UNITED STATES MARINE CORPS
MARINE CORPS AIR STATION MIRAMAR
P.O. BOX 452001
SAN DIEGO, CALIFORNIA 92145-2001

StaO 3710.1D
AirOps
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STATION ORDER 3710.1D

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

Subj: AIRFIELD OPERATIONS MANUAL

Ref: (a) MCAS Miramar Facility Response Plan
(b) OPNAVINST 3721.5L, Naval Air Traffic Control Air Navigation Aids and Landing Systems Program
(c) MCO P11000.11B Marine Corps Fire Protection and Emergency Services Program
(d) Aeronautical Information Manual
(e) OPNAVINST 3750.6S, Naval Aviation Safety Management System
(f) MCO 3140.24, Adverse and Severe Weather Warnings and Conditions of Readiness
(g) COMNAVAIRPAC/COMNAVAIRLANTINST 2740.1, Carrier Qualification Operations
(h) CNAF M-3710.7, NATOPS General Flight and Operating Instructions Manual
(i) LOA for Tower to Tower Flight Plans
(j) StaO 8020.1D, SOP for Cargo and Hazardous Material Loading Area
(k) StaO 3750.2A, Bird/Animal Aircraft Strike Reduction Plan
(l) StaO 8020.3B, Hazards of Electromagnetic Radiation to Ordnance (HERO) Emissions Control Bill
(m) SOCAL TRACON and MCAS Miramar LOA
(n) NAVAIR 00-80T-114, NATOPS Air Traffic Control Manual
(o) FACSFACSDINST 3120.15 Manual of EASTPAC and MIDPAC Operating Area
(p) Los Angeles ARTCC 3d MAW LOA
(q) Interagency Memorandum of Understating dated 9 September 1996
(r) FAA (JO) 7110.65V Series (NOTAL), Air Traffic Control
(s) StaO 5090.5C, Hazardous Waste Management Plan
(t) MCAS Miramar Spill Contingency Plan
(u) MCO 8023.3C, Personnel Qualification Program for Class V Ammunition and Explosives
(v) StaO P5530.3, Flight Line Security Program
(w) NAVSEA OP 5, Volume 1, Ammunition and Explosives Safety Ashore
(x) NAVAIR 00-80T-103, NATOPS Conventional Weapons Handling Procedures Manual Ashore
(y) Fuels Branch Operations Manual
(z) StaO 3550.1, Procedures to Request Training Aboard MCAS Miramar
(aa) MCO P1710.16E, Marine Corps Aero Club Program Manual
(ab) 32 CFR 766, Use of Department of Navy Aviation Facilities by Civil Aircraft
(ac) FLIP General Planning Guide and U.S. IFR Enroute Supplement
(ad) DOD Order 4515.13-R, Air Transportation Eligibility
(ae) StaO P5580.1 Law Enforcement Regulations
(af) NAVAIR 00-8-R-14 Aircraft Firefighting and Rescue
(ag) NAVAIR 00-8-R-20 Aircraft Crash and Salvage Manual
(ah) SOCAL TRACON and MCAS Miramar SFO LOA 1 April 2019
(ai) StaO 3750.1B

Encl: (1) StaO 3710.1D

1. Situation. The Purpose of this Order is to establish procedures, disseminate information, and provide instruction for the safe and orderly execution of flight operations aboard Marine Corps Air Station (MCAS) Miramar.

2. Cancellation. StaO P3710.1C.

3. Mission. This Order is published per the references, Federal Aviation Administration (FAA) regulations, and other applicable Navy and Marine Corps directives. Its provisions are applicable to all units and personnel operating aircraft or vehicles on the airfield and it shall govern all aircraft departing, arriving, or operating within the MCAS Miramar Air Traffic Control Area. The instructions contained herein shall not be construed to change or supersede existing instructions issued by higher authority, nor relieve pilots of their inherent responsibility to exercise sound judgment in situations not covered by these regulations.

4. Execution. Commanding Officers as well as Unit Supervisors shall ensure that all personnel are thoroughly familiar and comply with all the rules, procedures and regulations contained herein.

5. Administration and Logistics

a. This Order contains substantial changes to MCAS Miramar's airfield and flight operations procedures, and shall be reviewed by all participating pilots, aircrews, supervisory personnel, and air station operational support staff.

b. This Order is issued under Distribution Statement A and is published electronically. It can be accessed online via the MCAS Miramar SharePoint at https://eis.usmc.mil/sites/mcasm2/Adj/Lists/Station%20Directives/AllItems.aspx.

6. Command and Signal

a. Command. This Order is applicable to personnel assigned to Marine Corps Air Station Miramar.

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

C. B. DOCKERY

LOCATOR SHEET

Subj: AIRFIELD OPERATIONS MANUAL

Location: _____
(Indicate the location of copy of this manual)

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Authorizing Official

ANNUAL REVIEW

Log annual review as indicated.

Annual Review Date	Signature of Reviewing Official

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CHAPTER 1

GENERAL AIRFIELD INFORMATION

1000. GENERAL INFORMATION. The following information provides only a general overview of Marine Corps Air Station (MCAS) Miramar, its structure, and associated airspace. Some terminology and specific definitions for elements unique to MCAS Miramar are depicted in Appendix A-1. The procedures and regulations that govern the operation of vehicles and aircraft at specific locations aboard the air station are identified in more detail in subsequent chapters. An annual review of this Order shall be conducted during the month of June and coordinated with all applicable organizations to ensure content is pertinent and up to date.

1001. PRUDENTIAL RULES. The regulations stated in this Manual shall govern the operation of aircraft, vehicles, and personnel aboard this station; however, they are not intended to cover every contingency or all rules of safety and good practice. Department of Defense Flight Information Publications, Instrument Flight Rules (IFR) Enroute Supplement, and Instrument Approach Procedures shall be consulted for further details. All personnel are expected to exercise good judgment in the operation of vehicles and aircraft, and to adhere to the general prudential rules of vehicle operation and flying contained in current directives. MCAS Miramar authority may be delegated for requirements throughout this Manual.

1. Location. MCAS Miramar is located approximately ten miles north of downtown San Diego, California. A geographical reference to the approach end of Runway 24R is North 32 degrees 52 minutes 22 seconds and West 117 degrees 07 minutes 37 seconds.

2. Elevation. MCAS Miramar sits 478 feet above mean sea level (MSL) measured at the approach end of Runway 24L, 475 feet MSL at the approach end of Runway 24R. The west end of Runway 24R is 425 feet MSL.

3. Base Operations. Base Operations is located in Building 9211. It is a two-story building located on the north side of the flight line between Hangars 3 and 4. A VIP Lounge is also located on the first floor of this building.

4. Categorization. MCAS Miramar is a DOD Category Three airfield, and complies with Federal Aviation Regulation (FAR) Part 139.317 Index D for Aircraft Rescue and Fire Fighting (ARFF) requirements. Procedures required of this status are provided in Chapters 2 and 11.

5. Hours of Operation

a. The standard Airfield hours are Monday through Thursday from 0730-2400L PST/0830-0100L PDT, Friday from 0830-1800L, and Sunday from 1400-1800L. The airfield is normally closed on Saturdays, except as directed to meet specific mission requirements, for a variable 8 hour window during reserve unit weekends. Aircraft must land 5 minutes prior to field closure to allow for positive control to a non-movement area.

b. Flight operations outside the standard published airfield hours will require approval from the Airfield Operations Officer. Tenant requests must be routed through the proper chain-of-command to Third Marine Aircraft Wing (3d MAW) Current Operations for adjudication who will then send the requests

to MCAS Miramar S-3, Airfield Operations for final approval. Non-tenant unit requests should be addressed to MCAS Miramar S-3, Air Operations for adjudication and approval. These hours may change at the discretion of the Commanding Officer, MCAS Miramar, based on local flight operations and operational requirements.

c. Closed field operations are addressed in Chapter 9.

1002. AIRFIELD DESCRIPTION. The following information describes the airfield layout, to include buildings and characteristics, which describe MCAS Miramar. See Appendix B-1 for a graphical depiction.

1. Airfield. The Airfield encompasses the ground surface that is bordered by the fence line that immediately surrounds the flight line, runways, taxiways, helicopter landing spots, the perimeter road, and includes hangars, aircraft parking ramps, and other support facilities.

2. Flight Line. The flight line encompasses all hangars, parking aprons and ramps from which tenant squadrons operate. Airfield Operations (Building 9211), Air Traffic Control Tower (ATCT), Aircraft Rescue Fire Fighting (ARFF) building, Aircraft Recovery and Visiting Aircraft Line (VAL) are also part of the flight line. It does not include the taxiways, runways, helicopter landing spots, or the perimeter road. An illustration of the flight line is shown in Appendices B-1 and R-1.

3. Hangars. There are nine hangars, numbered 0 through 7, and Hangar A located on the north side of the airfield. Running east to west, Hangar 0 is located on the eastern most end of the airfield; Hangar 7 is located on the western most end of the airfield.

4. Weight Bearing Capacities. The weight bearing capacities of various airfield surfaces are described below and depicted in Appendix W-1.

a. Runway, taxiway, and parking ramps meet all maximum load limits for all current U.S. aircraft and have no wheel load limitations. Aircraft with high wheel loadings and/or clearance requirements will be issued specific taxi and parking instructions by ground control. Blacktopped areas near taxiways, compass roses, helicopter spots, and parking aprons are not stressed to support any aircraft.

b. The blacktop areas between the taxiways connecting Helicopter spots 1 through 2 are not stressed to support vehicular traffic. Additionally, the unpaved areas around the outer perimeter of both Helicopter spots 1 through 2 and landing helicopter dock (LHD) have only been treated to reduce Foreign Object Debris (FOD); these surfaces were not designed to support vehicle traffic. Vehicles are prohibited from operating in these treated areas. For further information, contact Airfield Operations.

5. Parking apron or ramp. Parking apron or ramp are terms used interchangeably throughout this order. The parking aprons or ramps are located north of Quebec Taxiway and south of the airfield buildings and hangars. They are further defined as those portions of the flight line on which aircraft are parked just prior to or immediately after flight operations. Each apron/ramp is numbered to coincide with its respective hangar (i.e. apron/ramp 0 is located in front of hangar 0).

a. Parking apron 0 is used primarily to park the KC-130 aircraft belonging to the tenant KC-130 squadron, Marine Aerial Refueler and Transport Squadron (VMGR) 352. Visiting C-130 aircraft or other large transport cargo aircraft may also be parked here provided prior coordination is made with VMGR-352.

b. Parking aprons 1 through 3 and apron A are used primarily to park tenant F/A-18 and F-35 aircraft, and visiting aircraft (F-16s, F-5s, etc.) hosted by tenant F/A-18 and F-35 squadrons. Tenant F-35 squadrons that park their aircraft on parking apron A are Marine Fighter Attack Squadron (VMFA) 314. Tenant F/A-18 squadrons that park their aircraft on parking aprons 1 and 2 are Marine Fighter Attack Squadrons (VMFA) 232 and 323. Marine Fighter Attack Training Squadron (VMFAT) 101 parks its aircraft on parking apron 3. The Fixed Wing Marine Transport Squadron Detachment (VMR Det) of H&HS, MCAS Miramar, also parks its C-12 and UC-35 aircraft on the east end of parking apron 1.

c. Parking aprons 4 and 5 are used primarily to park tenant CH-53E helicopters. Large transient helicopters visiting MCAS Miramar, such as CH-53E or CH-47 helicopters, may also be parked on one of these ramps provided prior coordination is made with the respective tenant CH-53E squadrons. Tenant CH-53E squadrons that park their aircraft on parking aprons 4 and 5 are Marine Heavy Helicopter Squadrons (HMH) 361, 462, 465, and 466.

d. Parking aprons 6 and 7 are used to park tenant MV-22 Tiltrotor aircraft, and other helicopters of equal or smaller size. Transient helicopters of this size may be parked on this ramp provided prior coordination is made with the respective tenant squadrons. Tenant squadrons that park their aircraft on parking aprons 6 and 7 are Marine Medium Tiltrotor Squadrons (VMM) 161, 163, 165, 166, 362 and 764.

6. Taxiways and Runways. Reference the Airfield Diagram in Appendix B-1.

7. Runway markings. Runways are marked in accordance with standard U.S. Navy and FAA Directives. Lighted runway distance markers are located at 1,000 foot intervals along all runways. A closed runway will be indicated by standard runway markings (yellow banners and/or lights in the form of an "X" at both ends). The Improved Fresnel Lens Optical Landing System (IFLOLS) will also be configured to indicate a closed runway by folding the datum arms. During the hours of darkness, all lighting associated with a closed runway will be secured.

8. Helicopter landing spots and the Amphibious Helicopter Deck (LHD). Reference the Airfield Diagram in Appendix B-1.

9. Runway 24L FCLP Carrier Deck. Fixed wing Field Carrier Landing Practice (FCLPs) are conducted to the simulated aircraft carrier deck located on the left side of Runway 24L, approximately 2,500 feet from the approach end. The carrier deck is painted for day operations and lighted for night operations. FCLP operations are described in Chapter 5.

10. Tow Line. The tow line is part of the aircraft flight line movement area and is used as the line that separates movement and non-movement areas. A tow line is located immediately north of Taxiway Quebec and is used by support vehicles and aircraft under tow. Be cautious of dimly lit aircraft under tow in this area at night. Additionally, Taxiway Quebec is used for

opposite direction taxi of aircraft during daylight hours. Towing is discussed further in Chapter 16.

11. Vehicle Lane. The vehicle lane is the two-lane, marked road that generally runs east to west along the flight line. It lies immediately south of the flight line buildings, and north of the parking apron.

12. Movement Area. The movement area includes all taxiways, runways, helicopter landing spots, and vertical landing pads.

a. The movement area is defined as the airfield surface area in which aircraft and vehicles require positive control by Air Traffic Control (ATC) in order to operate during hours the airfield is open for operations. The surface area remains the movement area even after the field is closed.

b. Vehicles from the fuels division are not required to obtain clearance from ATC Ground Control to cross the Quebec Taxiway between the following locations: the ramp area in front of hangars 2 and 3 and the fixed-wing inline fuel pits via either of the two vehicle lanes; the ramp area in front of hangar 6 and the rotary-wing inline fuel pits. Additionally, vehicles from ATCMD are not required to obtain clearance from ATC Ground Control to cross the Quebec Taxiway between the ramp area in front of hangar 6 and the rotary-wing inline fuel pits while enroute to the Station TACAN or FPN-63 site. This does not authorize ATCMD vehicles to proceed across any other movement area.

c. These vehicles are still required to have two-way radio capability. Vehicle operators shall give way to all aircraft and remain vigilant of aircraft operating on the taxiway and surrounding areas. This only applies to directly crossing the Quebec Taxiway within the marked lanes. Any incident or incursion regarding these vehicles crossing Quebec Taxiway will be the error of the vehicle operator. If there is any doubt as to whether the crossing should be made, the operator will contact ATC Ground control for direction.

13. Non-movement Area. The non-movement area is defined as those areas in which aircraft and vehicle movement do not require positive control by ATC. This includes the parking aprons, perimeter road, vehicle lane, and the primary Combat Aircraft Loading Areas (CALA).

14. Vehicle Restricted Access Area (VRAA). The Vehicle Restricted Access Area (VRAA) is defined as the runway, runway shoulder surface areas, and areas between the Runways (6L/24R and 6R/24L).

15. Perimeter Road. The Perimeter Road is defined as the airfield road that encompasses the eastern, southern, and western portions of the runway surfaces. The road starts at the eastern corner of the flight line, flight line gate 1, and ends at the movement area entrance in the vicinity of the in-line west fuel pits.

16. Arresting Gear. Arresting gear is located at the approach ends of Runways 24L, 24R, 06L, and 06R.

a. Locations of arresting gear are depicted in Appendix B-1. Arresting gear procedures are described in Chapter 5.

b. The arresting gear is marked by yellow circles painted on the runway. The lighted international arresting gear markers are yellow disks (three feet in diameter, also known as Johnson Balls) that are centered next to the cable.

17. Hazardous Cargo Loading Area. This Red Label Area is located on Taxiway Sierra between the east end and the strategic lift pad in the vicinity of spots 4 and 5. This loading area co-exists with the Secondary CALA and is not used concurrently with Secondary CALA operations or crash fire rescue training at the burn pit. See Appendix B-1 for exact location of the area.

18. Combat Aircraft Loading Area (CALA). The airfield possesses two approved CALA sites. CALA operations are described in Chapter 12 and depicted in Appendix B-1.

a. The primary CALA is located just east of Taxiway Echo, between the approach end of Runway 24L and Taxiway Sierra. The primary CALA has 10 points for loading ordnance onto aircraft. These sites are both depicted in Appendix B-1.

b. The secondary CALA is located on Taxiway Sierra between Runway 6R/24L and the strategic lift pad. There are 12 points for loading ordnance onto aircraft which can accommodate forward firing positions.

19. Compass Rose. The Air Station possesses one compass rose site and three north/south calibration lines. The full compass rose site is south of ramp 4, bordered on the east by Taxiway India, on the south by Taxiway Quebec, and on the west by Taxiway Sierra. One north/south calibration line is southwest of Hangar 7, southwest of Taxiway Quebec and north of Helo Spot 3. One north/south calibration line is east of Taxiway Golf, bordered to the north by Taxiway Quebec and to the south by Taxiway Papa. The third north/south calibration line is south of Hangar 0 in VMGR-352 Run-up spot 4. Procedures for utilization of the compass rose site and north/south calibration sites are provided in Chapter 2.

20. Fuel Pits. The air station has two locations in which aircraft hot refueling is provided. These two sites are referred to as the “in-line west” and the “in-line east” fuel pits. An expanded discussion of refueling and defueling procedures is located in Chapter 13. The fuel pits are depicted in Appendix B-1 as R/W and F/W fuel pits.

a. In-line East Pits: The in-line east pits are located south of Ramp 2 and 3 between Taxiways Quebec and Papa. They are aligned in an east-west direction, with Pit 1 on the east end and Pit 4 on the west end. Procedures for in-line pits are described in Chapter 13.

b. In-line West Pits: The in-line west pits are located north of the intersection of Taxiways Mike and Papa and south of Taxiway Quebec. The pits are aligned in an east-west direction beginning with Pit 5 on the east end and ending with Pit 8 on the west end. Appendix B-1 and Chapter 13 provide procedures and a pit number diagram with aircraft traffic flows.

