AM shall report findings to notified agencies and return the runway to service when FOD free. (T-3)

5.10.2. Arrived Aircraft. All agencies receiving a report of a dropped object from an aircraft arrived March ARB shall notify AM. AM shall suspend runway operations, perform an airfield check for FOD, and notify MOC, 452 MXG/MXQ, and previous airfield. AM shall prioritize runways and taxiways ahead of all other airfield areas. AM shall report findings to notified agencies and return the runway to service when FOD free. (T-3)

5.11. Landing Gear Malfunctions. Landing gear malfunctions shall be reported to Tower or RAPCON and an emergency declared by the pilot. Tower should solicit assistance of another aircraft to visually check that landing gear appears down. In the absence of another aircraft, Tower may utilize a restricted low approach at 1,700 ft MSL in VMC over Runway 12/30 to visually check that an aircraft's landing gear appears down. The pilot of the aircraft with the landing gear malfunction is the final authority that the landing gear is down and locked. If the aircraft has sufficient fuel, Tower may suggest a dry lake bed landing be attempted at Edwards AFB. AM shall suspend runway and taxiway operations after an aircraft with a landing gear malfunction lands and taxis to parking. AM shall not resume runway or taxiway operations until an airfield check is performed. (T-0)

5.12. Lost Communication.

5.12.1. Manned Aircraft.

5.12.1.1. VFR.

5.12.1.1.1. Light aircraft inbound to March ARB experiencing lost communications shall reset transponder to 7600, if able, and enter March Class C via THREE SISTERS, BOX SPRINGS or RIDGE CREST at 3,000 ft MSL. Light aircraft will normally enter the rectangular pattern mid-field for Runway 12/30 or Runway 14/32 and be vigilant for light gun signals from the Tower. If no light gun signal is indicated, aircraft shall not descend, continue on downwind, fly a normal base, final to upwind while rocking wings over the runway at 2,500 ft MSL. If no light gun signal is indicated after overflying the runway, aircraft shall visually scan the runway and proceed to landing being vigilant for other traffic on final and vehicles, personnel or equipment on the runway. Light aircraft experiencing lost communications while in March Class C or established in the pattern should be vigilant for light gun signals and proceed to a full stop landing. (T-3)

5.12.1.1.2. Heavy aircraft or fighter aircraft inbound to March ARB experiencing lost communications shall reset transponder to 7600, if able, and enter March Class C at 3,500 ft MSL via the extended centerline of Runway 14/32, as appropriate. Aircraft

shall proceed inbound for the initial and enter the overhead pattern. Pilot shall be vigilant for light gun signal indications from Tower. If no light gun signal indicated from Tower, pilot shall visually scan the runway and proceed to landing being vigilant for other traffic on final and vehicles, personnel or equipment on the runway. Heavy aircraft or fighter aircraft experiencing lost communications while in March Class C or established in the pattern should be vigilant for light gun signals and proceed to a full stop landing. (T-3)

5.12.1.2. IFR. All aircraft inbound to March ARB with lost communications shall reset transponder to 7600, if able, and continue until last clearance limit and hold or land as appropriate. Aircraft with transmit only or no communications capability should announce approach performing, as applicable, and continue inbound on that approach to landing. ATC will provide priority for landing and direct other aircraft to hold or continue as appropriate. Aircraft with receive only capability shall follow instructions issued by ATC and expect vectors for confirmation of receive capability then an appropriate approach clearance. (T-3)

5.12.2. Group 1-3 Unmanned Aircraft Systems. (T-3)

5.12.2.1. Lost Communications. Immediately contact AM or March ATC via any means available.

5.12.2.2. Lost Link. Immediately contact AM or March ATC via any means available.

5.12.3. Group 4-5 Unmanned Aircraft Systems. (T-0)

5.12.3.1. Lost Communications. Follow prescribed lost communications procedures detailed in most current approved FAA COA.

5.12.3.2. Lost Link. Transponder code should be preprogrammed to transmit 7400 prior to initiating flight. Follow prescribed lost link procedures detailed in most current approved FAA COA.

5.13. Emergency Divert.

5.13.1. Outbound. Pilots diverting to March ARB shall coordinate with Tower or RAPCON as appropriate. Tower or RAPCON shall provide maximum assistance to an aircraft diverting. (T-0)

5.13.2. Inbound. Pilots diverting to March ARB shall coordinate with Tower or RAPCON as appropriate. Tower or RAPCON shall provide maximum assistance to an aircraft diverting. Tower shall not deny landing to any aircraft that declares an emergency and elects to divert to March ARB. (T-0)

5.14. Unscheduled/No Flight Plan Aircraft Arrivals.

5.14.1. Civilian Aircraft. Aircraft landing without Tower approval shall be treated as hostile/hijacked. Follow procedures in Appendix 20 to Annex M of the March ARB IDP 31-101 (FOUO), 4 February 2016. (T-0)

5.14.2. Military Aircraft. Unscheduled military aircraft requesting arrival at March ARB without a flight plan or PPR shall be verified as a military aircraft prior to approving arrival. RAPCON or Tower shall obtain type aircraft, callsign, and home station and pass information to AM for verification with home station AM. AM shall obtain confirmation the

unscheduled military aircraft is valid and pass to RAPCON or Tower, as appropriate. AM shall notify all base agencies normally notified during PPR approval. RAPCON or Tower shall direct the aircraft to landing when confirmation is received from AM. Follow procedures in Appendix 20 to Annex M of the March ARB IDP 31-101 (FOUO), 4 February 2016. Services to the unscheduled military aircraft shall be provided on a best effort basis behind PPR approved missions. (T-0)