21. Hush Houses. MCAS Miramar has two “hush houses” located in buildings 9565 and 9601 between Hangars 0 and 1 which accommodate F/A-18 aircraft. The hush house in building 9565 also accommodates T-39, F-5, and F-16 aircraft.

22. Explosives Loading/Arming/Handling Areas. Loading, offloading, arming, and de-arming areas and procedures are detailed in Chapter 12 of this order.

23. Aircraft Wash Facilities. The airfield possesses an automated rinse facility, and eight standard wash racks.

a. Rinse Facility: An aircraft rinse facility, also referred to as the "bird bath," is located on the south side of ramp 5, just east of in-line west fuel pits. Designed primarily for rinsing helicopters with fresh water, it is also available for use by other types of aircraft. Aircraft desiring to use this facility must enter on the west side, taxiing in a west to east direction over the Bird Bath Rinse Activation Plate to automatically activate the system. Problems and/or questions about the bird bath should be directed to Airfield Operations.

b. Wash Racks: There are eight aircraft wash racks dispersed along the flight line, just north of the vehicle lane. The wash racks are depicted in Appendix B-1.

(1) Units that are arriving from or departing on deployment shall be given first priority with the wash racks for scheduling purposes.

(2) Use of the wash racks for units that are not arriving from or departing on deployment shall be on a "first come, first served" basis.

24. Windsocks. All windsocks are free swinging and will be fully inflated during wind velocities of 15 knots or greater. Windsocks are installed at the following locations and illuminated as indicated for night operation. For a visual depiction see Appendix B-1.

a. Between Runway 24R and Taxiway Papa, approximately 1,000 feet from the approach end, and has no illumination.

b. West of Taxiway Echo between the approach end of Runway 24L and Taxiway Sierra, and has illumination.

c. Abeam the northwest end of the LHD deck, and has no illumination.

d. Between Runways 6R and 6L, equidistant between approach end of 6L and 6R, and has illumination.

e. On top of the southwest corner of Hangar 6, at a point abreast of the helicopter landing spots, and has illumination.

f. Abeam the number two arresting gear, on the south side of Runway 24R, and has no illumination.

25. Strategic lift pad is located on the northeast side of Taxiway Sierra before the intersection with Runway 24L. This area provides ammunition loading/unloading of cargo aircraft and will accommodate cargo aircraft up to a C-5.

1003. AIRFIELD LIGHTING. All runway and taxiway lighting is variable in intensity and controlled by the Air Traffic Control Tower. The CV FCLP deck light can also be controlled by the Landing Signal Officer (LSO).

1. Runway 24R is equipped with high intensity, runway edge and centerline lights with five-step, variable intensity that can be pilot controlled during closed field operations (see Chapter 9 for details on pilot controlled lighting). The approach lighting system for Runway 24R is a U.S. Standard ALSF-1 configuration of five-step variable intensity. The approach lighting system extends 3,000 feet beyond the approach end. The first 2,000 feet are illuminated when operated on intensity levels 1, 2, or 3, and the full 3,000 feet are illuminated when operated on intensity levels 4 or 5. The sequenced flashing lights, associated with the approach lighting system, have three intensity settings and are adjustable from the air traffic control tower (ATCT). There are three sets of wave-off lights per side for Runway 24R.

2. Runway 24L is equipped with high intensity runway edge lights with five-step, variable intensity. There are no approach lights to Runway 24L, but there are three sets of wave-off lights per side. The Runway 24L carrier deck is equipped with three-step, high intensity lighting controlled by the LSO.

3. Runway 6R & 6L are equipped with high intensity runway edge lights with five-step, variable intensity. There are no approach lights to Runway 6R & 6L.

4. The LHD deck is equipped with high intensity runway edge lights with a five-step, variable intensity.

5. Helicopter spots 1 and 2 are equipped with high intensity edge lights with variable intensity. Helicopter spots 3-5 are unlit.

6. Taxiway lighting consists of blue lights with three-step, variable intensity.

7. In-line east and west refueling pit lighting is provided for the in-line refueling points at each location. Amber lights and signs indicate the location and number of each pit (1-4 east and 5-8 west).

8. Arresting gear markers have photocell activated yellow lights that indicate gear is rigged and in service. Red flashing lights on each arresting gear system are activated when the gear is engaged or out-of-battery.

9. Obstruction lights are provided for all prominent obstructions within a five-mile radius of the airfield. These obstructions are required to display a steady red or flashing red obstruction light.

10. When required for NVG operations, requests for securing airfield lighting will be made to the control tower and shall be evaluated on a case-by-case basis. Aircrew utilizing NVGs at the airfield shall ensure that their flight schedule reflects that mission. Aircrew will ensure that their anti-collision lights are turned back on once clear of the active runway.

11. A rotating beacon is located north of the control tower. The beacon is equipped with a green and double peaked white light.

a. The beacon will be operational whenever the airfield is open and operating under Instrument Meteorological Conditions (IMC). The beacon will also be operating during the hours the field is open between sunset and sunrise.

b. A flashing red light located on top of the rotating beacon will be illuminated when the airfield is closed.

c. For advisory purposes, Montgomery Field beacon is located three miles south of Miramar and has a green and single-peaked white light.

1004. AIRFIELD LIGHTING FOR AIRCRAFT APPROACHES. The air station operates Precision Approach Path Indicator (PAPI) lighting for standard arrivals, and an Optical Landing System (OLS) for FCLPs.

1. PAPI units are installed near the approach end of Runways 24R, 24L, 6R, and 6L. The PAPI lights for Runways 24R and 24L are located approximately 1,000 feet beyond the approach end threshold. The PAPI lights for Runways 6L and 6R are located approximately 750 feet beyond the approach end threshold. PAPIs provide aircraft with glide path information via a system of four light source units arranged in a horizontal row. The unit projects red/white color light patterns relative to the aircraft's position on glide path. The PAPIs are set for a three-degree glide slope. For further information on PAPI glide path light indications, refer to the current DOD Flight Information Handbook or Airman’s Information Manual (AIM) Chapter 7-6-3.

a. The PAPI units for Runways 24R, 24L, 6R and 6L are optimized for Height Group 2 aircraft, such as F/A-18s. Aircraft larger than an F/A-18 using the PAPI on approach to these runways should adjust their glide path accordingly so as not to land short of the optimum touchdown zone for that aircraft.

b. Air Traffic Controllers can control the intensity of the PAPI systems on Runways 24R and 24L. Air Traffic Control Maintenance Division (ATCMD) personnel must be dispatched to control the PAPIs on runways 6L and 6R.

c. In the event the PAPIs for any runway are out of service, an OLS will be set up approximately 1,200 feet from the approach end of Runway 24L, on the south side of the runway.

2. There are two model lighting systems used for OLS. Procedures for Fresnel Lens Optical Landing System (FLOLS) and Improved Fresnel Lens Optical Landing System (IFLOLS) are described below.

a. One Mark 14 IFLOLS is installed 3,004 feet from the approach end of Runway 24L and is used during FCLP operations.

b. The IFLOLS is activated and controlled by the Airfield Recovery section. Both lenses are set for a 3-degree glide slope and provide the LSO with a wave-off lighting system.

c. Any adjustments required for either the FLOLS or IFLOLS shall be coordinated with the Airfield Recovery section.

1005. AIRFIELD PHYSICAL SECURITY. Access to MCAS Miramar’s Airfield is restricted by an Automated Entry Control System (AECS). This system consists of an eight-foot high chain link fence topped with barbed wire. Access to the airfield through this fence is through either vehicle access gates or personnel access gates (turnstiles). All vehicle access gates and turnstiles are monitored with surveillance cameras. Report any damage or inoperability of access gates or turnstiles to the ODO at extension 9101. Further discussion regarding airfield vehicle operations is provided in Chapter 16 of

this manual.

1006. AIRFIELD OPERATIONS SECTIONS. MCAS Miramar possesses ten sections that provide the capabilities required to facilitate aviation operations aboard the airfield. Unless otherwise stated, these sections are assigned to the Airfield Operations Division.

1. Airfield Operations Division. The Airfield Operations Division is a functional section of the Station S-3 and is located in the Base Operations Building (9211).

a. Airfield Operations provides operational oversight for the Visiting Aircraft Line, Flight Planning section, Meteorological and Oceanographic section, Air Traffic Control section, Air Traffic Control Maintenance Division, Aircraft Rescue and Firefighting section, and Aircraft Recovery section.

b. A Federal Aviation Administration (FAA) Air Traffic Representative (ATREP) is collocated with Airfield Operations.

2. Visiting Aircraft Line (VAL). VAL is located in the Air Terminal in Building 9100, one block east of Base Operations.

a. Comprised of Marine and civilian employees, the VAL supports all transient aircraft, 3d MAW deployments, distinguished visitors (VIPs), medical evacuation (MEDEVAC), and local unit activities. VAL also supports special missions as required to include disaster relief and humanitarian aid.

b. VAL is manned at all times the airfield is open, and as required in support of personnel and units that are deploying to or returning from CONUS or overseas commitments.

c. Expanded guidance on the services provided by the VAL is provided in Chapter 15.

3. Flight Planning. This office is manned when the airfield is open, and is responsible for providing flight crews any assistance necessary for mission accomplishment.

a. A flight planning room is located on the first deck of Airfield Operations (Building 9211) across from the Operations Duty Officer. A flight planning table, computers with internet access, copier, DOD FLIP charts, maps, FLIP publications, and noise abatement procedures are available in the flight planning room.

b. The charts and publications in the flight planning room are intended for aircrew use as aids to planning. A limited supply of charts and publications are available to transient aircrews from the Flight Planning Chief. Fleet units should obtain needed charts and publications via the normal distribution system or from the National Imagery Mapping Agency (NIMA) Office, located aboard NAS North Island, San Diego DSN: 735-6069/70/68, or Com (619) 545-6068/69/70.

4. Meteorological and Oceanographic (METOC). The Regional METOC service branch is located on the first deck of Airfield Operations (Building 9211). METOC provides complete forecasting, flight weather briefing, and observational services 24 hours per day, 7 days per week. Expanded guidance

on the procedures to be used for METOC support is provided in Chapter 3. The following is an annual climatology summary for MCAS Miramar.

a. March-September: Cold frontal passages are the dominant weather factor early in this period, producing precipitation, layered cloudiness, and cool weather. After frontal passage occurs, excellent flying weather prevails for several days. By the end of April, the fog/stratus season begins and lasts through summer. Fog and stratus (IMC) develop during the night or early morning hours and usually dissipate by mid-morning. Afternoons are generally clear. Afternoon and evening visibility is occasionally reduced by haze when the temperature inversion is low. An occasional Catalina Eddy will cause the stratus cloud cover to persist for several days. Thunderstorm activity over the mountains and deserts to the east begins in July. Precipitation is rare during the summer months. In September, Santa Ana winds (periods of warm offshore flow) become more frequent. They are responsible for the area's most severe heating periods.

b. October - February: The late night and early morning stratus and fog pattern remain nearly the same except there is less clearing before frontal passages but rapid clearing afterwards. The rainy season begins during this period and the hot, dry Santa Ana activity decreases in intensity and occurrence by the end of November. By December, cooler temperatures and good flying conditions prevail; however, there can be extensive periods of cloudiness and rain. Cold front passages are most prevalent in December through February.

5. Air Traffic Control (ATC). ATC service branch and radar facilities are located on the second deck of Airfield Operations (Building 9211). The ATC Tower is located in Building 9212. The height of the tower from the base to the top of the tallest antenna is 115 feet.

a. Miramar ATC provides all weather tower and Ground Controlled Approach (GCA) radar services in support of the 3d MAW, I MEF and other military and civilian aircraft involved in contingency and training operations. ATC is manned whenever the airfield is open.

b. Aircrew members are encouraged to visit the ATC radar and tower facilities to obtain a better understanding of ATC procedures and capabilities. These visits may be arranged with the ATC Facility Officer (ATCFO) or Facility Watch Officer (FWO). Personnel are advised that access to these facilities is strictly controlled, and that an escort is required for entry into the control tower or radar room.

6. Aircraft Rescue and Firefighting (ARFF). ARFF is located in the first building immediately east of Airfield Operations (Building 9227). ARFF’s primary mission is to provide rescue and firefighting for aviation assets aboard the airfield. ARFF may also provide mutual aid to the MCAS Miramar Structural Fire Department as required for structural fires and emergency medical responses aboard the airfield per reference (a). ARFF is manned 24 hours per day, 7 days per week.

7. Aviation Fuels Division (AFD). AFD is located between Hangars 4 and 5 and falls under the administration and operational control of MCAS Miramar S-4. AFD provides aircraft refueling and defueling services and conducts these operations in accordance with references (e) and (t). Further discussion regarding fueling and defueling operations is located in Chapter 13.

8. Aircraft Recovery. The Recovery section is located in Building 9182 and is manned at all times the airfield is open, and during Closed Field Operations (CFOs), supporting tail-hook equipped aircraft. A 30 minute recall is in place for the on-duty crew in the event of emergency arrestment during closed airfield hours. The Recovery section inspects, operates, and maintains emergency arresting gear for use by tail-hook equipped aircraft. Additionally, they inspect, operate, and maintain the IFLOLS and Manually Operated Visual Landing Aids Systems (MOVLAS).

9. Explosive Ordnance Disposal (EOD). The installation EOD section is a Force Protection asset and they are first responders along with other emergency services. Additionally, EOD assists range operations through routine EOD response for explosive ordnance related issues. Request for EOD support for aircraft explosive hazards such as aviation ordnance and/or partially ejected countermeasures should be requested through Airfield Operations. Station EOD is under operational control of Station Operations and located in building 21020 on East Miramar. Station EOD is typically manned from 0730-1630, Monday through Friday. On holidays and after normal working hours, the Duty EOD Response Element (RE) is on a one hour phone recall. After hours the EOD RE can be reached via a duty cell phone, 858-864-4201.

10. Air Traffic Control Maintenance Division (ATCMD). ATCMD is located on the second deck of building 9211. ATCMD is comprised of military and civilian technicians that are on hand 24 hours per day, 7 days per week. Per reference (b), ATCMD is responsible to the Installation Commanding Officer, via the chain of command, for the upkeep and timely repair of Naval Air Traffic Control, Air Navigation Aids and Landing Systems (NAALS) equipment assigned by Space & Naval Warfare Systems Command (NIWIC) System Center Charleston to ensure continuous safe air operations in support of the installation’s mission.

a. Manage contract maintenance organizations applicable to the supportability of NAALS equipment, while properly administering the technical requirements of the contract under the guidance of the contracting officer.

b. Coordinate with local and regional frequency coordinators to ensure that no RF emissions are permitted on or around NAALS equipment that may interfere with the frequencies used to communicate with aircraft and airfield vehicular traffic or the control and operation of airfield equipment.

c. Assist the Operations Officer in the development of Operational Capability Improvement Requests (OCIR) as they pertain to NAALS equipment.

1007. COMMUNICATION FACILITIES

1. Air-to-Ground. Air-to-ground UHF and VHF voice communication frequencies are listed in the current edition of the FLIP Enroute IFR Supplement.

2. Automatic Terminal Information Service (ATIS). ATIS provides information to departing and arriving pilots concerning operational, meteorological, and NOTAM data via a continuous taped broadcast. Standard ATIS procedures are outlined in the FLIP Enroute IFR Supplement. ATIS for all aircraft is on UHF 352.00 MHz. Aircraft equipped with only VHF radios shall contact Ground Control on VHF 128.625 MHz, and the Ground Controller will issue ATIS information.

3. Pilot-to-Metro. Pilot-to-Metro service is available by contacting MCAS Miramar Metro on UHF 342.4 MHz.

4. Pilot-to-Dispatch. Aircraft may contact Flight Planning on UHF 335.625 MHz to pass along any service requests, i.e. fuel, passenger manifesting, transportation requests, changes or deviations with flight plans, etc.

5. Clearance Delivery. Aircraft may contact MCAS Miramar Clearance Delivery on UHF 254.325 MHz or VHF 125.975 MHz to request clearance for their flight plan.

6. Ground Control. Several Ground Control frequencies are utilized by MCAS Miramar to control aircraft. These frequencies are assigned by ATCMD, and frequency assignments are addressed in Chapter 4.

7. Tower. Aircraft departing or arriving MCAS Miramar will contact Tower on UHF 298.925 MHz or VHF 135.2 MHz.

a. Arrival, departure, and routing procedures are discussed in Chapters 5 (fixed wing), 6 (rotary wing), and 7 (tiltrotor) of this Manual

b. Closed Field Operations are discussed in Chapter 9.

8. CV/LHD FCLP Frequency. Aircraft conducting CV FCLPs will talk to the LSO on UHF 362.6 MHz, and this frequency is monitored by Tower. Aircraft conducting LHD FCLPs shall monitor tower frequency UHF 298.925 MHz.

9. Unicom. During the hours that the airfield is closed, all authorized ground taxi and flight operations shall be conducted on the Tower frequency VHF 135.2 MHz.

10. Squadron Tactical Base Radio (TBR). Each squadron has a TBR at its disposal. ATCMD will coordinate with the Spectrum Manager to ensure that MAG-11, MAG-16, and the VMR DET have an adequate pool of TBR Frequencies necessary to perform required missions. Squadrons will notify the MCAS Miramar Spectrum Manager whenever deploying or arriving on board if a change in base radio frequencies is required. All trouble calls will be reported to ATCMD. Relocation of radios by other than ATCMD personnel is strictly prohibited.

11. Tower-to-Tower Hotline. A tower-to-tower hotline for passing information connects the following military airfield towers: MCAS Miramar, NAS North Island, MCAS Yuma, NAF El Centro, NOLF Imperial Beach, MCAS Camp Pendleton, NALF San Clemente, Fleet Area Control and Surveillance Facility (FACSFAC), NBVC Point Mugu, NAWS China Lake, and Fleet Combat Training Center Pacific. Additionally, tower-to-tower hotlines exist between MCAS Miramar and Montgomery Field ATCTs.