5.15. Hydrazine Procedures.

5.15.1. General. Pilots with a suspected or actual hydrazine EPU activation or leak shall notify ATC. Procedures below provide specific guidance in addition to HAZMAT Response Checklist, Appendix 1 to Annex A or March ARB Installation Emergency Management Plan (IEMP) 10-2, 28 January 2008. (T-3)

5.15.2. Runway 14. Tower shall direct an aircraft with suspected or actual hydrazine EPU activation or leak to taxi off the departure end of Runway 14 at Taxiway Alpha and remain on the run-up area adjacent to the taxiway. Tower shall suspend runway operations and not permit taxi of any other aircraft on Taxiway Alpha south of Taxiway Bravo nor permit personnel or vehicles to enter the area except first responders. AM shall notify MIPAA of aircraft arriving Runway 14 with a suspected or actual hydrazine EPU activation or leak. (T-3)

5.15.3. Runway 32. Tower shall direct an aircraft with suspected or actual hydrazine EPU activation or leak to taxi off the departure end of Runway 32 at Taxiway Foxtrot and remain on the run-up area south of and adjacent to the taxiway. Tower shall suspend runway operations and not permit taxi of any other aircraft on Taxiway Foxtrot west of Taxiway Alpha nor permit personnel or vehicles to enter the area except first responders. (T-3)

5.16. Hot Brakes. Aircraft with hot brakes should be held on Taxiway Alpha, Taxiway Bravo, Taxiway Charlie, Taxiway Delta, or Taxiway Foxtrot east of the VFR hold short line for Runway 14/32. Aircraft with hot brakes should be held on Taxiway Charlie or Taxiway Delta west of the hold short line for Runway 12/30. Tower shall suspend operations on the applicable runway and taxiway an aircraft with hot brakes is on until the GE is terminated and an airfield check is performed. (T-3)

5.17. Munitions Storage Area Procedures.

5.17.1. Munitions Maintenance Crews performing work in the MSA shall continuously monitor the CMA Net and immediately report any emergencies to Tower. Emergencies requiring immediate evacuation and potential explosion shall be reported by crews as soon as practical but no later than arrival at the initial rally point located on the airfield side of Bldg 1290, Base Fire Station. Munitions Maintenance Crews shall use the most direct route to the initial rally point via the munitions road to Taxiway Alpha. (T-3)

5.17.2. Tower shall declare a GE when Munitions Maintenance Crews report an emergency or evacuate due to fire, potential explosion or explosion at the MSA or any of the situations is observed. Tower shall not taxi any aircraft nor allow any vehicles or personnel on Taxiway Charlie or Taxiway Alpha and Bravo between the main apron and Runway 14/32, and suspend use of Runway 12/30. (T-3)

5.18. Explosive Detection Military Working Dog (K9) Team.

5.18.1. Military Aircraft. Military crews requiring explosives detection K-9 support should request it through PTD or ATC. Tower, RAPCON, or AM shall promptly relay a request for explosive detection K-9 support through ECC. (T-0)

5.18.2. Civil Aircraft. Civilian crews requiring explosives detection K-9 support should request it through PTD or ATC. First facility to receive request, Tower, RAPCON, or AM shall promptly relay a request for explosive detection K-9 support through to FAA Washington Operations Center, AEO-100, via telephone (DSN 851-3750 and Commercial 202-267-3333) providing the aircraft's identification and position or if the aircraft is on the ground to ECC and notify other facilities of request. Tower, RAPCON, or AM shall have AEO-100 standby while relaying information to the crew in the case of an airborne aircraft. After determining the crew's wishes to divert to airport provided, obtain the ETA and advise AEO-100. If March ARB provides an explosives detection K-9 team through ECC, ensure 452 OG/CC or designated representative concurs prior to advising the crew the service is available. (T-1)

5.19. MQ-9 Emergency Procedures. (T-0)

5.19.1. General. MQ-9s shall execute a straight-in approach to Runway 14/32 to the maximum extent possible when an emergency is declared. Runway 32 is the preferred landing runway with less than 5 knot tailwind. Diverts to other runways/airfields are limited to applicable, current approved COAs. Programmatic changes to lost link procedures can be dynamically changed by crew but not during a situation in which the aircraft has lost all data link connections. 163 OG Ops Sup coordinates emergency procedures for MQ-9 and relevant agencies including SOF. ATC will provide separation instructions to MQ-9 crews when other aircraft are experiencing an emergency.

5.19.2. Operations Below VMC. When airborne, MQ-9 crews shall immediately notify ATC when forecasted or observed weather is below VMC and precludes use of intended routes, departure or arrival. ATC shall perform the actions in **5.19.3.1**. MQ-9 crews shall:

5.19.2.1. Declare an emergency if not already declared by ATC.

5.19.2.2. Coordinate with chase aircraft crew, SOF, ATC and 163 OG to execute the appropriate lost link profile in **5.19.3.3.2**, **5.19.3.3.3**, or **5.19.3.3.4** to allow for weather to improve.

5.19.2.2.1. If weather does not improve to allow safe recovery in VMC with 60 minutes of fuel remaining, and flying and landing the MQ-9 is feasible in weather less than VMC, the MQ-9 crew and SOF shall obtain 163 OG and ATC approval to fly the GRZLY VFR arrival under IFR.

5.19.2.2.2. If approval is granted, MQ-9 crew shall fly the GRZLY VFR arrival under IFR, request to fly a published ASR procedure, if available, or a visual approach and land visually at RIV. If unable to fly a visual approach or land visually, MQ-9 crew shall execute lost link profile in 5.19.3.3.2. but remain in orbit until fuel is exhausted.

5.19.2.2.3. If approval is not granted, MQ-9 crew shall continue executing lost link profile in 5.19.3.3.4. until fuel exhaustion.

5.19.3. Lost Voice or Lost Link.

5.19.3.1. General. In situations of lost communications between MQ-9 crew and ATC, lost communication between MQ-9 crew and chase aircraft crew, or lost link, ATC shall perform the following actions, if applicable:

5.19.3.1.1. Declare an emergency for crew if not already declared.

5.19.3.1.2. Determine need to hold aircraft departures as situation dictates.

5.19.3.1.3. Recover other MQ-9s as appropriate.

5.19.3.1.4. Direct manned aircraft to routes, altitudes, or areas that assure applicable VFR or IFR separation is maintained with MQ-9 and do not conflict with lost link preplanned routes, associated altitudes, and areas.

5.19.3.2. Lost Voice Communications.

5.19.3.2.1. MQ-9 Crew and ATC or Chase aircraft Crew. If MQ-9 crew loses all two-way radio contact with ATC, ATC will perform actions in **5.19.3.1**, attempt to contact chase aircraft, if applicable, and notify SOF to have MQ-9 crew establish contact via co-located two-way radio at the GCS or via landline if ATC is first party to recognize loss of two-way radio voice contact. If MQ-9 crew is first party to recognize loss of two-way radio contact with ATC, crew will contact the appropriate ATC facility directly using co-located two-way radio at the GCS, if appropriate, or via landline and request ATC relay situation to chase aircraft crew, if applicable.

5.19.3.3. Lost Link.

5.19.3.3.1. MQ-9 crew shall immediately declare an emergency and notify appropriate ATC agencies listed in **Table 5.1** as soon as practical if lost link occurs (>10 seconds, continuous and sustained) during flight. Chase aircraft crew shall assist ATC and MQ-9 crew as necessary. MQ-9 crew shall initiate and continuously maintain two-way voice contact via radio or landline until emergency is resolved. MQ-9 crew shall provide the following information:

5.19.3.3.1.1. Aircraft Callsign.

5.19.3.3.1.2. Assigned Transponder Code and 7400.

5.19.3.3.1.3. Time of lost link.

5.19.3.3.1.4. Last known position.

5.19.3.3.1.5. Altitude.

5.19.3.3.1.6. The direction of flight.

5.19.3.3.1.7. Fuel remaining (hours and minutes).

5.19.3.3.1.8. Presumed lost link profile aircraft should be implementing. Continuously confirm status of execution of pre-programmed lost link procedure with ATC and chase aircraft crew or via downlink/return link, if available, until emergency is resolved and link is restored. During pattern operations, crew will confirm if SOF or observer has visual contact with aircraft.

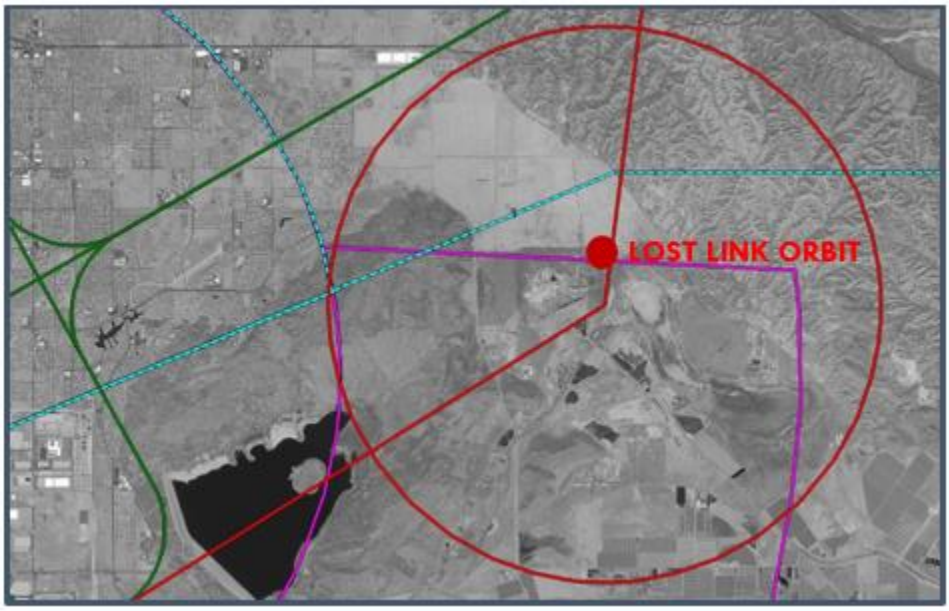
Table 5.1. MQ-9 Lost Link Contacts.

Air Traffic Control Facility		Phone Number
March ARB (RIV)	Air Traffic Control Tower	(951) 655-3198
	Radar Approach Control	(951) 655-2355
SCT	Empire Area Supervisor	(858) 537-5914
	Operations Manager	(858) 537-5900
High Desert TRACON (Joshua)		(661) 277-2023
Los Angeles ARTCC 24 Hour Duty Office		(661) 265-8200
163 OG Ops Sup		(951) 488-8021
163 OG SOF		Reserved for Future Use
GCS 5128		(951) 655-3205
GCS 5054		(951) 655-6712

5.19.3.3.2. Lost Link in RIV Class C Airspace. If MQ-9 experiences Lost Link while in RIV Class C airspace:

5.19.3.3.2.1. While in the rectangular or SFO pattern, past V_1 or on final prior to touch down, MQ-9 will climb to 4,500' MSL while flying runway heading within 2 NM, and continue climbing while turning left (Runway 32) or turning right (Runway 14) to overfly mid-field (N 33°52'51.93" W 117°15'33.70"). MQ-9 will then proceed to Lost Link Orbit (See **Figure 5.1**) at 4500' MSL (RIV081/007.5NM, N 33°53.57' W 117°06.11') and remain in orbit until aircraft has 2 hours of fuel remaining or link is re-established. If link is not re-established with 2 hours of fuel remaining, MQ-9 will climb in the Lost Link Orbit to 8,500' MSL and proceed direct point Golf and remaining GRZLY route to R-2515, and execute procedures in **5.19.3.3.4**.