1008. CONTROLLING AGENCIES AND EQUIPMENT

1. Air Traffic Control Facility (ATCF). ATCF is staffed by Marine Corps and DOD personnel and provides control tower and final approach radar service to MCAS Miramar. Equipment and type approaches available are:

a. FPN-63: Precision Approach Radar (PAR) to Runways 24R and 24L.

b. ASR-9: Airfield Surveillance Radar (ASR) to Runways 6L, 24R, and 24L.

c. URN-32: TACAN, Identifier "NKX," Channel 33, is located adjacent to the parallel taxiway (north side), approximately 8,500 feet from the approach end Runway 24R as shown in Appendix B-1. Flight directly over the TACAN antenna at low altitude (takeoff Runway 24R) should be avoided as sound and air pressures can affect sensitive equipment. When the airfield is closed, the TACAN is in “on demand” mode, requiring aircraft to interrogate the TACAN by placing their TACAN switch in the DME position.

d. ILS: Instrument Landing System; the localizer (111.15 MHz) is located on Runway 24R’s departure end, and the glideslope is located on the approach end of the same runway.

2. Southern California Terminal Radar Approach Control (SOCAL TRACON). SOCAL TRACON is the FAA's Instrument Flight Rules (IFR) controlling agency in Southern California. It provides radar approach and departure control services at 46 airports within their area of jurisdiction, including six military installations and MCAS Miramar. Located in San Diego, their area of jurisdiction begins at the U.S. Mexican border and extends north to a point 25 miles north of the Burbank/Glendale Airport, west, over Santa Catalina Island, and to the east it extends 10 miles east of the town of Julian. Their vertical airspace goes from the surface to 15,000 feet MSL with a few exceptions. Their services include final approach sequencing, traffic separation for all IFR aircraft, traffic advisories to participating VFR aircraft, and radar departure control services within 30 miles of the airport.

3. Fleet Area Control Surveillance Facility (FACSFAC). FACSFAC is located at NAS North Island, and provides radar advisory services to aircraft operating in Warning Area W-291. Other services include "Hot Area" advisories via ATIS (352.00 MHz), communications relay, Air Defense Identification Zone (ADIZ) penetration relay, flight following, and search and rescue coordination. FACSFAC's TACAN and transmitter/receiver sites for voice communications are located on San Clemente Island at an elevation of 2,054 feet MSL that provides excellent coverage/reception even while operating at low altitude.

CHAPTER 2

AIRFIELD STANDARD OPERATING PROCEDURES

2000. GENERAL INFORMATION. The following procedures are established as a baseline by which airfield sections and personnel will provide support or response to specific aviation-related events and incidents. Adjustments to these procedures may be made when safety or operational necessity dictate.

2001. DUTY RUNWAY DESIGNATION

1. Duty Runway. Runway 24R will be the duty runway when wind is eight knots or less, regardless of direction. When the tailwind component exceeds 8 knots on Runway 24R, the Tower Watch Supervisor (TWS), taking all factors into consideration, will normally switch to Runway 6L.

2. Helicopter Spots. Spots 1 and 2 have no restrictions. Spot 3 shall be used for hover checks and departures only. Spots 4 and 5 are unlit and may be used for all operations except unaided night landings.

2002. ARRESTING GEAR OPERATIONS AND CONFIGURATION

1. The standard configuration for the E-28 arresting gear shall be as follows:

a. The primary arresting gear runway will be Runway 24L/6R. When the arresting gear on Runway 24L/6R is not available, Runway 24R/6L will be designated the primary arresting gear runway.

b. Runway 24R short field gear will be derigged to facilitate the arrival and departure of aircraft that cannot operate over a raised cable. The short field E-28 arresting gear on Runway 24R should be rigged during wet weather as defined in Chapter 5 and on a ten minute notice for emergencies.

c. All other arresting gear will be rigged at all times, unless undergoing maintenance.

2. In the event that either Runway 24R/6L or 24L/6R is closed, the arresting gear configuration shall be determined by Airfield Operations. Airfield Operations shall take the following into consideration when making this determination: meteorological conditions, anticipated traffic flow and types, and other issues that will affect arresting gear requirements. 3. E-28 arresting gear (rotary hydraulic) is bi-directional. The recommended maximum weight and speed varies from aircraft to aircraft.

a. Engagement speed and weight must be accurately reported to the tower in order to determine whether a cross deck pendant change is required.

b. In establishing published weight and speed limitations for type aircraft, it is expected that brakes will normally be applied after arresting gear is engaged when speed is reduced to about 20 knots to prevent “two-blocking” the arresting gear. Failure to apply brakes may result in excessive delays in retracting the arresting gear.

4. After engagement, the normal time required to re-rig the E-28 is 3 to 6 minutes.

5. During CV FCLPs, the LSO has control capability of lighting the arresting gear markers east of the carrier deck on Runway 24L.

6. Recovery personnel shall conduct daily inspections of all E-28 arresting gear, the Improved Fresnel Lens Optical Landing System (IFLOLS), and the Manually Operated Visual Landing Aid System (MOVLAS) when the airfield is open or as is required.

2003. AIRCRAFT RESCUE AND FIREFIGHTING PROCEDURES

1. In accordance with reference (af), ARFF will maintain a Standby Alert posture consisting of (2) fully manned P-19 fire apparatus and a minimum of 2,000 gallons of additional water by means of (1) P-26 water tender, or (2) additional P-19s acting as tenders. The Standby Alert Posture is maintained at the fire barn (building 9227) during all flight operations while the field is open. The location of the fire barn permits arrival at midpoint of the furthest runway supported (Runway 06R/24L) well within the required minimum aggregate response time of five minutes as required in the reference. Average response time to this point is approximately 2:15, but may vary based on clearances provided through the Air Traffic Control Tower. During closed airfield hours, ARFF will maintain a minimum Standby Alert posture of (1) fully manned P-19 fire apparatus.

2. Due to topographical variations within the airfield operating area, certain helicopter-borne operations on the LHD deck will require the establishment of an Immediate Response Alert Position or “Hot Spot” in order to provide immediate response to observed, unanticipated emergencies and to control such fires until follow-on P-19 support arrives to effectively conduct rescue and fire extinguishment. The Hot Spot position shall be strategically located in order to best observe operations and to respond immediately to an emergency. ARFF will man the Hot Spot with (1) fully manned P-19 firefighting apparatus.

3. During Closed Field Operations (CFOs), ARFF shall maintain the appropriate manned Standby Alert posture to provide adequate fire rescue support and extinguishment. Further discussion on ARFF responsibilities during CFOs is provided in Chapter 9.

4. When requested, ARFF shall assist the Airfield Operations Duty Officer (ODO) with runway visual inspections, and actions to correct discrepancies shall be submitted to the ODO upon completion.

5. Further discussion of ARFF responsibilities during an aircraft emergency response is provided in reference (c) and Chapter 11 of this Manual.

2004. PRIOR PERMISSION REQUIRED (PPR)

1. A PPR is required for all transient aircraft that request permission to land, receive service, receive staging support, or remain overnight at MCAS Miramar.

a. Transient aircrews are advised that maintenance services for aircraft that are dissimilar to those flown by tenant units are limited.

b. Available maintenance services are outlined in the DOD FLIP IFR Enroute Supplement.

c. For more information on transient aircraft operations at MCAS Miramar, see Chapter 14.

2. A PPR is required for all tenant 3d MAW, VMM-764, and Miramar VMR Detachment aircraft that require VAL support. A PPR is also required for all tenant aircraft that plan to pick up or drop off passengers and/or cargo on the VAL. This ensures that VAL has the appropriate equipment and personnel in place to support the mission.

3. A PPR is required for all authorized 3d MAW aircraft that plan to conduct closed field operations (CFOs) and extended field operations (EFOs) for each operation requested. Approval of CFOs and EFOs is granted by the Airfield Operations Officer. The above events are not all inclusive, and other operations that require PPRs are identified throughout this order. For more information on CFOs see Chapter 9.

2005. COMPASS ROSE PROCEDURES

1. Requests for scheduling a compass rose site shall be submitted to Airfield Operations. Requests may be made by telephone.

2. Each compass rose is unlit and shall not be utilized during the hours of darkness.

3. Aircraft shall be towed on and off the compass rose with the engines secured. Maintenance crews are reminded that the compass rose is part of the movement area and requires radio contact with the control tower.

4. Aircraft shall not be towed on the blacktop surface surrounding the compass rose as it is not stressed to support aircraft.

2006. CEREMONIES ONBOARD MCAS MIRAMAR. The purpose of this section is to promulgate policies and procedures to be used for noise abatement during ceremonial functions on station and at stipulated events in the surrounding community.

1. The preferred location for ceremonies (i.e. Change of Command, Post and Relief, Retirement, etc.) is the MCAS Miramar Parade Deck. This minimizes the impact on flight operations by reducing quiet hour requests.

2. All MCAS Miramar inbound and outbound aircraft, except for emergencies, will abide by noise abatement procedures for either full quiet hours or modified quiet hours, as applicable.

a. Full quiet hours are noise abatement procedures generally implemented for Commanding General speaking engagements and for ceremonies conducted on or near the flight line. Full quiet hours are the exception and shall only be implemented at the direction of the MCAS Miramar Commanding Officer following the guidance of the 3d MAW Commanding General and/or the Marine Corps Installations West Commanding General.

b. Modified quiet hours are noise abatement procedures implemented for ceremony practice and ceremonies held at locations both on and near the flight line aboard MCAS Miramar.

c. Quiet hours may be granted for decommissioning ceremonies and other local events, as required.

d. The Airfield Operations Officer, in conjunction with 3d MAW COPs, will review all requests.

3. General Officer, O-6, and Headquarters & Headquarters Squadron Change of Command and Sergeant Major Post and Relief ceremonies may be held in front of Base Operations.

4. All other O-5 Change of Command and Sergeant Major Post and Relief ceremonies should be held in front of unit hangars or at the MCAS Miramar Parade Deck.

5. Units returning from deployment, with 30 passengers or more via non-tenant aircraft, may have their homecoming event at the Passenger Terminal. Units returning via tenant aircraft may conduct homecoming events at their respective hangars. All hangar events, regardless of the number of passengers, type/ model/series of aircraft, or event type, shall utilize the Station Fire Department's checklist to ensure all Station departments are notified.

6. Scheduling

a. Requests for quiet hours shall be made via email to the MCAS Miramar Airfield Operations Officer via the appropriate chain of command. Requests by 3d MAW units for ceremonies to be conducted on the airfield shall be submitted through the 3d MAW G-3.

b. The command conducting the ceremony shall submit their request for full or modified quiet hours up the appropriate chain of command to MCAS Miramar Airfield Operations via 3d MAW G-3.

c. Requests from station units shall be routed to Airfield Operations. Airfield Operations will ensure coordination is made with 3d MAW G-3 regarding air station ceremonial events.

d. Requests should include the time, date, and location of the ceremony or event.

e. Requests should be submitted no less than 30 days prior to the requested date.

f. Requests shall be limited to 60 minutes in duration to reduce impact on flight operations.

g. Full quiet hours and modified quiet hours will be published monthly by the MCAS Miramar Airfield Operations Department and are disseminated primarily by OPSGRAM via e-mail, NOTAMS, and ATIS. A Standard Naval Message will be sent if requested.

7. All aircraft operating within the MCAS Miramar Class B airspace during quiet hours will be limited or directed as follows:

a. During Full Quiet Hours:

(1) Tower will advise all aircraft on initial contact that full quiet hours are in effect.

(2) Tower will not issue taxi clearance five minutes prior to full quiet hours commencing.

(3) Tower will not issue takeoff, landing, or practice approach clearances.

(4) The use of GCA pattern, multiple approaches, FCLPs, and LHD operations are not permitted.

(5) Tower will instruct all airfield vehicles to remain clear of the ceremony on the flight line.

(6) No maintenance turns are authorized.

(7) No taxiing of aircraft.

(8) No Ground Support Equipment (GSE) operations permitted.

(9) Units shall ensure maintenance personnel and flight crews are aware of full quiet hours.

b. During Modified Quiet Hours:

(1) Tower will advise all aircraft on initial contact that modified quiet hours are in effect.

(2) Aircraft are limited to departures and straight-in full stop landings only.

(3) The use of the GCA pattern, multiple approaches, FCLPs and high power turn-ups are not permitted.

(4) Vehicular traffic is to remain clear of the ceremony area.

(5) GSE operations and high-power engine ground runs are permitted only when deemed essential.

(6) Units shall ensure maintenance personnel and flight crews are aware of modified quiet hours.

c. All quiet hours may be modified by the Airfield Operations Officer to allow turn-up and/or takeoff of propeller-driven aircraft (KC-130, C-12, T-34) and helicopters, provided such operations do not disturb the ceremony site.

2007. FOREIGN OBJECT DEBRIS (FOD) PROGRAM

1. Prevention of FOD is an essential, ongoing program at MCAS Miramar. The elimination of debris and the early detection and reporting of airfield surface damage is everyone's responsibility. Safety of personnel and aircraft depends on an aggressive FOD prevention program.

2. MCAS Miramar shall close once each year for a complete airfield FOD walk down. This is normally conducted on the Monday immediately following the annual MCAS Miramar Air Show.

3. Runway visual inspections are an active part of the FOD Prevention Program. Three separate runway visual inspections occur each day on movement surfaces when the airfield is open. The Airfield ODO and Southwest Region Fleet Transportation (SWRFT) sweeper driver shall conduct morning visual inspections of the movement area prior to the airfield opening. The Airfield ODO will conduct an afternoon visual inspection of the movement area no later than (NLT) 1500L, and another one in the evening prior to sunset. At times when the Airfield ODO is not available, ARFF shall conduct these visual inspections.

4. All vehicles entering the flight line are required to conduct a visual inspection of their tires, and to remove and dispose of any detected debris.

a. All vehicles should be driven on clean paved surfaces when possible. If a vehicle must be driven on unpaved surfaces, the operator should check the vehicle tires for foreign objects immediately upon returning to the pavement.

b. All military, civilian, and contractor personnel on the flight line shall use clean as you go procedures, maintaining general cleanliness and inspection standards in the work area or flight line to reduce the risk of FOD.

5. Airfield sweepers are regularly used on aircraft parking ramps, taxiways, turn-up spots/pads, runways, weapon storage areas, and base weapons convoy routes.

a. As per the LOA between SWRFT and AirOps, normal sweeping operations are conducted by SWRFT Monday through Friday from 0630 to 1130 in designated areas on the flight line.

b. On weekends, the Airfield ODO will conduct visual inspections of the movement area for closed field operations and Sunday’s airfield operating hours, or as needed. At times when the Airfield ODO is not available, ARFF shall conduct the visual inspections.

c. During all other times, ARFF will provide emergency airfield sweeper services as needed. In cases in which ARFF cannot support airfield sweeper services, the SWRFT Supervisor will be contacted to recall personnel if needed. ARFF may not be able to provide sweeper services due to a shortage of personnel or aircraft emergency (i.e. aircraft crash, blown tire, or damage to the runway).

d. Sweeper service may be requested at any time by contacting the Airfield ODO.

6. Units based at MCAS Miramar have direct impact on the overall effectiveness of the FOD prevention program. Units are responsible for maintaining an active FOD prevention program in assigned areas. They shall conduct regular inspections of their areas, including hangars, aircraft parking ramps, turn-up areas, and fuel pits. Particular attention should be given to areas where the sweeper is not effective, such as in-line fuel pits, compass rose, expansion joints, pad eyes, and cracks.

7. Units should not place or store embark boxes, GSE gear, or other items on unimproved surfaces. Units that track dirt/mud from unimproved surfaces onto their parking ramp shall be responsible for its removal. Airfield sweepers

are not used to remove dirt and mud because they are ineffective at removing this type of FOD.

8. Helicopters arriving at MCAS Miramar with FOD on their landing gear (mud, clumps of dirt, or any other type of debris) are prohibited from landing on the runways due to possible FOD impact. Potential is very high for FOD on helicopter landing gear to be deposited on a runway, forcing closure of the affected runway(s) until the FOD is removed. Helicopters with FOD on their landing gear shall land at one of the following areas:

a. Helicopters arriving via a VFR helicopter route will land at the helicopter spots.

b. Helicopters arriving on an instrument approach, upon obtaining the runway environment, will air taxi down Runway 24R or 24L, exit at the Taxiway Sierra intersection, and land in the immediate vicinity of the aircraft rinse facility (“bird bath”).

8. FOD conditions requiring corrective action beyond the ability of the tenant units shall be reported to the Airfield ODO for action. Aircrew who notice adverse conditions shall contact Ground Control, who will relay to the Airfield ODO.

2008. THINGS FALLING OFF AIRCRAFT (TFOA) INCIDENTS. A TFOA incident has occurred when an object is observed falling from an aircraft, an object is intentionally jettisoned from an aircraft (other than ordnance intended for release in authorized areas), or an object is discovered missing from an aircraft subsequent to flight.

1. No pilots operating at MCAS Miramar shall intentionally drop or jettison objects from an aircraft except in an emergency or in an authorized bombing, gunnery, or jettison area.

2. If it becomes apparent that a TFOA incident has occurred, the aircrew shall report the incident as soon as possible to ATC and the MCAS Airfield ODO through the aircraft reporting custodian.

a. Aircrews that may have experienced a TFOA shall avoid flying over populated areas to the maximum extent possible.

b. On initial check in, pilots shall inform SOCAL Approach Control and the tower of the problem experienced and request radar vectors to a straight-in, full stop landing. An overhead break is not authorized following a suspected TFOA incident.

3. The report to the Station ODO shall include as much of the following information as is known at the time:

a. Pilot’s name, grade, service number, and organization.

b. Type of aircraft, modex, and bureau number.

c. Description of object dropped (size, weight, and composition).

d. Best estimate of location of incident.

e. Time of incident.

f. Maneuver involved at time of drop, to include airspeed, altitude, and heading.

g. Estimate of possible injury to personnel.

h. Estimate of damage to private property.

i. Recovery efforts made or planned.

4. Reporting custodians are reminded that submission of this report does not relieve them from other reporting requirements (i.e. OPREP Serious Incident and Hazard Reports) in accordance with reference (e).

2009. NEAR MIDAIR COLLISION (NMAC) REPORTING

1. Pilots-in-command of aircraft involved in a near midair collision within Miramar's airspace during field hours shall immediately notify the controlling ATC via radio and state "I WISH TO REPORT A NEAR MIDAIR COLLISION." Reference (d) Chapter 7-6-3 gives regulatory definition and detail.

a. In order to preclude frequency congestion, pilots of locally based aircraft involved in a near midair collision (under control of Miramar ATC/San Diego TRACON) are requested to make only the initial report while airborne. A complete report will then be submitted via telephone or in person to the Air Traffic Manager, SOCAL TRACON, or if landing at an airfield other than MCAS Miramar, to the most convenient FAA ATC Facility.

b. Pilots-in-command of aircraft involved in a near midair collision outside of Miramar's airspace or during hours the airfield is closed shall report to the appropriate controlling agency.

2. When reporting a near midair collision to military or civilian ATC, the following information should be provided):

a. Date and time of the incident.

b. Location and altitude of occurrence.

c. Reporting aircraft identification, type aircraft, and destination.

d. Known information concerning the type and identification of the other aircraft involved.

e. Type of flight plan & station altimeter setting used.

f. Weather conditions at altitude or flight level, plus 5,000 feet above and below.

g. Approximate course and altitude of each aircraft.

h. Closest proximity involved.

i. Degree of evasive action of each aircraft.

j. Injuries, if any.

3. In addition to the report set forth above, reporting custodians will report all incidents of near-midair collisions through the chain of command per reference (e) and such other directives as may be issued by higher authority. Near midair collisions with civilian aircraft are reported to the nearest ATC facility in accordance with FAA regulations.

2010. SMOKING OR OPEN FLAMES ON THE AIRFIELD. Smoking on the airfield is prohibited except in designated areas by Airfield Operations and the Base Fire Department. Outdoor grilling (i.e. propane or charcoal) on the flight line is prohibited.

1. When designating a smoking area, units are reminded that smoking is prohibited in all government owned facilities. Smoking on the airfield, especially around parked/operating aircraft and/or fuel trucks, creates a fire and FOD hazard.

a. Smoke break areas shall be outdoors and away from common points of ingress/egress to the facility.

b. Smoke break areas shall not be located in front or along the side of building air intake ducts or close to windows.

2. For further guidance, smoking areas shall not be established within 50 feet of:

a. Any gasoline dispensing operations.

b. Where bituminous and plastic coatings are being applied.

c. Outdoor flammable liquid, gas handling or storage area.

d. Aircraft parking areas and/or ramps.

e. Hot refueling areas, gaseous/liquid oxygen storage areas, all areas where explosives, chemicals and highly combustible materials are being stored and/or handled.

f. All outdoor hazardous materials and hazardous waste sites.

3. Approved smoking areas shall have signs posted. The signs shall consist of the words “DESIGNATED SMOKING AREA” in six inch red letters on a white background.

4. Removal or destruction of any required “No Smoking” sign is prohibited. Anyone who observes someone smoking outside of designated smoking areas should take immediate action to stop the activity. If able, get the name and unit of the offender(s) and forward it to Airfield Operations for further action.

5. All hangars have AFFF systems installed with flame detection that can be activated by open source flames or other heat sources. Units requesting to hold an event inside their respective hangar must coordinate with the Station Fire Prevention office at 858-307-1952 or 1490.

2011. DESTRUCTIVE WEATHER PLAN

1. Destructive weather could have a negative impact on both flight and support operations at MCAS Miramar. Reference (f), MCO 3140.24, provides guidance on the types of weather warnings and associated information disseminated by the MCAS Miramar METOC Services Branch.

2. Destructive weather warnings issued by the MCAS Miramar METOC Services Branch include thunderstorms, severe thunderstorms, tornadic activity (i.e. waterspouts, funnel clouds, tornadoes), high winds, and destructive precipitation (i.e. hail). Warnings are disseminated via the computer-based AtHoc Mass Notification System by METOC and backed up by an OPSGRAM email and phone calls from the Base Operations Duty Officer (ODO) to squadron ODOs using the ODO communication system.

3. Thunderstorm Warnings. The MCAS Miramar METOC Services Branch will issue three types of thunderstorm warnings depending on their proximity to MCAS Miramar to provide situational awareness to squadron aircrew and maintenance departments. METOC notifies the Station ODO and releases the warning via the AtHoc mass notification system, and the Station ODO notifies squadron ODOs via the squadron emergency phone system. The three pertinent warnings and required actions are described below.

a. Thunderstorm Advisory is issued when thunderstorm activity is expected outside the local area, within 50 nautical miles of the air station and expected to move toward the air station.

b. Thunderstorm Condition 2 (T2) warning is issued when Thunderstorm activity is expected to enter the local area (25 nautical miles) within 6 hours of the T2 issuance.

c. Thunderstorm Condition 1 (T1) warning is issued when thunderstorm activity is imminent or occurring in the local area (within 10 nautical miles). The following apply:

(1) All ordnance operations shall cease whenever lightning is detected within 10 miles of MCAS Miramar.

(2) All fuel operations shall cease whenever lightning is detected within 5 nautical miles of MCAS Miramar.

(3) Fuel and ordnance operations may only commence once the lightning activity has moved away 5 and 10 nautical miles from MCAS Miramar, respectively.

4. Wind Warnings. The MCAS Miramar METOC branch will issue two types of wind warnings depending on their intensity.

a. Local wind warning will be issued when winds are sustained at 20-33 knots and/or frequent gusts of 25 knots or greater are forecasted to occur or are occurring.

b. High wind warning is issued when winds are sustained at 34 knots or greater and/or frequent gusts of 40 knots or greater are forecasted to occur or are occurring

(1) Consider hangaring when a high wind warning is issued.

(2) If aircraft cannot be hangared they should be tied down in accordance with appropriate NATOPS recommendations in order to minimize damage.

5. For further information about destructive weather guidance, refer to reference (f), or contact the MCAS Miramar METOC branch.

2012. DIVERT SUPPORT FOR LOCAL AREA CARRIER FLIGHT OPERATIONS

1. MCAS Miramar works in conjunction with NAS North Island to provide divert/alert services in support of local carrier (CV) operations. In this capacity, MCAS Miramar may be tasked to provide either primary or secondary divert support when tenant units are onboard. If no tenant units are onboard the local CV, all CV flight operations must be conducted during normal airfield operating hours while Miramar is serving as the primary divert.

a. Primary divert status requires that the airfield be open while CV operations are underway.

b. Secondary divert status requires that the airfield be able to open should NAS North Island no longer be able to fulfill primary divert status requirements. MCAS Miramar requires one-hour notification to open the airfield when in secondary divert status.

2. During published airfield operating hours, Fleet Area Control and Surveillance Facility (FACSFAC) shall notify the MCAS Miramar ODO when the Air Station’s status has changed from secondary to primary divert support.

3. After published airfield operating hours, FACSFAC shall notify MCAS Miramar METOC when the Air Station’s status has changed from secondary to primary divert support.

4. The aircraft carrier is responsible for notifying the air station providing primary divert support upon commencement or termination of carrier flight operations each day. This notification is provided by an IMMEDIATE message (to: CO MCAS MIRAMAR CA//S-3/AIROPS//), voice radio circuit via FACSFAC, phone call to the MCAS Miramar Airfield ODO and/or email to miramarmcas.odo@usmc.mil.

5. Pilots operating with aircraft carriers are encouraged to comply with the divert procedures outlined in reference (g). Of particular importance is the requirement to contact FACSFAC as soon as possible while in transit from W-291.

6. Aircraft diverted to MCAS Miramar for refueling while operating aboard aircraft carriers in the SOCAL area or W-291 warning areas may be cleared to return to the carrier without filing a written flight plan. The pilot should not shut down and should provide the Flight Planning section with a stereo route to the desired destination.

7. Divert aircraft with ordnance will abide by the following procedures:

a. Aircraft with ordnance will be de-armed at the Runway 24R de-arm area. If certified personnel/equipment are not available for de-arming, the aircraft shall be shut down and retained in the de-arming area until de-arming is complete. Once de-armed, aircraft with C/D 1.1 or 1.2 explosive materials shall proceed to the primary or secondary CALA. A security watch

shall be posted in the CALA until the aircraft is cleared for departure or upon completion of download and stowage of munitions by certified personnel. Aircraft with C/D 1.3 and 1.4 explosive materials may proceed to the flight line or CALA area for downloading.

b. Certified MAG-11 or MAG-16 personnel will assist in de-arming aircraft and downloading ordnance. If a certified person is unavailable, a member of the aircrew may act as a qualified individual for de-arming as approved by the parent command.

c. The respective T/M/S MALS will be responsible for providing appropriate AWSE/SHOLS gear available within their current inventory to accommodate the safe download and temporary storage of munitions.

d. Aircraft servicing shall not be attempted until the aircraft is de-armed, and maintenance shall not be performed until after downloading of ordnance.

2013. TARGET BANNER OPERATIONS. Launches normally will be conducted on Runways 24R/6L. The control tower shall ensure the short field arresting gear is derigged prior to a banner launch. If using Runways 24L/6R, all arresting gear will be derigged. For complete target banner operations procedures see Chapter 5.

2014. HOT BRAKE PROCEDURES. All aircraft shall have a hot-brake check prior to entering the hot fuel pits. See Chapter 13 for further information.

2015. AIRFIELD OPERATIONS DUTY OFFICER. The Airfield ODO is responsible to the Air Station Operations Officer for providing daily operational guidance during flight operations.

1. The ODO shall be posted one hour prior to both normal flight operations and CFOs. See Chapter 9 for more information on CFOs.

2. The ODO shall review the ODO binder to ensure familiarity with duty responsibilities.

3. The ODO shall be responsible for coordinating efforts by all Airfield Operations sections.

4. The ODO may address any questions, as they arise, to the ATCFO or ATC NCOIC during workweek daytime hours, or to the Facility Watch Officer (FWO) on duty for questions after hours.

5. The ODO shall complete a visual inspection or “surface check” of the movement area prior to field opening and pass any discrepancies to the Tower Watch Supervisor (TWS).

6. The ODO shall pass field closure time to the TWS at least 30 minutes prior to that time.

7. The ODO shall receive noise complaints via phone or e-mail using the form in Appendix V.

a. All noise complaints shall be handled in a professional and courteous manner.

b. All noise complaints shall be documented by the ODO.

c. When possible, the ODO shall conduct research on the complaint and provide findings to the Community Plans and Liaison (CP&L) Office if the caller requests a call back.

8. The control tower phone number shall be handled as a restricted number and shall not be made available to the public.

a. Under no circumstances shall the ODO direct noise complaints or other outside calls to the tower.

b. Do not forward calls to the tower unless it is an emergency or a safety of flight issue.

9. ATC shall inform the ODO if aircraft have deviated significantly from course rules.

10. The ODO shall track the arrival and departure of all distinguished visitors as well as advise interested commands of changes in arrival and departure times as required.

11. The ODO shall maintain a daily log of both normal and unusual occurrences during his/her assigned watch period.

12. The ODO shall be the primary contact for airfield clearances for contractors, inspectors, and workers when they require airfield access during normal working hours. After that time, non-MCAS Miramar personnel should check in with METOC personnel.

13. The ODO will provide assistance to transient aircrews as required.

14. The ODO will handle civilian aircraft and international arrivals to MCAS Miramar, both in normal and emergency situations. See Chapter 14 for amplifying information.

15. In instances involving inadvertent release or jettison of ordnance outside a designated range or an aircraft mishap with ordnance onboard, the ODO shall contact the Miramar Explosive Ordnance Disposal (EOD) Team.

16. In preparation for station aircraft strategic lift operations, the ODO will coordinate time, date, and type of cargo with all other supporting agencies: VAL, Station Aviation Ordnance, the Explosive Safety Office, PMO, ARFF, and Station EOD. See Chapter 4 for further discussion.

2016. AIRFIELD PHOTOGRAPHY. Photographs on the airfield are not authorized unless it is in support of a Station or 3d MAW sponsored event (i.e. air show, educator’s workshop, community relations tour, MCCS event, etc…). Tenant and transient squadrons are authorized to take unit photos, or sponsor a squadron event on the flight line, provided that photographs taken are in/of their own hangars or ramps spaces. All other photographs outside of the events/areas detailed above, or of highly sensitive aircraft, installation security areas, security areas, or perimeter fencing are not authorized without MCAS Miramar Commanding Officer’s, or designee, approval. Failure to comply with this guidance may result in punitive action.

CHAPTER 3

FLIGHT PLANNING

3000. GENERAL INFORMATION

1. This chapter provides initial guidance, definition, resources, and approval procedures for flight planning at MCAS Miramar. All flights originating at MCAS Miramar will be conducted per current OPNAV instructions, FAA directives, Flight Information Publications, and this Manual.

2. NOTAMS for the local flying area, North America, Central America, South America, Pacific, and Europe can be obtained on the Internet through computers located in the Flight Planning Area, host site https://www.notams.jcs.mil.

3001. FLIGHT PLANNING DEFINITIONS

1. Clearance Authority

a. In accordance with reference (h), only the pilot-in-command (PIC) or formation leader shall complete the flight plan via paper or the Flight Weather Briefer (FWB) system.

b. In accordance with reference (h), the daily flight schedule may be used in lieu of a flight plan for flights conducted within the local flying area.

c. Modification of a flight plan shall be accomplished only with the concurrence of PIC or formation leader.

2. Local Flying Area. The area is defined as a 350 NM radius from MCAS Miramar, excluding that airspace over Mexico. A line connecting the following points approximates a 350 NM radius east and north of MCAS Miramar: TUCSON (TUS) VORTAC 090R/30 DME, WINSLOW (INW) VORTAC, BRYCE CANYON (BCE) VORTAC, COALDALE (OAL) VORTAC, and MOFFETT (NUQ) TACAN.

3. Class B Positive Control. All aircraft including helicopters operating under Visual Flight Rules (VFR) must operate under positive control of an air traffic control agency within the San Diego Class B Airspace.

3002. METEOROLOGICAL AND OCEANOGRAPHIC (METOC) SUPPORT

. MCAS Miramar has been designated as the Marine Corps' western hemisphere hub for the provision of METOC support. Miramar's METOC is responsible for providing METOC services to all USMC elements west of the Mississippi River.

1. MCAS Miramar METOC operates 24 hours per day, seven days a week, as a full service weather provider. METOC services are available while airborne on UHF frequency 342.4 MHz.

2. Weather briefs shall primarily be obtained through the primary FWB website (https://fwb.metoc.navy.mil) or the alternate server (https://fwb.navo.navy.mil). Submission via email or in person through the METOC section is authorized but requires four hour prior notice for planned take off time

3. Local weather briefs should be submitted in FWB one hour prior to brief request time. Cross country and over-water weather briefs should be submitted three hours prior to brief request time. This will give the METOC section ample time to ensure the brief is completed accurately.

4. Briefing void time is thirty minutes after ETD, not to exceed three hours past briefing time. The pilot in command is responsible for obtaining an update from METOC if the briefing becomes void prior to departure.

5. For any questions relating to submitting flight plans or the FWB website, contact the METOC section via numbers in Appendix Y-3.

3003. SUBMISSION OF FLIGHT SCHEDULES/FLIGHT PLANS

1. All squadrons onboard MCAS Miramar shall deliver daily flight schedules via paper or electronically to the flight planning office in building 9211. This flight schedule shall be received by the flight planning office prior to 1700 local on the day preceding the scheduled flight operations. This prior notice ensures that flight schedules can be processed into the FAA Host Computer System the night prior, and that ordnance requirements are identified for safety purposes. See Appendix D-1 for the format to be used.

2. Squadrons shall also submit flight schedules for their no fly days to facilitate unplanned add-ons, hosted aircraft, etc.

3004. FLIGHT PLANNING APPROVAL PROCEDURES

1. All USMC squadrons or training detachments to MCAS Miramar shall submit requests to flight clearance via daily flight schedules for canned stereo routes or email DD-175/DD-1801 to smbmiramarmcas.s3flp@usmc.mil. DD-175-1 requests shall be submitted to the METOC section using the FWB website. Non-USMC squadrons or training detachments shall utilize the same flight plan submission process as USMC squadrons, but shall email DD-175/DD-1801 to smbmiramarmcas.metoc.ftc@usmc.mil a minimum of four hours prior to scheduled take off to receive a weather brief.

a. To facilitate a more timely and accurate DD-175-1, aircrew should obtain an active individual FWB login account through the FWB website.

2. Changes to any pre-filed stereo flight plans or add-ons to squadrons' flight schedules must be phoned in to the flight planning section at 307-1532/4981 no later than 30 minutes prior to take-off.

3. Squadrons filing stereo flight plans by means of the daily flight schedule must include the following:

a. Call sign (name and number not to exceed a total of seven characters), type aircraft, wingman’s call sign(s) if applicable, specific stereo route, estimated time enroute in hours and fraction of hours, time of Bravo leg pick up in hours and fraction of hours, and ordnance load on board.

b. Any changes or cancellations to ordnance missions shall be relayed by telephone to the MCAS Miramar Explosive Safety Office at 307-8868 as soon as possible.

4. The MCAS Miramar tower is not authorized to accept flight plans from any departing aircraft over the radio. Tower personnel will instruct aircrews to contact the Flight Planning section to resolve any flight plan conflicts.

3005. FLIGHT PLAN ROUTES. The following type of flight plans may be used under the conditions specified. See Chapters 5, 6 and 7 for arrival and departure route descriptions, and Appendices G-1 through R-1 for route resources for aircrew kneeboard cards.

1. Stereo Routes. Fixed and rotary wing stereo routes have been established by letter of agreement (LOA) with the Federal Aviation Administration (FAA) and MCIWEST G-3 to enhance MCAS Miramar flight operations. These routes are defined, cataloged, and maintained in the stereo routes binder in the flight planning office.

a. A stereo flight is conducted under instrument flight rules on pre-filed routes and altitudes proceeding to/from the Southern California operating areas and other frequently used instrument, training, and low-level routes per the procedures contained in the current FAA LOA.

b. When an aircraft files a stereo flight plan, the same call sign must be used throughout the flight.

c. The stereo routes shall not be modified to land at any facility if a landing is not included in the flight plan, emergencies excluded. If the required mission/flight does not coincide with the parameters of the stereo route, a DD-175 must be filed.

d. Transient aircraft hosted by MCAS Miramar tenant squadrons may be allowed to fly MCAS Miramar’s stereo routes after receiving an ATC course rules brief.