Figure 5.1. RIV Class C Lost Link Orbit.



5.19.3.3.3. Lost Link in Transit.

5.19.3.3.3.1. En Route to R-2515. If MQ-9 experiences Lost Link while en route to R-2515 past point Golf and outside of RIV Class C airspace, aircraft is pre-programmed to fly the remaining route in **4.19.1.4.5.1** to point Grizzly at 8,500' MSL and execute the lost link profile in **5.19.3.3.4**. If MQ-9 experiences Lost Link prior to point Golf and is within RIV Class C airspace, MQ-9 will execute pre-programmed lost link procedure in **5.19.3.3.2** until aircraft has 2 hours of fuel remaining or link is re-established.

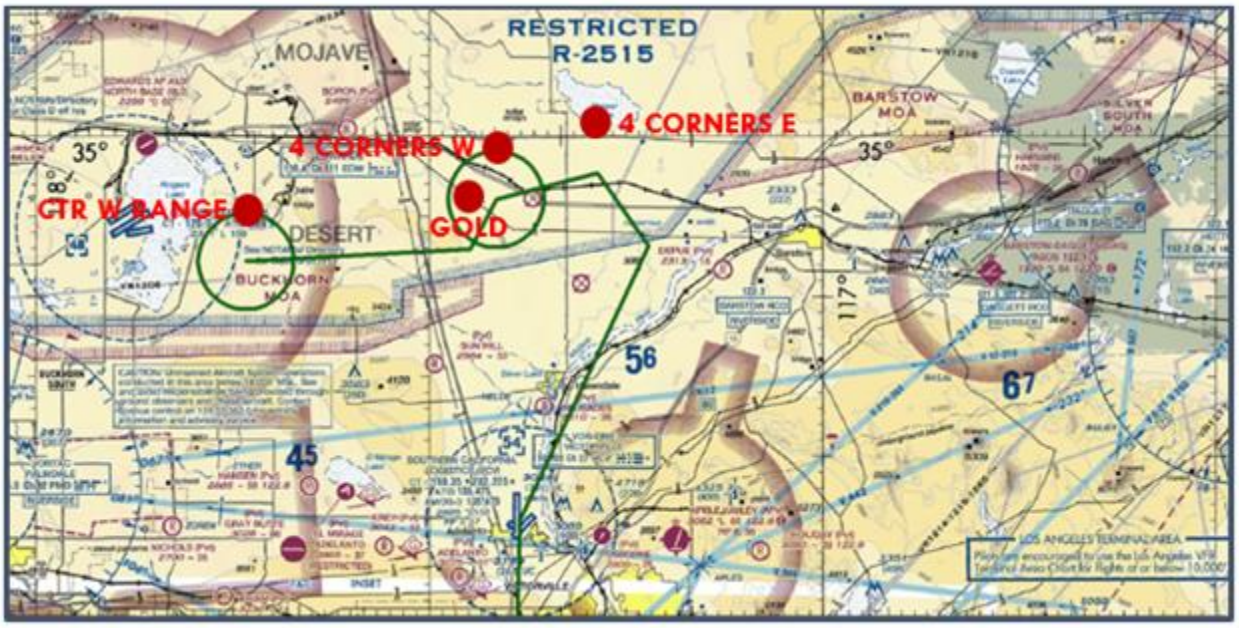
5.19.3.3.3.2. En Route to RIV. If MQ-9 experiences Lost Link while en route to RIV Class C airspace past point Grizzly and outside of R-2515, aircraft is pre-programmed to fly the remaining route in 4.19.1.4.5.1. to point Golf at 9,500' MSL, then remain in Lost Link Orbit (RIV081/007.5NM, N 33°53.57' W 117°06.11') for 90 minutes. If link is re-established while in Lost Link Orbit, MQ-9 crew will fly aircraft to RIV for landing. If link is not re-established after 90 minutes, MQ-9 is pre-programmed to execute the standard transit routing to R-2515 in **4.19.1.4.5.1** with a non-standard altitude of 9,500' MSL and lost link profile in **5.19.3.3.4** from point Grizzly.

5.19.3.3.4. Lost Link in R-2515. If MQ-9 experiences lost link within R-2515 or in lost link situations during en route transit (see **5.19.3.3.3.1** or **5.19.3.3.3.2**), MQ-9 will fly route in **Table 5.2** in sequence at 8,500' MSL, 9,500' MSL or last cleared altitude as applicable and hold within 3 NM of point 4 Corners W for 60 minutes (See **Figure 5.2**):

Table 5.2. MQ-9 R-2515 Lost Link Pre-Programmed Route.

NAME	FRD	COORDINATES	Remarks
4 Corners E	EDW078022	N34°57'41.49" W117°17'09.50"	
4 Corners W	EDW085016	N34°56'03.85" W117°24'55.06"	60min Hold, 3nm radius
Gold	EDW098015	N34°52'57.00" W117°26'53.00"	
Ctr W Range	EDW165007	N34°52'11.75" W117°44'01.42"	Ref R2508 LL Final Term Orbit
If the aircraft reaches the R-2508 LL Final Term Orbit, the Grey Butte Divert Option may be employed.			

Figure 5.2. MQ-9 R-2515 Lost Link Route, Orbit, and Termination.



5.19.3.3.4.1. If RPA link cannot be restored after holding at 4 Corners W, all potential viable recovery scenarios are exhausted, and 163 OG personnel determine MQ-9 cannot be safely recovered without undue danger to persons and/or property damage on the ground, the MQ-9 is programmed to fly via point Gold to the Flight Termination Point/Ctr W Range (N 34°52'11.75" W 117°44'01.42") and orbit within a 3 NM radius until fuel is exhausted (See **Figure 5.2**).

5.20. Continuity of ATC/AM Services.

5.20.1. Control Tower Wind Limits. Tower will be evacuated when the observed gust (three seconds or more) or sustained wind velocity is 74 kts (85 Miles per Hour (MPH)). (T-1)

5.20.2. Airfield Operations Complex Evacuation. Bldg 395 contains Tower, RAPCON, AM, WX, Crew Communications, Intel, and TA. Bldg 395 shall be evacuated if Tower evacuates for wind per 5.20.1., when there is a fire in the building, an earthquake renders occupancy unsafe, hazardous conditions exist, or when directed by 452 AMW/CC/CV or Crisis Action Team (CAT). Tower shall notify RAPCON, AM, SCT, ATM, and AOM of evacuation. AM shall notify AFM, MIPAA, WX, CP, ECC, ATOC, MOC, and TA prior to evacuation. If the first work section in Bldg 395 to initiate an evacuation is not Tower, that work section shall notify Tower to ensure an organized evacuation is executed. AM shall coordinate and submit a NOTAM closing the March Class C and airfield to all aircraft and contact information. RAPCON shall transfer control of all aircraft to SCT prior to returning airspace responsibility. Tower shall ensure all arrivals have landed and are parked, departures are permitted to depart if not in a parking spot and have elected to depart, aircraft in March Class C not arriving or departing March ARB are instructed to exit the airspace, and an appropriate ATIS message is broadcast. See **5.20.4**. (T-1)

5.20.3. Protection of the AN/GPN-30. Tower shall notify ATCALS MX when the forecasted or observed gust (three seconds or more) or sustained wind velocity is expected to reach 74 kts (85 MPH) or greater. Tower shall annotate notification to freewheel the antenna in the AF Form 3616 and notify RAPCON as appropriate. ATCALS MX shall freewheel the antenna upon notification. Tower shall notify ATCALS MX when observed sustained winds and forecasted winds are and will remain below 74 kts (85 MPH). Tower shall annotate notification to ATCALS MX in the AF Form 3616 and notify RAPCON as appropriate. ATCALS MX shall restore the antenna to normal operation. (T-1)

5.20.4. Alternate Facilities. March ARB has no alternate Tower or RAPCON facilities. AM shall evacuate and activate the alternate facility when directed or upon evacuation. See **5.20.2**. (T-3)

5.21. Airfield Operations Mishap Procedures. (T-1)

5.21.1. AM. AM shall do the following in the order listed:

5.21.1.1. Perform applicable actions listed in **5.1** & **5.2**. Do not release names of any individuals allegedly involved in an aircraft incident or accident to agencies outside of USAF channels. Refer all inquiries to PA.

5.21.1.2. Coordinate with Tower concerning facility and runway status.

5.21.1.3. Conduct a FOD check as required and/or applicable. Inspect aircraft taxi routes affected by the mishap as applicable.

5.21.1.4. Suspend/close operations to runways or taxiways as required.

5.21.1.5. Close the airfield, if required.

5.21.1.6. Print current NOTAMs. Coordinate and submit a flight safety or local NOTAM, as needed.

5.21.1.7. If the mishap occurred on or near the airfield, record the following in the AF Form 3616 effective at the time of the mishap:

5.21.1.8.1. Runway involved.

5.21.1.8.2. RSC.

5.21.1.8.3. ATCALS status.

5.21.1.8.4. Airfield lighting status.

5.21.1.8.5. BWC.

5.21.1.9. Notify TERPS, AOAM, AFM and AOM of the mishap.

5.21.1.10. Plot mishap location, cordon, entry control point, safe route, known hazards and other relevant information on crash grid maps.

5.21.1.11. Obtain mishap aircraft information as needed:

5.21.1.11.1. Aircraft call sign and tail number.

5.21.1.11.2. Departure base.

5.21.1.11.3. Home station or organization.

5.21.1.11.4. Name and rank of crew members.

5.21.1.11.5. Number of personnel on board.

5.21.1.12. Make and retain copies of and provide original to the AOM within 24 hours:

5.21.1.12.1. Signed AF Form 3616.

5.21.1.12.2. Flight Plan (Weight and Balance if applicable).

5.21.1.12.3. Passenger manifest (if applicable).

5.21.1.12.4. Local airfield advisory information.

5.21.1.12.5. Any other forms that pertain to the flight.

5.21.1.12.6. Mishap flight following log.

5.21.1.12.7. Airfield Inspection Checklist as applicable.

5.21.2. Tower. Tower shall do the following in the order listed:

5.21.2.1. Perform applicable actions listed in **5.1** & **5.2**. Do not release names of any individuals allegedly involved in an aircraft incident or accident to agencies outside of USAF channels. Refer all inquiries to PA.

5.21.2.2. Coordinate with RAPCON, SCT, and AM concerning facility and runway status.

5.21.2.3. Sterilize airspace over crash site if within March controlled airspace.

5.21.2.4. Initiate NOTAMs with AM, as required.

5.21.2.5. Notify the ATM and AOM of the mishap.

5.21.2.6. Request WX document an aircraft mishap (SPECIAL) weather observation.

5.21.2.7. Print the RIV METAR report in effect at the time of the mishap.

5.21.2.8. Notify ATCALS MX to check equipment performance if USAF ATCALS were involved.

5.21.2.9. The WS on duty shall coordinate with the ATM to provide position relief to controllers on duty at the time of the mishap. If the WS suspects a controller may have contributed to the mishap, that controller shall be relieved from position immediately.