2. Point-to-Point Flights. A flight plan and weather brief shall be submitted for all IFR flights originating from MCAS Miramar.

a. Flight plans must be filed with the flight planning section at least 30 minutes prior to planned takeoff time to provide sufficient processing time.

b. Flight plans may be sent to the flight planning section during working hours, and PICs shall ensure the plans are received. PICs shall also provide phone contact information to the flight planning section so they may resolve questions or concerns that arise regarding the flight plan.

c. Pilots shall ensure that the weather brief number and signature are included on the flight plan.

3. Tower-to-Tower Helicopter Flight Plans. VFR helicopter flights to Marine Corps or Naval Air Stations require prior coordination. Requests for tower-to-tower clearances should be made through the clearance delivery section or ground control prior to departure in accordance with reference (i).

a. Tower-to-Tower flight plans are available for transiting to/from the following facilities: MCAS Camp Pendleton, MCAS Yuma, NAF El Centro, NAS North Island, NAWS China Lake, NALF San Clemente, NOLF Imperial Beach, and NBVC Point Mugu.

b. To file a VFR Tower-to-Tower flight plan, the pilots shall contact the clearance delivery section or ground control with the following information:

(1) Aircraft call sign

(2) Type and number of aircraft

(3) Destination

(4) Estimated Time Enroute (ETE)

(5) Souls on board

(6) Fuel on board in hours and minutes

3006. WEIGHT AND BALANCE REQUIREMENT. Weight and Balance requirements shall be completed in accordance with reference (h).

3007. CLOSURE OF FLIGHT PLANS. All aircrew will ensure that they close out their flight plans once safely on the ground. If the aircrew lands at an airfield which was not listed in the flight plan, the aircrew should contact the primary airfield to cancel any PPRs and announce the change to the airfield operations section.

CHAPTER 4

AIRFIELD FLIGHT OPERATIONS

4000. GENERAL INFORMATION. The discussion in this chapter addresses issues that are common to all aircraft flight and maintenance operations at MCAS Miramar.

1. The airspace delegated to MCAS Miramar is known as Area “P”, or “Papa” airspace. This delegated airspace lies within the Southern California TRACON Class B Airspace as shown in Appendix F-1 and F-2.

a. Papa airspace is activated when the airfield is open. It is defined as the airspace beginning at the NKX R-090 at 5.3 nautical miles extending along Highway 52 westbound to Genesee Avenue northbound until it reaches Interstate 5 continuing alongside Interstate 5 to the Interstate 5/805 merge. The airspace boundary then continues eastbound JLI R-232 NKX R-021 at 6.5 nautical miles, then to NKX R-048 at 5.6 nautical miles, then to the original starting point NKX R088 at 5.3 nautical miles.

(1) East of Interstate 805, the vertical dimensions are surface to and including 3,000 feet. West of Interstate 805, the vertical dimensions are surface to and including 2,000 feet. The airspace north of the OCN R-123 vertical dimensions is 1,800 feet to and including 3,000 feet.

(2) During SVFR operations, Area Papa vertical dimensions east of Interstate 805 are surface to and including 2,500 feet. West of Interstate 805, the vertical dimensions are surface to and including 2,000 feet. Airspace north of the OCN R-123 vertical dimensions is 1,800 feet to and including 2,500 feet.

b. When the airfield is closed, responsibility for the Class B airspace reverts to SOCAL TRACON. MCAS Miramar permits CFOs for tenant squadrons under a strict set of guidelines. For detailed information on CFOs refer to Chapter 9.

2. Local Flying Area. The local flying area is defined in Chapter 3, paragraph 3001.2.

3. MCAS Miramar ATC operates using positive control for all flight operations. Positive control allows ATC to separate all aircraft in and around Papa airspace. This is emphasized due to the complexity of simultaneous fixed-wing and rotary-wing operations at Miramar, the volume of practice instrument approaches, the close proximity to the Montgomery Field traffic pattern, and the large number of civilian aircraft transiting the airspace around Miramar.

4. Compliance with tower instructions is mandatory except when a pilot is exercising emergency authority. Pilots should inform the tower of their intentions, when able, in order for ATC to de-conflict other traffic.

4001. SAFETY

1. Regardless of the control measures and altitude restrictions defined in this order, the Tower Watch Supervisor shall retain overall responsibility for control of all flight operations within Miramar’s Papa airspace when the airfield is open. Tower shall adjust pattern altitudes and flight paths when

required to ensure safety of flight. The Tower Watch Supervisor is ultimately responsible to ensure that all pattern procedures are enforced.

2. When multiple aircraft are operating in a pattern that offers optional downwind altitudes, the Tower Watch Supervisor shall be the final authority on determining which altitude is used.

3. If the Tower Watch Supervisor determines that landing/FCLP operations have deteriorated to an unacceptable level based on weather, safety, or noise considerations, they shall take appropriate measures to correct the problem. If necessary, individual aircraft may be directed to land or a particular flight operation may be terminated.

4002. GENERAL TAXI INSTRUCTIONS

1. Pilots shall maintain situational awareness with regard to the size of their aircraft when taxiing around MCAS Miramar. Some taxiways (particularly on squadron flight lines) do not provide adequate clearance for all types of aircraft.

2. Should an aircrew encounter a taxiway clearance that may restrict their ability to taxi, they shall stop and request alternate taxi instructions from the Ground Controller.

3. All aircraft shall be operated at a safe taxi interval to avoid possible FOD ingestion. Taxi power should be kept to the minimum required for the given circumstances. A safe taxi speed for any aircraft is defined not only by their individual NATOPS but also by a pilot's ability to stop their aircraft in a timely manner in the event of an emergency.

4. MCAS Miramar utilizes several Ground Control frequencies to issue taxi clearances and direction. Prior to taxiing, pilots shall obtain ATIS and contact Ground Control on the appropriate frequencies listed below:

a. ATIS for all military aircraft is on UHF 352.0 MHz. Aircraft equipped with only VHF radios shall contact Ground Control on VHF 128.625 MHz, and the Ground Controller will issue ATIS information.

b. Aircraft operating to/from aprons 0 through 3 or the transient line shall contact Ground Control on UHF 307.325/VHF 128.625 MHz.

5. The use of landing/taxi lights is recommended at night to illuminate hazards and alert others to aircraft’s presence and position. The use of landing/taxi lights during approaches, both day and night, is also recommended.

6. Pilots observing emergency vehicles displaying flashing red lights on the airfield shall stop and hold their positions until authorized to proceed by the control tower.

7. Taxiing aircraft have right of way over vehicles on the airfield except those displaying flashing red lights responding to an emergency on the airfield.

a. Pilots must be aware that there are vehicles operating on the airfield with radios that are not compatible with military aircraft radios. Airfield ground vehicle operating procedures are delineated in Chapter 16.

b. During airfield operating hours, Ground Control will issue vehicle cautionary advisories to taxiing aircraft.

c. During CFOs, aircrew shall monitor VHF 135.2 MHz and transmit intentions to inform other aircraft within the vicinity of the airfield.

8. Pilots will notify the tower of anything on or near aircraft movement areas that could adversely impact flight operations (i.e. personnel, vehicles, construction equipment, or animals).

4003. STANDARD TAXI PLAN

1. Aircraft taxi communication requirements are different depending on location and airfield operating hours.

a. During hours that the airfield is open, aircraft operating in the non-movement area may taxi under their own cognizance. Though not required, two-way communication is recommended.

b. During hours that the airfield is open, aircraft operating in the movement area shall do so under the positive control from ATC.

c. During closed field operations, regardless of hours or location on the airfield, all aircrew shall use Unicom frequency VHF 135.2 MHz to de-conflict aircraft movement.

2. Bi-directional spotting exists on parking aprons 4 through 7 to accommodate favorable wind conditions for engine shutdown, rotor engagement/disengagement, and engine starts.

a. Aircraft on these parking aprons will normally be parked facing in a westerly direction consistent with predominant winds. The normal taxi flow into and out of these apron parking spots is counterclockwise. Parking orientation and taxi flow may be reversed to maximize favorable wind effects.

b. All aircraft should be pointed in the same direction to facilitate standard taxi flow.

3. The taxi lines immediately in front of Hangars 4, 5, 6 and 7 (next to the fire lane) are designated as tow-only lines and shall not be used by taxiing aircraft.

4. Taxi procedures for both the in-line hot refueling pits are discussed in Chapter 13.

5. Taxi procedures for entering and exiting the CALAs are discussed in Chapter 12.

6. Aircraft are prohibited from taxiing under their own power when the airfield is closed unless that aircraft is approved for CFO procedures. Refer to Chapter 9 of this Manual for CFO details. All other aircraft must be moved by another means such as towing.

4004. COURSE RULES BRIEFINGS

1. All tenant squadron pilots are required to obtain an annual course rules brief.

2. All tenant squadrons returning from an extended deployment of six months or more and non-tenant units deployed to the air station shall obtain a course rules brief prior to commencing operations at MCAS Miramar.

3. Course rules briefings may be scheduled by contacting MCAS Miramar ATC, or by attending Instrument Ground School conducted by Marine Aircraft Group 11 (MAG-11) and/or Marine Aircraft Group 16 (MAG-16)

4. MCAS Miramar ATC and METOC sections shall participate in instrument ground school courses conducted by MAG-11 and/or MAG-11.

4005. AIRCRAFT DEPARTURE AND ARRIVAL PROCEDURES

1. MCAS Miramar has arrival and departure routes for both VFR and IFR aircraft which may place fixed and rotary wing traffic in the same general vicinity. The various routes are depicted in Appendix G-1. Pilots shall maintain situational awareness and keep alert for other aircraft transitioning on arrival/ departure routes that may impact their route of flight.

2. MCAS Miramar course rules are designed to ensure safe flight operations, reduce the noise impact on the local community, and meet fleet training and operational requirements. Accomplishment of these objectives is accomplished if aircrews are thoroughly familiar with these rules and operate in strict compliance with them. Important factors considered in formulating these rules are safety, proximity of other airfields, noise abatement, civil airway structure to the west, SOCAL TRACON Class Bravo Airspace, transition to and from the seaward operating areas, and fleet air training requirements.

3. Fixed wing, rotary wing, and tiltrotor course rules are addressed in Chapter 5, 6, and 7.

4006. GENERAL AIRCRAFT LIGHTING FOR NIGHT OPERATIONS

1. General. All flights, either individual or multi-aircraft, operating in Miramar’s Class B airspace shall activate their anti-collision lights for both collision avoidance and to facilitate tower recognition of aircraft’s position.

a. Any aircraft with inoperative anti-collision and/or landing lights shall notify ATC, cease flight operations, and be escorted by either their wingman or a VAL “Follow-me” truck back to their line.

b. Specific lighting configurations for day/night/NVG lighting for fixed wing, rotary wing, and tiltrotor operations are discussed in Chapters 5, 6, and 7.

4007. CIVIL AIRCRAFT TRANSITION ROUTES. Three main routes exist for civil aircraft to transit MCAS Miramar’s airspace to and from Montgomery Field. The airfield pattern altitudes and civil route altitudes are established to provide a minimum 500 foot vertical separation between all routes and patterns. Strict compliance with these altitudes is mandatory to ensure safety of flight. Appendices K-1 and T-1 also illustrate these altitude separations.

1. The first route enables a select group of civil aircraft to transit over the Interstate 15 freeway at 1,600 feet MSL for fixed wing aircraft and 1,100 feet MSL for rotary wing aircraft. Civil aircraft shall fly these altitudes,

or as assigned, to ensure 500 foot vertical separation from MCAS Miramar traffic.

a. Interstate 15 transitions will be discontinued whenever aircraft are inbound to Miramar for either an emergency recovery or the overhead break. Visual separation between aircraft may also be utilized when appropriate.

b. Non-military helicopters (police, medical, traffic watch, etc.) may be allowed to transition at a lower altitude over the Interstate 15 freeway only when there is no fixed wing traffic in the MCAS Miramar patterns.

2. The second route allows civil aircraft to transit either north or south over the midfield at 2,900 feet MSL.

3. The third route allows civil aircraft to fly over Interstates 5 and 805. Fixed wing aircraft on this route shall proceed at 1,600 feet MSL. Rotary wing aircraft shall transit at or below 1,100 feet MSL).

4008. STRATEGIC LIFT CARGO PROCEDURES. Strategic lift cargo is defined as cargo delivered or shipped via aircraft which consists of explosive, toxic, caustic, nuclear, combustible, flammable, biological, infectious or poisonous materials that may directly or indirectly endanger human life or property, particularly if misused, mishandled or involved in mishaps. Strategic lift cargo operations will be coordinated and issues resolved at least 24 hours prior to the desired time/date. Strategic lift cargo is handled per the current edition of reference (j) and the following local procedures:

1. The strategic lift pad, as defined in Chapter 1, is designated as MCAS Miramar’s strategic lift area. See Appendix B-1 for location.

2. When strategic lift operations are being conducted at the strategic lift pad, ordnance operations in both the primary and secondary CALAs are prohibited. In the event an unscheduled aircraft loaded with strategic lift cargo arrives at MCAS Miramar while ordnance operations are being conducted in the secondary CALA, it will be staged at an area on the airfield that ensures the maximum possible safe separation from other aircraft until the strategic lift pad becomes available.

3. Aircraft desiring to load or off-load strategic lift cargo will be directed to park on the strategic lift pad.

4. In preparation for both tenant and non-resident aircraft closed field strategic lift pad operations, the Visiting Aircraft Line (VAL) will coordinate the time, date, and type of cargo with the Airfield ODO, Explosive Safety Office, Provost Marshal’s Office (PMO), Aircraft Rescue and Fire Fighting (ARFF), Station Explosive Ordnance Disposal (EOD), and Aviation Ordnance.

5. During strategic airlift operations supporting agencies perform the following functions:

a. Station Aviation Ordnance is responsible for proper control and safe handling during loading and/or unloading operations.

b. ESO observes the unloading/loading process to ensure overall safe operation and compliance with applicable regulations.

c. PMO is responsible for establishment of proper security measures, and to provide security for shipments when needed.

d. ARFF will dispatch a crash truck to the strategic lift area during landing, taxiing, unloading/loading, and takeoff of strategic lift aircraft in order to ensure immediate response protection with appropriate fire suppression equipment and rescue personnel.

e. Station EOD should be notified of load content, type, and quantity of all explosive cargo in the strategic lift area. They are on-call to support any disposal operations.

6. HAZMAT Operating Procedures. For additional information on proper precautions for HAZMAT operations and HAZMAT emergency response procedures (other than ordnance or fuel), contact both the MCAS Miramar Base Fire Department (Structural) and the MCAS Miramar Environment Department.

4009. PILOT DECLARED EMERGENCIES

1. When a pilot declares an emergency, the tower will dispatch emergency equipment and advise all appropriate parties of the nature of the emergency. The following information will be provided by the pilot as soon as possible/practical:

a. Nature of emergency, intentions, arrested landings (weight and speeds).

b. Souls on Board.

c. Fuel Status.

d. Ordnance and type.

e. Any other information deemed helpful in case of a mishap.

2. The nature of the emergency and the information provided by the pilot will determine further ATC action. Aircraft in the pattern and taxiing must be ready to respond to immediate instructions to hold, exit the runway, and/or enter the Delta.

3. Pilots declaring an emergency should contact SOCAL Approach as soon as practical giving their call sign, type aircraft, position, nature of emergency, number of souls on board, fuel remaining, type/amount of ordnance, and intentions. The aircrew should again report this emergency status information upon handoff from SOCAL Approach.

a. Pilots experiencing an airborne emergency should preface initial ATC radio transmission with “THIS IS AN EMERGENCY...”

b. When a pilot declares an emergency, the MCAS Miramar control tower shall notify necessary personnel via the crash net.

c. Controlled ejection areas have been designated. These areas are discussed in Chapter 5 of this Manual.

4. Emergency Fuel. The pilot who declares emergency fuel to Miramar tower will be given priority handling for expeditious landing. When doing so, the pilot shall report fuel remaining in minutes to the tower. The crash phone

will be activated and emergency procedures will be followed by the control tower.

5. Minimum Fuel. This is not an emergency; however, the pilot who declares minimum fuel to Miramar tower should not receive undue delay in sequence and clearance for landing in order to prevent an emergency from developing.

4010. AIRCRAFT RESCUE AND FIRE FIGHTING/PILOT RESPONSIBILITIES

1. Pilot transportation by ARFF vehicles is not permitted, because ARFF must be ready to provide an emergency response at all times. The Airfield ODO may arrange for transportation as operations allow.

2. When aircraft are shut down or disabled on runways or taxiways, pilots will remain with the aircraft until relieved by their squadron maintenance personnel.

3. ARFF briefs are given to squadrons upon request. Topics include operational fire procedures, Halotron extinguisher use and fire prevention. To schedule a brief, call ARFF or the Airfield ODO.

4011. TOWER LAMP SIGNALS. ATC light signals from Miramar tower are conducted in accordance with current directives and are the primary means used to signal NORDO aircraft. Procedures for receiving and acknowledging ATC light signals can be found in current FLIP publications.

4012. WEATHER MINIMUMS

1. Minima required for specific operations are as follows:

	CEILING	VISIBILITY
Basic VFR	1,000 feet	3 miles
Visual overhead approach	2,600 feet	3 miles
High Pattern	1,600 feet	3 miles
Low Pattern	1,100 feet	3 miles
Special VFR for CV FCLPs	600 feet	2 miles (See Note)
Yuma and I-15 Helo Route	2,500 feet	3 miles
Fairways Helo Route	1,500 feet	3 miles
Beach Helo Route	1,000 feet	3 miles
Special VFR Beach Helo Route	700 feet	1 mile (See Note)

NOTE: SVFR requires a clearance from the control tower. CV FCLP aircraft in the Miramar Class B Airspace must land prior to fixed wing IFR aircraft reaching a 9-mile final and prior to a rotary wing IFR aircraft reaching a 1.5-mile final.