5.21.2.10. Provide original signed AF Form 3616, completed AF Form 3626, and mishap flight progress strip to the AOM within 24 hours.

5.21.3. RAPCON. RAPCON shall do the following in the order listed:

5.21.3.1. Perform applicable actions listed in **5.1** & **5.2**. Do not release names of any individuals allegedly involved in an aircraft incident or accident to agencies outside of USAF channels. Refer all inquiries to PA.

5.21.3.2. Coordinate with Tower, SCT, and AM concerning facility and runway status.

5.21.3.3. Sterilize airspace over crash site if within March controlled airspace.

5.21.3.4. Initiate NOTAMs with AM, as required.

5.21.3.5. Notify the ATM and AOM of the mishap.

5.21.3.6. Request WX document an aircraft mishap local (SPECIAL) weather observation.

5.21.3.7. Print the RIV METAR report in effect at the time of the mishap.

5.21.3.8. Notify ATCALS MX to check equipment performance if USAF ATCALS were involved.

5.21.3.9. The WS on duty shall coordinate with the ATM to provide position relief to controllers on duty at the time of the mishap. If the WS suspects a controller may have contributed to the mishap, that controller shall be relieved from position immediately.

5.21.3.10. Provide original signed AF Form 3616, completed AF Form 3626, and mishap flight progress strip to the AOM within 24 hours.

5.21.4. AOAM. AOAM shall perform the following in the order listed:

5.21.4.1. Create a certified copy of automation system data and provide to AOM within 24 hours.

5.21.4.2. Create a certified copy of audio recordings and provide to AOM within 12 hours.

5.21.5. WX. WX shall perform the following:

5.21.5.1. Document an aircraft mishap (SPECIAL) weather observation.

5.21.5.2. Retain records on the RIV METAR report in effect at the time of the mishap.

5.21.5.3. The Weather Supervisor shall collect all records and provide them to the AOM within 24 hours.

5.21.6. TERPS. TERPS shall perform the following:

5.21.6.1. Preserve all files contained within the Instrument Approach Package and any other documentation associated with the incident instrument procedure in use at the time.

5.21.7. ATCALS MX. ATCALS MX shall perform the following:

5.21.7.1. Check equipment performance if USAF ATCALS were involved when notified by either Tower or RAPCON.

5.21.7.2. Record and document equipment performance and alignments. ATCALS MX shall not perform any adjustments during inspection.

5.21.7.3. Provide AOM results of inspection and recommendation.

5.21.8. AOM. The AOM shall perform the following:

5.21.8.1. Consult with ATM on relief of controllers suspected in/involved in mishap.

5.21.8.2. Determine need to remove ATCALS from service and coordinate and submit NOTAMs based on ATCALS MX recommendation.

5.21.8.3. Assess airfield and ATC capabilities and provide 452 OG/CC status.

5.21.8.4. Notify HQ AFRC/A3OA of factual details of mishap within 12 hours or within first hour of the next duty day following the mishap.

5.21.8.5. Collect and safeguard all documentation and data provided by facilities.

RUSSELL A. MUNCY, Brig Gen, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 10-10, *Joint Use of Military and Civilian Flying Facilities*, 25 October 2007

AFPD 10-18, *Foreign Governmental Aircraft Use of United States Air Force Airfields*, 1 March 1997

AFPD 13-2, *Air Traffic, Airfield, Airspace and Range Management*, 7 August 2007

AFPD 33-3, *Information Management*, 8 September 2011

AFPD 91-2, *Safety Programs*, 24 July 2012

AFI 10-220, *Contractor's Flight and Ground Operations*, 21 August 2013

AFI 10-1001, *Civil Aircraft Landing Permits*, 1 September 1995

AFI 10-1002, *Agreements for Civil Aircraft Use of Air Force Airfields*, 1 September 1995

AFI 10-1003, *Use of Air Force Installations for Non-Government Business by Civil Air Carriers Participating in the Civil Reserve Air Fleet (CRAF) Program*, 1 August 1996

AFI 10-1004, *Conducting Air Force Open Houses*, 18 February 2010

AFI 10-1801, *Foreign Governmental Aircraft Landings at United States Air Force Installations*, 1 September 1997

AFI 11-201, *Flight Information Publication*, 31 March 2009

AFI 13-201, *Airspace Management*, 21 August 2012

AFI 13-204 v1, *Airfield Operations Career Field Development*, 9 May 2013

AFI 13-204 v2, *Airfield Operations Standardization and Evaluations*, 1 September 2010

AFI 13-204 v3, *Airfield Operations Procedures and Programs*, 1 September 2010

AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking) (FOUO)*, 21 June 2010

AFI 13-213, *Airfield Driving*, 1 June 2011

AFI 13-217, *Drop Zone and Landing Zone Operations*, 10 May 2007

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 21 May 2015

AFI 34-117, *Air Force Aero Club Program*, 1 October 2014

AFI 36-2650, *Maintenance Training*, 20 May 2014

AFI 91-202, *The U.S. Air Force Mishap Prevention Program*, 24 June 2015

AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, 15 June 2012 (Incorporating AFI91-203_AFGM2015-04, 17 September 2015)

AFI 91-204, *Safety Investigations and Reports*, 12 February 2014

AFI 91-206, *Participation in a Military or Civil Aircraft Accident Safety Investigation*, 8 July 2004

AFMAN 13-215 v1, *Airfield Operations Data Systems*, 6 February 2014

AFMAN 13-215 v2, *Airfield Operations Charts and Instrument Procedures Support*, 6 February 2014

AFMAN 13-215 v3, *Airfield Operations Equipment Systems*, 6 February 2014

AFMAN 33-326, *Preparing Official Communications,* 1 November 1999

AFMAN 91-201, *Explosive Safety Standards*, 12 January 2011

AFMAN 91-223, *Aviation Safety Investigations and Reports*, 16 May 2013

AFPAM 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH) Management Techniques*, 1 February 2004

MARBI 13-213, *March Airfield Flightline Driving Program*, 17 July 2014

MARBI 15-101, *Base Operational Weather Support*, 17 February 2016

MARBI 21-104, *Foreign Object Damage (FOD) Prevention Program Dropped Object Prevention (DOP) Program*, 20 September 2013

MARBI 21-136, *Crash, Damaged or Disabled Aircraft Recovery Procedures (CDDAR),* 26 August 2013

MARBI 91-201, *Weapons Safety Program*, 2 September 2015

Operations Plan, *March Bird/Wildlife Aircraft Strike Hazard (BASH) Plan 91-212 (FOUO),* 16 June 2015

Operations Plan, *March ARB Comprehensive Emergency Management Plan 10-2 (FOUO),* 28 January 2008

Operations Plan, *March ARB Integrated Defense Plan (IDP) 31-101 (FOUO),* 4 February 2016

Operations Plan, *March ARB Installation Deployment Plan (FOUO),* 15 September 2015

Operations Plan, *452 AMW Mishap Response Plan for Flight Mishap Safety Investigations (FOUO),* 28 April 2015

Letter of Agreement, *Law Enforcement VFR/SVFR Operations Within March Class C Airspace*, 14 October 1998

Letter of Agreement, *AR-209 Track Aerial Refueling Operations*, 1 June 1996

Letter of Agreement, *MQ-9 Remotely Piloted Aircraft Local Flying Procedures at March Air Reserve Base*, 15 March 2016

Letter of Agreement, *Night Vision Device Operations*, 1 January 2009

Letter of Agreement, *March Air Reserve Base Tactical Arrivals and Departures*, 26 July 2006

Letter of Agreement, *Interfacility Coordination and Control Procedures*, 10 April 2013

Letter of Agreement, *Simulated Flameout Procedures Between 144th Fighter Wing, Southern California TRACON, and March Air Traffic Control*, 14 February 2013

Letter of Agreement, *Parachute Operations at Lake Elsinore and Perris Valley*, 7 January 2016

Letter of Agreement, *March Air Reserve Base Tactical Arrivals and Departures*, 26 July 2006

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AF Form 813, *Request for Environmental Analysis*

AF Form 3616, *Daily Record of Facility Operation*

AF Form 3626, *Position Log*

Abbreviations and Acronyms

AAFM—Assistant Airfield Manager

AC—Asphaltic Concrete

ACA—Aerospace Control Alert

AE—ammunition/explosive

AF—Air Force

AFFSA—Air Force Flight Standards Agency

AFI—Air Force Instruction

AFJMAN—Air Force Joint Manual

AFM—Airfield Manager

AFRC—Air Force Reserve Command

AGE—Aerospace Ground Equipment

AGL—Above Ground Level

AHCP—Alternate Hazardous Cargo Pad

AICUZ—Air Installation Compatible Use Zone

Air Evac—Aeromedical Evacuation

AM—Airfield Management

AMC—Air Mobility Command

AMIS—Airfield Management Information System

AMP—Airfield Marking Panel

AMS—Automatic Meteorological Station

AMSL—Airfield Management Shift Lead

ANG—Air National Guard

AOAM—Airfield Operations Automation Manager

AOB—Airfield Operations Board

AOM—Airfield Operations Manager

AP—Area Planning

APHIS—Animal and Plant Health Inspection Service

APU—Auxiliary Power Unit

APV—Apple Valley Airport

AR—Air Refueling

ARB—Air Reserve Base

ARFF—Airport Rescue and Fire Fighting

ARINC—Aeronautical Radio, Inc.