2. Although weather criteria may be reported as suitable for specific operations, restrictions may be put into effect by the control tower when poor visibility conditions restrict the controller’s ability to maintain visual contact with all aircraft in the traffic pattern. Restrictions will be broadcast on ATIS.

3. When official weather ceiling is reported below the prescribed minimums for the specific operation previously listed, the Air Traffic Control Facility Officer (ATCFO), at his/her discretion, may lift the restrictions for helicopter route operations and the visual overhead approach only after:

a. Receiving pilot weather reports indicating the ceiling is better than the official weather report, and

b. The aircraft can safely perform the specific operation clear of the clouds.

NOTE 1. In case of the overhead approach, aircraft shall be visually observed continuously while in the tower delegated airspace.

NOTE 2. In case of aircraft on VFR helicopter routes, aircraft do not need to be visually observed by the tower.

Example: METOC is reporting a 1,500 foot ceiling and 5 miles visibility. However, the majority of the reported weather (ceiling) is to the west and pilots have been reporting a ceiling of 3,000 feet between the initial and over the airfield. At the discretion of the ATCFO, the overhead pattern may be opened for subsequent operations.

4013. OBSTRUCTIONS/PROMINENT OBJECTS' HEIGHT. There are numerous obstructions or prominent objects on or near the airfield that may constitute hazards to flight operations. For a complete listing refer to Appendix A-3.

4014. BIRD/ANIMAL AIRCRAFT STRIKE HAZARD (BASH) PROGRAM

1. All bird activity that may create a potential or actual hazard to flight shall be reported to Miramar tower. Tower will relay these known hazards to all aircraft under its control and will continue reporting until it is no longer a factor. The control tower will also notify the Airfield ODO who will expeditiously notify Flight Planning, Weather, tenant squadrons, and the MCAS Miramar Environmental Department.

2. During periods of intensive bird activity, this information will be broadcast via ATIS. See reference (k) for additional information.

4015. ELECTRONIC TESTING/TUNING

1. Maintenance radio checks should be accomplished on assigned unit radio frequencies.

2. If an assigned frequency is unavailable, radio checks may be conducted with the Ground Control on UHF frequency 307.325 MHz, provided that maintenance personnel:

a. Monitor the frequency prior to initiating a call to ensure the frequency is not busy.

b. Secure the radio checks immediately if so instructed by Ground Control.

3. Emergency Locator Transmitter (ELT) Equipment Testing. Operational ELT testing should only be done during the first 5minutes after any hour (i.e. 0700-0705, 1500-1505, etc.) and should be no longer than 3 audible sweeps. Inadvertent activation of ELT equipment causes the Coast Guard and local air traffic control facilities to be alerted.

a. Operational testing at times other than the first 5 minutes of each hour should be done in shielded rooms, special containers, or coordinated

with the MCAS Miramar control tower through the Station ODO prior to commencing tests.

b. In the event of an inadvertent ELT transmission, contact the tower or Air Traffic Control Maintenance Division (ATCMD) and report it.

c. Due to hazards caused by radar to personnel and ordnance, aircraft shall not operate radar systems on the deck except into a dummy load. Safety distances of 10 feet for HERO susceptible ordnance and 25 feet for HERO unsafe ordnance will be adhered to for radar operation using a dummy load.

4. ARC-80, ARC-94 Operations. HERO unsafe/susceptible ordnance shall be kept a safe distance from ramp/hangar maintenance spaces. The following procedures are in place to ensure HERO unsafe/susceptible ordnance does not prematurely activate/ignite:

a. The ARC-80 transmitter shall not be operated within 360 feet of any electro-explosive device.

b. The ARC-94 transmitter shall not be operated within 230 feet of any electro-explosive device.

c. Reference (l) discusses HERO in detail and provides a listing of minimum HERO safe distances for other equipment.

CHAPTER 5

FIXED-WING OPERATING PROCEDURES AND COURSE RULES

5000. GENERAL INFORMATION. The procedures listed in this chapter apply specifically to fixed wing aircraft flight operations at MCAS Miramar.

5001. ENGINE RUN-UPS/TURN-UPS. Engine run-ups or turn-ups are terms used interchangeably in this manual, and are generally defined as a procedure to start and test engine function prior to takeoff, or for maintenance purposes and performed in a specific area.

1. Fixed wing units are authorized to conduct maintenance turn-ups regardless of operating hours, unless otherwise restricted in this section.

2. For jet aircraft a high power turn-up is defined as running an engine(s) at a power setting of 80% and above. A low power turn-up for jet aircraft is defined as any power setting less than 80% power setting.

3. Noise Abatement. All jet aircraft high power turn-ups shall be conducted by authorized personnel that are qualified in model, and in accordance with Chapter 8 Noise Abatement Procedures.

4. All units conducting engine maintenance turn-ups when the airfield is closed shall also refer to Chapter 9 of this Manual.

5. Engine run-ups. Pilots shall be cognizant of their aircraft position relative to the runways when conducting engine run-ups. The prop wash/jet blast may disturb the air over a runway's landing threshold and create a hazardous condition for landing aircraft. Pilots shall conduct their engine run-ups in the following areas or as directed by the tower. See Appendix B-1 for an airfield diagram.

a. The engine run-up area for a Runway 24 departure is north of 24R on the east side of the throat at the approach end in the Marshal Area. Pilots are cautioned against stopping in a position that blocks access to the runway.

b. Pilots shall not taxi onto the asphalt area marked with yellow chevrons in the vicinity of the Marshall Area. The yellow chevron area is not stressed for aircraft.

c. Engine run-up area for Runway 6 departures shall be determined by the control tower. Four possible run-up areas for Runway 6 are:

(1) On Taxiway Mike between the parallel runways, holding short of the approach end of Runway 6R.

(2) On Taxiway Mike, holding short of Runway 6L at the 8,000-feet remaining intersection.

(3) On Taxiway November, holding short of Runway 6L at the 10,000-feet remaining intersection.

(4) On Taxiway Oscar, holding short at the approach end of Runway 6L.

6. Turboprop aircraft. Turboprop aircraft are authorized to conduct engine run-ups on the aircraft parking ramps when the airfield is either open or closed, provided an adequate safety clear zone is located directly behind the aircraft conducting the run-ups. The size of this safety clear zone is determined by the size and type of the aircraft. This clear zone must be clear of other aircraft, personnel, equipment, and debris.

5002. FIXED WING DEPARTURES. The following section is provided for tactical fixed wing aircraft departures. Specific departure procedures for T-34 aircraft are defined later in this chapter and shown in Appendix X.

1. All fixed wing aircraft shall depart MCAS Miramar on an approved Departure Procedure (DP) or radar vectors to ensure positive control in Class Bravo airspace. Aircraft unable to comply with the climb rate of any departure procedure (LAKEE, REDIN, SEAWOLF, TINNY, or VITKO), or who do not have the departure procedure publication in the aircraft shall advise ATC and can expect radar vectors on departure.

2. When calling for departure, pilots shall:

a. Request specific departure to be made (LAKEE, SEAWOLF, etc.).

b. Request type of takeoff (individual/section, standard or non-standard).

c. And give position on the airfield (holding short Runway 24R, etc.).

3. Aircraft shall not take position on the runway or take off until cleared by the tower. Pilots shall read back all hold short instructions.

a. IFR aircraft will be cleared individually in order to provide appropriate IFR separation. Section IFR takeoffs are authorized provided the ceiling and visibility are at or above TACAN circling minimums.

b. Flights of three or more aircraft are encouraged to request the use of both parallel runways for simultaneous takeoff.

c. Transient aircraft shall use the parallel runways or depart on individual flight plans.

d. Speed outbound shall not exceed 250 knots per 14 CFR 91.117, unless a higher speed is required by service directives or for safe aircraft operation.

e. Maximum performance climbs and/or unrestricted climbs are not authorized without prior approval from the Airfield Operations Officer IAW local noise abatement procedures.

4. Radar trail departures may be authorized. They will only be authorized for flights of four or less aircraft equipped with appropriate air-to-air radar when weather is reported at or above single aircraft takeoff minimums, provided each aircraft has an operational radar. For specific radar trail departure details, see Chapter 10.

5. Upon pilot request, or controller suggestion and pilot acceptance, aircraft may be taxied for an intersection departure (intersections of Runways 24L/R and Sierra Taxiway) to expedite departures and reduce delays.

See Appendix B-1 for an airfield diagram and Appendix B-3 for distances remaining for most commonly used intersections.

6. When departing Runway 24 and commensurate with aircraft operational capability, commence a climbing right turn abeam the TACAN, then via assigned DP. This departure turn shall not be commenced early or delayed as a means to facilitate flight rendezvous.

7. Running rendezvous shall be used to preclude flying over noise-sensitive areas.

8. Afterburners shall be secured within the field boundary prior to commencing right turn. Additionally, afterburners shall not be used below 10,000 feet except during takeoff or during an emergency.

5003. FIXED WING ARRIVALS. This section is provided for tactical fixed wing aircraft arrivals. Specific arrival procedures for T-34 aircraft are defined in this chapter and shown in Appendix X.

1. Visual approach to Runway 24. Pilots requesting a visual approach to MCAS Miramar shall do so upon check-in with Southern California (SOCAL) TRACON. If operating in W-291, SOCAL TRACON should be contacted prior to reaching point WIZKY (NKX R-250/35 DME) or point SIERRA (NKX R-200/31 DME). See Appendices G-1 and H-1.

a. Check-in should include call sign, approach request, current ATIS code, aircraft position, number of aircraft in flight, and remarks (banner, emergency, etc.).

b. Entry for the overhead approach will be via radar vectors to ATLAS (NKX R-063/7 DME at or above 3,000 feet MSL).

c. Pilots proceeding to ATLAS from the west shall not initiate a turn early or extend entries unless specifically directed by ATC.

(1) Approach control will normally terminate radar service prior to reaching ATLAS and switch the flight to MCAS Miramar tower. Pilots shall make the frequency change expeditiously.

(2) ATLAS is a mandatory crossing point. Pilots shall navigate to cross ATLAS at or above 3,000 feet MSL, wings level, and on a heading of 240.

(3) Speed inbound from ATLAS shall not exceed 250 knots unless a higher speed is required for safe aircraft operation.

2. Visual Approach to Runway 6. See Appendices G-1 and I-1. Check-in procedures are identical to Runway 24 procedures.

a. Entry for the overhead approach will be via radar vectors through KUDOS (NKX R-033/6 DME at or above 3,000 feet MSL).

b. Pilots proceeding to KUDOS from the west shall not initiate a turn or extend entries unless specifically directed by ATC.

c. SOCAL TRACON will normally terminate radar service prior to reaching KUDOS and switch the flight to the Tower. Pilots shall make the frequency change expeditiously.

(1) KUDOS is a mandatory crossing point. Pilots shall navigate in order to cross KUDOS at or above 3,000 feet MSL, wings level.

(2) Speed inbound from KUDOS shall not exceed 250 knots unless a higher speed is required for safe aircraft operation.

(3) Direct entry from KUDOS into Runway 6L left downwind is also available.

3. Upon initial contact with the tower, call sign and inbound intentions for all members of the flight shall be stated (i.e. full-stop, low approach, touch-and-go, de-arming request, etc.).

4. Procedures for Break. Aircraft arriving for the break shall utilize the following parameters and procedures unless otherwise directed by the tower. For a visual depiction of overhead break procedures and patterns see Appendices H-1 and I-1.

a. Standard break altitude for the parallel runways regardless of landing direction is 2,100 feet MSL.

b. The carrier break is authorized for Runway 24 based on existing traffic at the airfield. When approved, the carrier break altitude is 1,300 feet MSL.

c. Runway 24 Breakpoint. Pilots shall conduct their break at the numbers for Runway 24R, or as directed by the tower.

d. Runway 6 Breakpoint. Pilots shall conduct their break either west of the tower or past the departure end over Kearny Villa Road to minimize flying over station housing/buildings.

5004. FIXED WING TRAFFIC PATTERNS

1. Standard VFR Patterns. VFR patterns shall be left traffic for all runways except Runway 6R. Touch-and-go traffic on Runway 6R shall utilize a right traffic pattern. When dictated by operational necessity, the FCLP pattern to Runway 6L may be authorized and shall utilize a left traffic pattern.

a. Downwind altitude for high pattern full stop or touch-and-go traffic for all runways regardless of landing direction is 1,600 feet MSL.

b. Downwind altitude for low pattern normal touch-and-go traffic for all runways regardless of landing direction is 1,100 feet MSL. This altitude applies to Runways 24L, 24R, and 6R. Normal touch-and-go traffic is not authorized on Runway 6L due to noise abatement.

c. FCLP traffic pattern is 1,100 feet MSL to either Runway 24L or Runway 6L.

2. Delta Pattern (VFR Only). The Delta pattern is used for holding aircraft during periods of traffic saturation, fouled runways, or emergencies.

a. The Delta pattern for Runways 24/6 is a left racetrack pattern overhead the field at 2,600 feet MSL or as assigned by the tower. It is

bounded by Miramar Road to the north, Interstate 805 to the west, Highway 52 to the south, and a 3 DME arc to the east.

b. Aircraft established in Delta for Runway 24 that are recalled for landing by the tower shall report “over Camp Elliott descending for the break.” Camp Elliott is NKX R-088/2.5 DME.

c. Aircraft established in Delta for Runway 6 that are recalled for landing by the tower will be directed to descend to break altitude while on the downwind leg of the pattern.

3. Touch-and-Go Patterns. Aircrew may conduct touch-and-go landing practice to Runways 24L, 24R, and 6R. Touch-and-go landings to Runway 6L are generally not authorized due to noise abatement.

a. If multiple aircraft are conducting operations to both parallel runways, regardless of landing direction, it is imperative that all aircrew maintain situational awareness to ensure appropriate lateral separation from all other aircraft in the pattern.

b. Touch-and-go aircraft can use either the 1,100 or 1,600 feet MSL pattern altitude unless there are aircraft conducting FCLPs to Runway 24L or LHD operations.

(1) When FCLPs are being conducted to Runway 24L, touch-and-go traffic to Runway 24R will fly the 1,600 feet MSL high pattern.

(2) When helicopter flight operations are being conducted at the LHD Deck, touch-and-go left traffic to Runways 24L and 24R and right traffic to Runway 6R will be flown at the 1,600 feet MSL high pattern.

c. When touch-and-go operations are being conducted to Runway 24R and FCLPs are not in progress, all touch-and-go traffic shall utilize the same downwind altitude.

d. In order to maintain lateral and vertical separation when FCLP and touch-and-go patterns are being conducted simultaneously, aircraft in the Runway 24R touch-and-go pattern shall fly their pattern outside of the FCLP pattern so as to maintain visual separation.

(1) The resultant touch-and-go traffic pattern shall be flown at 1,600 feet and outside the FCLP pattern and aircraft shall not turn their base leg in front of the FCLP aircraft on final to Runway 24L.

(2) When flown concurrently with the FCLP pattern, touch-and-go or low approach aircraft departing from Runway 24R shall not commence the crosswind turn until climbing past 1,200 feet MSL.

(3) When flown concurrently with the FCLP pattern, touch-and-go aircraft that have passed the abeam position for landing on Runway 24R shall not descend below 1,200 feet MSL until established on final.

(4) Aircraft in the touch-and-go pattern to Runway 24R need to be aware that aircraft in the FCLP pattern may be operating a closed pattern on a discrete frequency. These aircraft will be in contact with the LSO positioned abeam the carrier deck on Runway 24L.

e. It is imperative that aircraft utilizing Runway 24L for day or night operations maintain appropriate lateral separation from Runway 24R due to simultaneous same-direction Runway operations.

f. Standard touch-and-go traffic is authorized for Runway 6R. Aircraft in this pattern shall utilize a right-hand pattern with a downwind of either 1,100 feet or 1,600 feet MSL. All aircraft in the same touch-and-go pattern shall use the same downwind altitude and remain north of Highway 52.

g. FCLPs to Runway 6L shall only be authorized when deemed operationally necessary by CG, 3d MAW. CO, MCAS Miramar, shall be the final approving authority for these operations.

(1) The FCLP pattern to Runway 6L is a left-hand pattern with 1,100 feet MSL downwind.

(2) See this chapter Section 5007 for additional information on FCLPs.

4. Landing

a. Upon receiving clearance to land, aircrews shall acknowledge the clearance and the assigned Runway (i.e. “Cleared to land, 24 Right”).

b. All aircraft shall report their landing gear down.

c. After landing, aircraft shall exit the runway as expeditiously as possible on the nearest suitable taxiway.

(1) Depending on tempo of operations, tower controllers may request that aircraft turn off the runway after landing (i.e., “If able, turn right next taxiway”). The pilot shall determine if the turn can be made safely and advise tower.

(2) If unable, pilot shall continue rollout and exit when safe to do so. The pilot shall advise the tower of intentions.

d. After landing rollout, aircrew shall remain on tower frequency until clear to the north of Runway 6L/24R. Once clear of the active runway, aircraft will make a switch to Ground Control for further instructions.

e. Section touch-and-goes are prohibited. This does not restrict practice section low or missed approaches from being performed.

f. Afterburner operations in the landing pattern are not authorized, except in an emergency.

5005. ARRESTED LANDINGS. Arrested landings are authorized for all tail-hook equipped aircraft that require utilization of the arresting gear for training, an emergency, or during wet weather procedures.

1. Squadrons that desire use of the arresting gear for training must make prior coordination with the Airfield Operations Department. This coordination is necessary to ensure that both the Control Tower and Aircraft Recovery Division are prepared to support the requirement.

2. The terms “precautionary arrestment,” “precautionary trap,” or similar phrases shall not be utilized by pilots in lieu of declaring an emergency. Any in-flight request for aircraft arrestment not previously coordinated through Airfield Operations will be considered necessary by the nature of the emergency.

3. During an aircraft arrestment, LSOs and other support personnel shall relocate to the approach side of the arresting gear unless a different position is required to facilitate the arrestment of the aircraft.

a. The dynamic nature of aircraft arrestments presents significant physical dangers. The kinetic energy that is transferred to the arresting gear by the aircraft may cause the equipment to fail. Arresting gear failures include the arresting cable breaking at arrestment, arresting cable “donuts” detaching and progressing forward of the arrestment, or an arrested aircraft veering off the runway.

b. Airfield Operations shall provide a radio to the LSO to communicate with the arresting aircraft when required. This may be either a PRC-113 portable radio or a radio equipped vehicle.

c. LSOs and other essential personnel shall take precautions to minimize all dangers associated with the aircraft arrestment. Any LSO who insists on communicating with an arresting aircraft from the departure side of the arresting gear shall do so at their own risk.

5006. WET WEATHER PROCEDURES

1. Wet weather procedures are defined as operational procedures that enable tail-hook equipped aircraft to make arrested landings when there is standing water on the runway in accordance with reference (n).

2. Pilots are advised that water on the rubber build-up areas of the runways may produce poor traction and braking action. Additionally, standing water on the runways may produce hydroplaning conditions.

3. All pilots of tail-hook equipped aircraft shall be familiar with the wet weather procedures. This will facilitate adjustments to the landing pattern when the procedures are in effect.

4. Wet weather procedures will be initiated by the tower during any of the following conditions: during inclement weather (i.e. steady downpour of rain), when advised by pilots that there is standing water on the runway, or when advised by pilots that “braking action is poor due to standing water.”

a. Standing or patchy areas of water on the runways will be reported via OPSGRAMS and NOTAMS to notify tenant and transients users that this hazard exists.

b. When available, ATC will furnish pilots the quality of braking action received from pilots or Base Operations. The quality of braking action will be described in terms of "good," "good to medium,” “medium,” “medium to poor,” or “nil,” and the location on the runway. "Nil" braking action reports or water depths of 1/2 inch or greater will result in runway closure until the braking action report improves or the hazard no longer exists.

5. The statement, “wet weather procedures are in effect” will be broadcast on ATIS along with reported braking action of “medium,” “medium to poor,” “poor,” or “nil” if braking action advisories are in effect.

a. Standing water of one eighth of an inch or greater will be reported on ATIS along with the location on the runway.

b. Takeoffs should not be attempted when standing water covers an appreciable part of the runways greater than one-half inch in depth.

6. Once initiated, 12 miles of separation is required between arriving aircraft to give the Recovery Division personnel adequate time to prepare the arresting gear for the next arrested landing. During dual runway recovery operations, separation between aircraft shall be no less than six miles.

7. Tower must receive a “ready deck” call from Recovery to authorize landing clearance.

a. Pilots may receive clearance to land from the tower as late as one mile from touchdown.

b. In the event a “ready deck” call is not received by the tower when the aircraft is one mile from landing, a “wave-off” or “missed approach” call will be issued to the aircraft. This shall be followed by instructions to execute the IFR Missed Approach Procedure or enter the VFR downwind pattern depending on weather conditions. Compliance with these procedures is mandatory.

8. Pilots may execute a missed approach if they are not comfortable with the runway environment, even if cleared to land.

9. Once the wet weather procedures are activated, the Tower Watch Supervisor will implement the procedures.

5007. FIELD CARRIER LANDING PRACTICE (FCLP)

1. Scheduling. CV and LHD FCLP operations are scheduled with and published by the MCAS Miramar Airfield Operations Department. FCLP operations will be conducted according to the published CV/LHD FCLP schedule and in accordance with references (b) and (g).

2. Utilization. Units conducting FCLPs during their own published scheduled time period have priority over unscheduled aircraft wanting to enter the FCLP pattern.

a. Unscheduled aircraft desiring FCLPs shall make their request to the Tower, but they must be accepted by the LSO on station.

b. An LSO that accepts unscheduled aircraft into a scheduled FCLP pattern assumes responsibility for adherence of that aircraft to the pattern.

c. Dissimilar fixed wing aircraft wanting to conduct FCLP operations at the same time will require prior authorization from Airfield Operations and the LSO. Pilots and LSOs are expected to maintain a safe interval between aircraft in the FCLP pattern.

3. FCLP Pattern Control. Reference (n) assigns control responsibilities of all aircraft in tower controlled airspace to the control tower and states that "LSOs and RDOs are not classified as ATC personnel and shall not be used to provide ATC services." Qualified LSOs at MCAS Miramar are provided as much latitude as possible to simulate realistic conditions. Tower personnel retain responsibility for all pattern control and separation. Runway and FCLP pattern discipline are delegated to the LSO; however, that delegation may be revoked at any time the control tower deems necessary for safety of flight operations or noise abatement considerations. The control tower shall issue all takeoff and landing clearances.

4. LSO Transportation to LSO Platform

a. LSOs scheduled to control FCLP periods shall check in at building 9211 with the Airfield ODO for transportation to the LSO platform.

b. LSO requirements for emergency aircraft should be made known to both the Airfield ODO and ATC as soon as possible.

c. LSOs need to consider pickup and transit time and possible limited vehicle delays when requesting transportation to meet their schedule. LSO transportation requests should be minimized.

d. The FCLP pattern shall not commence until the LSO is on station and fully ready to accept aircraft.

e. Only essential personnel (LSOs, required aircrew, and recovery personnel) shall be located at the LSO platform during FCLPs. Exceptions to this restriction will be approved by the Airfield Operations Officer on a case-by-case basis.

5. LSOs from non-tenant units. Additional requirements for non-tenant command FCLPs are as follows:

a. LSOs must obtain a tower brief upon arrival at MCAS Miramar before conducting flight operations.

b. Tower's brief to the LSOs will include specific requirements and/or restrictions that may be required during the FCLP period.

c. Tower will inform the LSO to provide a two-pass heads up to the tower prior to any aircraft's expected departure.

d. Tower will inform the LSOs to have departing aircraft aircrew contact tower on radio frequency UHF 298.925 MHz when departing from their last touch-and-go for specific departure instructions and frequency change to departure control.

e. LSOs will ensure that aircraft which have not received tower clearance for departure remain in the FCLP pattern until a clearance is received and IFR release obtained.

f. The LSO shall call the tower at the completion of the FCLP period with the total number of touch-and-goes and wave-offs.

6. Safety

a. It is imperative that aircraft utilizing Runway 24L for day or night touch-and-go and/or FCLP patterns maintain appropriate lateral separation from Runway 24R due to simultaneous same-direction runway operations.

b. During night FCLP operations, Runway 24L lights will be secured and the simulated aircraft carrier deck will be lighted.

(1) The distance between the centerline of Runways 24L/R is only 700 feet. LSOs and FCLP pilots must remember that any overshoot of the Runway 24L centerline presents a midair collision hazard with traffic on final for Runway 24R. The LSO shall be alert to aircraft flown in a manner that will cause it to overshoot Runway 24L centerline and initiate an early wave-off.

(2) Neither the tower nor the PAR controller is able to detect an FCLP overshoot.

c. Fixed wing FCLP/low pattern flight operations and rotary wing LHD flight operations shall not be conducted simultaneously.

d. The maximum number of aircraft allowed in the FCLP pattern for various circumstances is defined below, based on all aircraft being visible to the tower controller. In case of reduced visibility, the Tower may limit the number of aircraft in order to maintain visual contact. The Airfield ODO may also reduce the number of aircraft in the pattern for noise abatement purposes.

(1) A maximum of five aircraft (except EA-6Bs) prior to 2200(L).

(2) A maximum of four aircraft (except EA-6Bs) after 2200(L) are allowed in the FCLP pattern.

(3) A maximum of four EA-6Bs are allowed in the FCLP pattern any time prior to 2200(L).

(4) After 2200(L), EA-6Bs are not allowed to conduct FCLPs due to noise abatement.

7. LSO Information

a. Location. The LSO platform is located at the south side of Runway 24L. The platform is equipped with telephones and radios. A portable radio is also available for use during emergencies on runways other than Runway 24L.

b. Alternate LSO Platform. In the event the LSO platform is not available (scheduled maintenance, etc.), the Airfield Operations Department can provide a radio equipped vehicle for LSO operations. This vehicle will be positioned abeam the carrier deck by the Airfield ODO or his representative, and LSOs will be provided transportation to and from this vehicle by Airfield Operations (the ODO, VAL, etc.).

c. Fresnel Lens. An Improved Fresnel Lens Optical Landing System (IFLOLS) is operational whenever the airfield is open. During night FCLP operations, the runway lights on Runway 24L are normally secured, but they must be turned ON for takeoffs, full stop landings, and emergencies.

(1) The LSO has control of the Fresnel Lens' wave-off lights. Instructions concerning the use of all equipment at the platform can be obtained from both the MCAS Miramar ATCMD and the Aircraft Recovery Division.

(2) All adjustments to the Fresnel Lens (such as light intensity, glide slope changes, etc.) shall be made by personnel from the Aircraft Recovery Division. They can be contacted via the ground net or landline.

d. The LSO shall use the radio call sign "PADDLES." The tower monitors and has overall authority over the FCLP frequency on UHF 291.65 MHz.

e. LSOs shall ensure that the LSO platform is left clean of trash and debris after each use, in order to minimize FOD in the vicinity of the runways.

f. All equipment discrepancies shall be reported to the ODO as soon as practical, but no later than the end of FCLP operations.

8. FCLP Pattern Entry

a. Aircraft that desire direct entry into the FCLP pattern may be directed to cross Runway 24R by the Tower and switched to PADDLES frequency at the hold short line for Runway 24L. The Tower will issue takeoff clearance after coordinating with the LSO.

b. Aircraft approaching the break for entry into the FCLP pattern (see Appendix G-1 and J-1) may be cleared by ATC to descend to FCLP pattern altitude when established on downwind leg.

c. To avoid overflight of populated areas, pilots should remain within 2 DME of the NKX TACAN and east of I-805.

9. Runway 24L FCLP Procedures

a. The FCLP pattern is a left-hand racetrack pattern flown at 1,100 feet MSL within the 2 DME NKX TACAN, remaining north of Highway 52 and east of Interstate 805. See Appendices J-1 and K-1.

(1) While conducting FCLPs, aircraft shall utilize the PADDLES frequency at all times and shall immediately comply with instructions received from the LSO or tower.

(2) The FCLP pattern is conducted separately from traffic in other patterns directly overhead or adjacent on final approach. Safe separation from other traffic is predicated upon FCLP aircraft adhering to the FCLP pattern procedures.

(3) Aircraft shall not depart the FCLP pattern without clearance from the tower. Aircraft departing the FCLP pattern require both an IFR clearance (issued by the clearance delivery section or control tower) and a departure release (issued by SOCAL TRACON via the Tower), unless sequencing to land.

b. After all takeoffs or touch-and-goes, aircraft shall climb to at least 800 feet MSL before commencing crosswind leg.

c. Proper pattern spacing must be accomplished through timely turns to downwind.

(1) Unless directed by tower or for safety of flight, upwind extensions shall be minimized for noise abatement.

(2) Aircrew and LSOs are expected to maintain a tight pattern.

(3) Instructions issued by the tower for pattern maintenance are mandatory unless an emergency exists.

d. The pattern altitude of 1,100 feet MSL shall be maintained on the downwind leg until the 180 position. On base leg, a descent below 800 feet MSL shall not be commenced until the pilot receives glide slope information.

e. Upon departing the FCLP pattern for a full-stop landing, aircraft shall climb straight ahead, maintain 1,100 feet MSL, and switch to tower frequency for pattern sequencing. This altitude restriction is necessary since other VFR traffic may be breaking overhead and descending to 1,600 feet MSL.

(1) During periods of high traffic, the tower may issue clearance downwind and/or climb on the PADDLES frequency.

(2) If difficulty is encountered obtaining tower clearance, pilots may conduct a turn downwind while maintaining pattern interval.

(3) Aircrew shall not climb above 1,100 feet MSL until cleared by tower.

(4) Regardless of the manner in which tower provides its clearance, pilots should ensure they switch to tower frequency when able to preclude interference with FCLP communications.

f. FCLP aircraft may be given a go-around to facilitate launching or recovering of aircraft during peak traffic periods or for emergency reasons.

(1) In extreme cases, when multiple go-arounds would be necessary, tower will direct “Paddles Signal Delta” over the FCLP frequency. When directed to “Signal Delta,” FCLP aircraft are to remain dirty, climb and maintain 1,100 feet MSL, maintain established intervals in the FCLP pattern, and fly the final and upwind leg just south of Runway 24L.

(2) As soon as conditions permit, tower will direct “Paddles Signal Charlie.” After receiving “Signal Charlie,” the first aircraft to reach the 180 will begin descent to 800 feet MSL and then continue FCLPs under LSO control.

g. Close-in Wave-offs. USMC/USN aircraft may land on Runway 24L while FCLPs are in progress, provided the full-stop aircraft has a minimum of 6,000 feet of runway separation from the FCLP aircraft (daytime only). For reference, 6,000 feet of separation is provided when the landing aircraft is abeam Lima Taxiway and the FCLP aircraft is crossing the Runway 24L landing threshold.

(1) The tower shall maintain overall control of runway separation when close-in wave-offs are being conducted.

(2) During close-in wave-off operations, the tower shall notify the LSO by stating “Landing Runway 24L.” The LSO shall acknowledge this call.

(3) When initiated by tower, the close-in wave-off procedure authorizes the LSO to continue the FCLP approach to the carrier deck and issue a “wave-off” call prior to touchdown.

(4) At no time shall an aircraft performing FCLPs be allowed to touch down when a close-in wave-off is being conducted.

(5) Normal operations may resume when the landing aircraft has cleared the landing runway and the LSO is informed by tower of a “clear deck.”

10. Runway 6L FCLP Procedures. The basic pattern, criteria and LSO procedures for Runway 6L FCLPs are generally the same as those procedures described for Runway 24L FCLPs.

a. When landing Runway 6, FCLPs will be conducted to the approach end of Runway 6L. The LSO will be provided with a portable radio. A Fresnel Lens will be set up approximately 750 feet from the approach end of the runway.

b. The FCLP pattern to Runway 6L is a left-hand racetrack pattern flown at 1,100 feet MSL.

c. After all takeoffs or touch-and-goes, aircraft shall climb to at least 800 feet MSL prior to commencing a turn to the crosswind leg.

d. On the downwind leg, the pattern altitude of 1,100 feet MSL shall be maintained until the 180 position.

e. On the base leg, a descent below 800 feet MSL shall not be commenced until the pilot can receive glide slope information.

f. To avoid overflying University City housing, extended downwind patterns are not authorized. All pilots are cautioned to observe landing traffic entering from the break.

11. Special VFR (SVFR) FCLP Operations

a. Though FCLPs under SVFR conditions may be authorized, approval for sustained SFVR FCLPs is unlikely.

b. SVFR FCLP operations may be conducted down to the following weather minimums: Ceiling 600 feet, visibility 2 miles.

c. Tower must obtain clearance from Montgomery Field prior to commencement of SVFR FCLP operations when Montgomery is reporting less than VFR minimums.

d. All participating aircraft shall be continuously visible from the tower.

e. Pilots shall maintain two-way radio contact with tower and/or LSO.

f. Federal Aviation Regulations (FARs) do not permit mixing IFR and SVFR flights in Class B Airspace. SVFR is granted on a not-to-interfere basis with IFR traffic.

(1) Due to separation requirements for SVFR fixed wing aircraft and arriving IFR aircraft, FCLP aircraft shall land prior to an IFR aircraft reaching a 9 mile final unless visual separation can be maintained.

(2) To avoid extensive delays, participating FCLP aircraft may file a GCA box clearance and request a GCA approach to Runway 24L to the carrier deck.

5008. FIXED WING NVG OPERATIONS. Night vision goggles may be worn while entering or leaving the MCAS Miramar Class B airspace. Aircrew shall notify the tower, and single aircraft or formation flights shall have their position and anti-collision lights on for identification.

1. Fixed wing flight operations at the airfield preclude the dimming of the airfield lighting to support NVG operations. Due to the amount of cultural lighting from both airfield and surrounding community lighting, continuous NVG operations at the airfield are not recommended.

2. Aircraft should have, at a minimum, their position lights on while operating in Class B airspace.

3. Individual aircraft or flights shall turn on their anti-collision lights while operating at MCAS Miramar to provide instant recognition by the control tower, other aircraft conducting flight operations at the airfield, and general aviation traffic flying near or through MCAS Miramar’s Class B airspace.

5009. FIXED WING LOST COMMUNICATION PROCEDURES. Aircraft experiencing radio failure should squawk 7600 on their Mode 3 transponder for the duration of the flight. Aircrew should continue to make all normal transmissions in the blind in case their transmitter is still working.

1. VMC Procedures. Aircraft experiencing a loss of communication shall follow normal arrival procedures for the overhead break if the aircrew believes they can maintain VMC.

a. The aircrew must be alert for pattern traffic. If equipped with an auxiliary receiver, aircrew should monitor Approach Control, MCAS Miramar tower, and guard.

b. When approaching the break, the pilot should rock wings and watch the tower for a green light, look for traffic ahead and downwind, and follow traffic if any to the landing runway.

c. Approaching the 180 position, wheels should be checked down and locked, and a green light anticipated from the tower. Green “cut” lights on the Fresnel Lens will also indicate clearance to land.

2. IMC Procedures

a. Aircraft that experience lost communication in flight shall proceed in accordance with the procedures identified in the Flight Information Handbook.

b. Aircraft that have established communication with a Miramar Final Controller and then experience a radio failure for one minute in the radar

pattern or for five/fifteen seconds (PAR/ASR) seconds on final when inbound to MCAS Miramar shall proceed with “Lost Communication Yellow” procedures.

c. SOCAL TRACON will issue the lost communication procedure. For locally based aircraft familiar with this procedure, TRACON will issue the abbreviated transmission “LOST COMM YELLOW.” Aircraft not locally based or not familiar with this procedure will receive complete lost communication procedures.

d. Lost Communication Yellow is defined as:

(1) Attempt to contact the control tower and proceed VFR. If unable to re-establish communication, but able to maintain VFR, execute VMC NORDO procedures outlined above.

(2) If unable to maintain VFR, fly the final portion of the HI-TACAN Runway 24R approach.