ARTCC—Air Route Traffic Control Center

ASR—Airport Surveillance Radar

ATC—Air Traffic Control

ATCALS—Air Traffic Control and Landing Systems

ATIS—Automatic Terminal Information Service

ATM—Air Traffic Manager

ATOC—Air Terminal Operations Center

ATREP—Air Traffic Representative

Ave—Avenue

BAM/AHAS—Bird Avoidance Model/Avian Hazard Advisory System

BASH—Bird/Wildlife Aircraft Strike Hazard

Blvd—Boulevard

BOS—Base Operating Support

BWC—Bird Watch Condition

C2—Command and Control

CA—California

CAT—Crisis Action Team

CBP—U.S. Customs and Border Protection

CBP RAU—U.S. Customs and Border Protection Riverside Air Unit

CE—Civil Engineers

CFR—Code of Federal Regulations

CIC—Controller-in-Charge

CMA—Controlled Movement Area

COA—Certificate of Authorization or Waiver

CONR—CONUS Region

CONUS—Continental United States

COR—Contracting Officer Representative

CP—Command Post

CS—Communications Squadron

DAAS—Department of Defense Advanced Automation System

DALR—Digital Audio Legal Recorder

DASR—Digital Airport Surveillance Radar

DD—Department of Defense

DME—Distance Measuring Equipment

DO—Operations Officer

DoD—Department of Defense

DRF—Disaster Response Force

DSN—Defense Switching Network

DST—Daylight Savings Time

DV—Distinguished Visitor

DZ—Drop Zone

ECC—Emergency Communication Center

ECD—Estimated Completion Date

ELT—Emergency Locator Transmitter

EM—Emergency Management

EOC—Emergency Operations Center

EOD—Explosive Ordnance Disposal

EPU—Emergency Power Unit

ERCC—Engine Running Crew Change

ETA—Estimated Time of Arrival

ETVS—Enhanced Terminal Voice Switch

EWO—Emergency War Order

FAA—Federal Aviation Administration

FBO—Fixed-Base Operator

FCF—Functional Check Flight

FDIO—Flight Data Input Output

FES—Fire Emergency Services

FL—Flight Level

FLIP—Flight Information Publication

FM—Frequency Modulation

FOD—Foreign Object Damage

FOUO—For Official Use Only

FPCON—Force Protection Condition

FR—Federal Register

FSS—Flight Service Station

ft—Feet

GA—General Aviation

GCS—Ground Control Station

GE—Ground Emergency

GS—Glideslope

HAZMAT—Hazardous Materials

HCP—Hazardous Cargo Pad

HD—Hazard Division

HDF—Homeland VOR

HF—High Frequency

HQ—Headquarters

IAP—International Airport or Instrument Approach Procedure

IAW—In Accordance With

IC—Incident Commander

IDP—Integrated Defense Plan

IEMP—Installation Emergency Management Plan

IFE—Inflight Emergency

IFR—Instrument Flight Rules

ILS—Instrument Landing System

IMC—Instrument Meteorological Conditions

JET—Joint Environmental Toolkit

JI—Joint Inspection

JLI—Julian VORTAC

JO—Joint Order

KIAS—Knots Indicated Airspeed

kN—kilonewtons

kts—Knots

L—Local Time or PST

lbf—force pounds

Lbs—pounds

LMR—Land Mobile Radio

LOA—Letter of Agreement

LOC—Localizer

LOP—Letter of Procedure

LZ—Landing Zone

M—Magnetic

MA—Movement Area

MACA—Mid-Air Collision Avoidance

MCE—Maximum Credible Event

Med Evac—Medical Evacuation

MEQ—Maximum Explosive Quantity

METAR—Aviation Routine Weather Report

MIPAA—March Inland Port Airport Authority

min—Minute

MITO—Minimum Interval Takeoff

MOC—Maintenance Operations Center

MOG—Maximum on Ground

MPH—Miles Per Hour

MSA—Munitions Storage Area

MSL—Mean Sea Level

MTR—Military Training Route

MX—Maintenance

N/A—Not Applicable

NAS—National Airspace System

NAVAID—Navigational Aid

NERCC—Non-Engine Running Crew Change

NEW—Net Explosive Weight

NEWQD—Net Explosive Weights for Quantity Distance

NLT—No Later Than

NM—Nautical Mile

NORAD—North America Air Defense

NOTAM—Notice to Airmen

NVD—Night Vision Device

OPR—Office of Primary Responsibility

ORE—Operational Readiness Exercise

ORI—Operational Readiness Inspection

PA—Public Affairs

PAOL—Pilot-Airfield Operations Liaison

PAPI—Precision Approach Path Indicator

PCAS—Primary Crash Alarm System

PCC—Portland Cement Concrete

PCN—Primary Crash Net

PDZ—Paradise VORTAC

PHCP—Primary Hazardous Cargo Pad

PIC—Pilot-in-Command

PL—Protection Level

PMI—Preventative Maintenance and Inspections

PMSV—Pilot-to-Metro Service

POW/MIA—Prisoner of War/Missing in Action

PPQ—Plant, Pest, Quarantine

PPR—Prior Permission Required

PST—Pacific Standard Time

PTD—Pilot-to-Dispatch

Qtr—Quarter

R—Radial

RAPCON—Radar Approach Control

RCR—Runway Condition Reading

Ref—Reference

RIV—March TACAN or March ARB

RPA—Remotely Piloted Aircraft

RSC—Runway Surface Condition

RSRS—Reduced Same Runway Separation

RVR—Runway Visual Range

Rx—Receive

SCA—Sensor Collection Appliance

SCN—Secondary Crash Net

SCT—Southern California TRACON

SE—Safety

SEF—Flight Safety

SEG—Ground Safety

SFO—Simulated Flame-Out

SFS—Security Forces

SII—Special Interest Item

SISFO—Straight-In Simulated Flame-Out

SM—Statute Miles

SoCal—Southern California TRACON

SOF—Supervisor of Flying

SPECI—Aviation Selected Special Weather Report

SPINS—Special Instructions

St—Street

STARS—Standard Terminal Automation Replacement System

SVFR—Special Visual Flight Rule

TA—Transient Alert

TACAN—Tactical Air Navigation

TBD—To Be Determined

TDY—Temporary Duty

TERPS—Terminal Instrument Procedures Specialist

TFR—Temporary Flight Restriction

TO—Technical Order

TRACON—Terminal Radar Approach Control

TRM—Thermal VORTAC

TSM—Training and Standardization Manager

Tx—Transmit

UAS—Unmanned Aircraft System

UAV—Unmanned Aerial Vehicle

UFC—Unified Facilities Criteria

UHF—Ultra High Frequency

USAF—United States Air Force

USDA—United States Department of Agriculture

USG—United States Government

UTA—Unit Training Assembly

VFR—Visual Flight Rules

VHF—Very High Frequency

VLZMP—Visual Landing Zone Marker Panel

VMC—Visual Metrological Conditions

VOR—VHF Omni-directional Range

WGS—World Geodetic Survey

WS—Watch Supervisor

WTC—Wing-Tip Clearance

WX—Weather Station

Z—Zulu or Universal Time Coordinated

ZLA—Los Angeles ARTCC