(3) Aircrew shall maintain at or above 5,000 feet MSL until NKX R-067/16 DME fix.

(4) If the prevailing winds are out of the east, aircrew may circle to Runway 6L.

e. Pilots should be alert for green cut lights on the Fresnel Lens and/or tower light gun signals for landing clearance.

f. Pilots should monitor guard frequencies and ATIS on UHF 352.0 MHz for ATC transmissions. Standard transmissions inbound should continue to be made in the event the transmitter is working.

5010. REDUCED RUNWAY SEPARATION

1. Reduced runway separation criteria may be utilized on arrival by U.S. Marine Corps and Navy aircraft when the preceding aircraft has similar or higher performance characteristics.

2. Reduced Separation Criteria. When reduced runway separation operations are being conducted, the following are the minimum separation distances authorized:

a. Between sunrise and sunset - Landing:

(1) Full stop behind full stop – 2,000 feet.

(2) Touch-and-go behind full stop – 6,000 feet.

b. Between sunset and sunrise - Landing:

(1) Full stop behind full stop – 6,000 feet.

(2) Touch-and-go behind full stop – clear deck.

3. Reduced runway separation shall not be applied to other than U.S. Marine Corps or Navy aircraft unless a Letter of Agreement is executed between the operational commander and the Station Operations Officer, MCAS Miramar. Letter of Agreement coordination and preparation assistance may be obtained by contacting the Station Air Traffic Control Facility.

5011. PRACTICE PRECAUTIONARY APPROACHES. Practice precautionary approaches may be conducted as required by applicable NATOPS manuals IAW MCAS Miramar/SCT Letters of Agreement, provided prior approval is obtained from both tower and TRACON.

5012. F-35B/C OPERATIONS

1. F-35B pilots will abide by the same rules that apply to fixed wing aircraft

a. F-35B aircraft wishing to conduct a vertical landing on pad 1 or 2 during VMC conditions must inform Foss Tower upon initial check-in of intentions to allow for proper sequencing

b. F-35B aircraft wishing to conduct a vertical landing on pad 1 or 2 during IMC conditions are expected to fly the appropriate instrument approach to the duty runway and inform Foss Tower upon initial check-in of intentions.

c. Direct approaches to vertical landing pads are not authorized due to FOD and HERO concerns when the Primary CALA is active. Pilots can expect clearance to maneuver to the vertical landing pads once over runway 24L, clear of the Primary CALA.

2. F-35B/C High-Power, Low-Thrust/MBIT maintenance checks shall be conducted outside the southern-most aircraft sun-shade on units' respective line. The Squadron is responsible for ensuring proper clearance behind the aircraft is maintained, posting Marines as required to prevent aircraft or vehicular movement behind the aircraft within the safety area.

5013. TRANSPACIFIC/TRANSCONTINENTAL JOIN-UP PROCEDURES

1. Standardized join-up procedures are provided to facilitate the departure of aircraft transiting the Pacific Ocean or Continental U.S. with a refueling tanker escort.

2. Depending on weather conditions, multiple considerations affect the join-up evolution for aircraft departing MCAS Miramar. The lead pilots must conduct a thorough face-to-face or phone brief with MCAS Miramar ATC to ensure join-up procedures are understood.

3. A typical flight join-up will consist of the following:

a. Aircraft will depart Runway 24R/L individually and enter a left downwind at 2,000 feet MSL to remain within 2NM south of MCAS Miramar.

b. The tanker aircraft will taxi onto the runway once the last aircraft has begun its departure roll. The tanker aircraft will depart once the lead aircraft is abeam Runway 24R on downwind.

c. Airborne aircraft that are following the tanker outbound should join up as soon as possible to avoid delays from SOCAL.

4. When weather precludes the flight join-up procedures described above, aircraft can expect to depart as a flight on a separate flight plan from the tanker aircraft. Flight join-ups will be conducted over the Pacific Ocean to the west or over the desert to the east.

5014. T-34 SPECIFIC ARRIVALS AND DEPARTURES. T-34 aircraft shall abide by the same rules that apply to all IFR/VFR fixed wing aircraft except when arriving or departing MCAS Miramar VFR on an approved VFR arrival route. See Appendix X for kneeboard compatible depictions.

1. The four approved VFR arrival routes for T-34s are the Yuma Route, Black Mountain Route, Del Mar Route, and Qualcomm Stadium Route.

2. Aircraft transiting either inbound or outbound on the Del Mar, Black Mountain, or Yuma Routes will contact Tower for route clearance, altitude restrictions, traffic advisories, and additional ATC services.

3. All T-34 VFR routes shall be flown as published unless modified by ATC. If weather conditions preclude flight in accordance with VFR procedures, pilots shall notify ATC of weather conditions and the route will be closed.

4. Yuma Route is used for easterly arrivals and departures.

a. Outbound. Depart via left downwind or as assigned by the tower and proceed direct to Highway 52 bend (NKX R-085/4.8 DME) then direct to Santee Lakes (NKX R-086/7.4 DME). Remain between 2,500 and 3,000 feet MSL or as assigned by Tower until Santee Lakes.

b. Inbound. Report approaching Santee Lakes with intentions between 2,500 and 3,000 feet MSL and proceed direct to Hwy 52 bend (NKX R-085/4.8 DME) or as assigned by Tower for landing. Aircraft may be required by Tower to hold over Santee Lakes at 2,500/3,000 feet MSL for inbound overhead jet traffic.

(1) Straight-in approaches – Enter a left base at 4 DME for Runway 24R/L, or as assigned by Tower.

(2) Overhead Approach – Proceed direct to a 2 mile initial at 2,100 feet MSL or as assigned by Tower. Cross the approach end of Runway 24 at assigned altitude for a left break with wings level. Descend to 1,600 feet MSL in the downwind.

5. Del Mar Route is used for westerly departures only.

a. Outbound. Depart heading northwest bound and proceed direct Del Mar Race Track (NKX R-343/9 DME). Remain below 3,000 feet MSL until Del Mar Race Track.

b. Inbound. Not authorized.

6. Black Mountain is used for arrivals from the north and the coastline.

a. Outbound. Not authorized.

b. Inbound. Report Black Mountain (NKX R-006/6.9 DME) below 3,000 feet MSL with landing intentions for pattern entry instructions. Aircraft may be required by Tower to hold over Miramar Lake at 2,100 feet MSL for inbound overhead jet traffic.

(1) Right Base entry - Report entering a 2 mile right base or as assigned by the tower for landing Runway 24R/L.

(2) Left 270 Overhead approach – From Black Mountain, proceed direct to Runway 24 approach end descending to 2,100 or as assigned by the tower. Cross approach end of Runway 24 at assigned altitude for a left 270 degree break. On downwind, descend to 1,600 feet MSL and remain north of Hwy 52.

7. Qualcomm Stadium is used for arrivals from the south only. Aircraft may be required to hold over Santee Lakes at 2500 or 3000 feet MSL as directed by Tower, for inbound overhead jet traffic.

a. Outbound. Not authorized.

b. Inbound. Report Qualcomm Stadium at 3000 feet MSL (NKX R-158/5.3 DME) and proceed directly to the intersection of Interstate 15 and Highway 52. Aircraft shall cross Highway 52 at 3,000 feet MSL. Aircraft are not authorized to descend below 3,000 feet MSL until directed by Tower.

(1) Left base entry – Upon crossing Highway 52, enter a 2-mile left base for Runway 24R/L as directed by Tower.

(2) Right 270 Overhead entry - From the intersection of Interstate 15 and Highway 52, proceed direct to approach end of Runway 24. Cross the approach end of Runway 24 at assigned altitude for a right 270 degree break. Descend to 1,600 MSL on downwind.

5015. TARGET BANNER OPERATIONS

1. Target banner operations are not authorized during closed field operations.

2. Tow Target Launches

a. Launches normally will be conducted on Runways 24R/6L. Tow aircraft are permitted to launch a banner from Runways 24L/6R, if Runways 24R/6L is not available. Prior to launch, the tow cable may be laid out in the overrun area between the threshold lights or parallel to the runway outboard the runway lights. In either case, extreme care shall be utilized during actual hookup operations to ensure the runway lighting is not damaged. Tow aircraft shall line up a minimum of six feet off centerline to preclude the metal banner tow bar from impacting the protruding centerline lights.

b. Tower shall ensure the short field arresting gear is de-rigged prior to a banner launch. If using Runways 24L/6R, all arresting gear will be de-rigged.

c. The tractor pilot shall advise ground control on initial contact that he/she is the banner tow.

d. Dual runway operations:

(1) When the tractor pilot calls for tow hookup, Tower will clear the aircraft to line up and wait. Traffic permitting, the chase aircraft will be cleared into position and hold at this time on the parallel runway. The chase shall be cleared into position prior to the tractor receiving takeoff clearance.

(2) Takeoff clearance for the tractor and chase will be issued as a flight.

e. Single runway operations:

(1) When the tractor pilot calls for runway clearance for banner hookup, Tower will clear the tractor and chase aircraft as a flight to line up and wait. Squadron policy will dictate if the chase aircraft takes the runway with the tractor or holds short. If the chase aircraft takes the runway with the tractor, the chase aircraft should line up well aft and opposite, off centerline from the tractor's position, to permit uninterrupted banner hookup and to avoid ingestion of FOD during takeoff roll.

(2) Takeoff clearance for the banner tow and chase will be issued as a flight. Chase aircraft should not commence takeoff roll until observing a good banner.

f. The banner tow aircraft will conform to normal departure procedures. When weather is IMC and individual departures are in effect, the chase aircraft can expect a delay after the banner tow aircraft for separation.

g. The airfield must be within weather minimums for section departures (tow and escort).

3. Tow Target Drops

a. Inbound tow aircraft shall contact SOCAL TRACON and advise them of the banner tow, and if weather permits, request radar vectors to a visual approach. If weather precludes radar vectors to a visual approach but is above tow drop minimums (1,000 foot ceiling, 3 miles visibility), the tow aircraft will request radar vectors to a PAR approach.

b. The tow drop zone is the overrun area of Runway 24L. Diligence by both aircrew and tower in visually clearing the drop area is mandatory before the drop.

c. Tow aircraft shall not descend below 1,500 feet MSL until passing Kearny Villa Road. Tow aircraft making a PAR approach will be switched to tower control when VFR at three miles for a visual drop. If the tow aircraft is unable to maintain VFR at 1,500 feet MSL, the pilot should inform the controller of intentions and be prepared to execute an instrument departure.

d. After passing Kearny Villa Road, pilots shall line up with the centerline of Runway 24L and stand by for drop instructions.

e. Tower (or chase aircraft when directed by Tower) will call "drop" and advise "banner away."

f. In advance of the drop, Tower should be advised of intentions after the drop. The pilot shall not turn downwind until cleared to do so by Tower.

g. The responsibility for recovery and disposal of both the tow and cable rests with the user organizations. If not recovered immediately with the tow, cables shall be clearly marked for easy identification for pickup at a later time. User organizations must coordinate later pickups with the ODO. The goal is to recover the cable for recycling prior to the next day of operations.

4. Tow Aircraft Emergencies

a. No Radio (NORDO)

(1) Squadrons are encouraged to ensure NORDO aircraft are escorted when returning for landing.

(2) If the tow aircraft returns NORDO, normal procedures will be followed with the chase aircraft making the radio reports.

(3) After crossing Kearny Villa Road, the chase aircraft will close to a loose wing position and relay cut instructions by prearranged hand signals.

(4) The chase will then take the lead for downwind entry.

b. Hung Tow

(1) If sufficient fuel remains, a second drop attempt may be made.

(2) Tower will direct “left downwind, maintain 1,600 feet MSL.”

(3) Aircrews should report left base, turn inbound and repeat the drop procedures.

(4) If it becomes evident a landing must be made with tow banner or cable attached, aircraft shall proceed to San Clemente for landing.

(5) If a landing at San Clemente is not feasible due to weather or fuel, landing will be made on Runway 24R.

(6) A higher than normal approach shall be flown to avoid Kearny Villa Road and the approach lights.

(7) Touchdown point should be 4,000 feet down the runway abeam the control tower, leaving 8,000 feet of usable runway remaining and arresting gear if needed.

(8) The chase aircraft will call when the banner is clear of the approach lights and make a low approach only.

(9) The tow aircraft will remain on the runway until the ordnance crew has disengaged the cable.

(10) Squadrons towing banners shall have personnel and equipment standing by to ensure expeditious clearing of hung tow from aircraft and to re-open the runway.

c. Lost Tow

(1) In the event of lost tow, the full cable length should be assumed to be attached to the aircraft until positively determined otherwise.

(2) Tower will direct all other pattern traffic to the Delta at 2,600 feet MSL to preclude an overflight by the tow aircraft.

(3) The tow aircraft will be directed to climb to 2,100 feet MSL for downwind.

(4) A field sweep will be conducted by the Crash Crew to determine if the cable is on or near the runways.

(5) A flyby may be conducted to determine if the cable is still attached to aircraft.

(6) If no cable is attached, a normal landing will be permitted.

(7) If the cable is attached, all attempts will be made to drop the cable in the tow drop area.

(8) If attempts to drop the cable are unsuccessful, the number one arresting gear will be derigged and a hung tow landing as described above will be made.

d. Below WX Minimums

(1) In the event cloud cover over MCAS Miramar prevents a standard arrival, a banner drop at sea or divert to San Clemente, El Centro or Yuma is recommended.

(2) If a descent through a cloud cover becomes necessary, this is an emergency situation and the requirement for a chase aircraft is rescinded. SOCAL TRACON must be informed of this emergency situation.

5. For further information on scheduling Target Banner operations, contact Airfield Operations.

5016. CONTROLLED EJECTION AREAS

1. For safety reasons, the preferred area for conducting a controlled ejection or bail out is out over the water heading westbound. Contact “BEAVER” control stating call sign, position and intentions. “BEAVER” control will initiate SAR actions and provide other possible assistance such as vectors to an ejection area (if requested), separation from other aircraft or surface contacts, etc.

2. When an ejection becomes imperative in the vicinity of MCAS Miramar, all possible attempts should be made to contain the ejection within the confines of East Miramar.

CHAPTER 6

ROTARY-WING OPERATING PROCEDURES AND COURSE RULES

6000. HELICOPTER OPERATING PROCEDURES. The procedures listed in this chapter shall apply specifically to rotary wing flight operations at MCAS Miramar.

6001. HELICOPTER ARRIVAL/DEPARTURE PROCEDURES.

1. VFR HELICOPTER ROUTES

a. Helicopters arriving or departing MCAS Miramar VFR shall use one of the four approved VFR Helicopter Routes. These routes are identified as the Fairways Route, the Beach Route, the Interstate 15 Route, and the Yuma Route. Routes are detailed in Chapter 6 and illustrated in Appendices L through O of this Manual.

b. Contact either MCAS Miramar Airfield Operations or ATC to obtain a course rules briefing and/or the most current published VFR/SVFR Helicopter Routes Booklet authorized for navigation.

c. Tower Responsibilities. During the hours that the airfield is open, aircraft utilizing the VFR helicopter routes shall contact tower for route clearance, altitude restrictions, traffic advisories, and additional ATC services.

d. Closed Field Operations. During the hours that the airfield is closed, aircraft shall be in contact with SOCAL TRACON while airborne in the Class B airspace. Additional requirements associated with closed field operations are addressed in Chapter 9.

2. NOISE ABATEMENT. Due to the densely populated area surrounding MCAS Miramar, the following noise abatement procedures shall apply on the VFR Rotary Wing Routes.

a. Preferred Routing. Depending on weather, mission, or destination, the preferred routing for rotary wing aircraft is to arrive from and depart to the west. This routing minimizes the amount of time the aircraft are required to fly over the surrounding community.

(1) The Fairways Route is the primary route for rotary wing transiting between MCAS Miramar and the coastline, shown in Appendix L.

(2) The Beach Route will only be used as necessary due to weather, familiarization, or to ensure de-confliction of traffic, shown in Appendix M.

(3) MCAS Miramar Air Traffic Control (ATC) will separate inbound and outbound helicopter traffic on the Fairways and Beach Helicopter VFR Routes by sequencing traffic as necessary to ensure separation.

b. Altitudes. Noise abatement considerations may dictate that enroute altitudes be adjusted from time to time. Contact Airfield Operations or ATC for the most current update on inbound and outbound altitudes that pilots can expect for these routes.

(1) All helicopter VFR and Special VFR routes shall be flown as published unless modified by ATC.

(2) If weather conditions preclude flight at published course rules altitudes, pilots shall notify the control tower of weather conditions. Pilots shall maneuver to maintain VFR, request Special VFR procedures if available, or contact SOCAL Approach for IFR services.

(3) In compliance with reference (m), helicopter VFR arrivals between 2400 and 0700 local shall fly inbound to MCAS Miramar at or above 4,000 feet MSL until beginning descent for landing or navigate to avoid directly over flying communities along the coastline and along Interstate 15.

c. Multiple aircraft Departures and Arrivals.

(1) Section arrivals/departures are authorized for all helo routes.

(2) Flights up to four aircraft are authorized for arrivals and departures on all helo routes except the I-15 Route.

(3) Flights larger than four aircraft shall comply with the routing authorized in the current MAG-16 SOP.

3. SVFR PROCEDURES. Due to terrain, obstructions, minimum vectoring altitude, and noise abatement, the Beach Route is the only route authorized for SVFR rotary wing operations.

a. The weather minima required to conduct SVFR on the Beach Route is a reported ceiling of 700 feet AGL and 1 mile visibility at MCAS Miramar.

b. Aircrew shall fly this route at 1,000 feet MSL inbound or outbound.

c. If weather minimums preclude flight operations at an altitude of 1,000 feet MSL, the Beach Route shall be closed.

d. Expect delays for IFR traffic when the weather is below 1,000 feet MSL. It is recommended that aircraft request an IFR recovery or IFR to VFR-on-top departure, as appropriate.

e. If Special VFR weather minimums preclude flying the SVFR Route at published altitudes, the route will be closed.

4. IFR Arrivals. VFR helicopters requesting IFR pickup may experience significant delays during IMC at MCAS Miramar due to airspace and air traffic congestion. To prevent this situation from occurring, pilots are highly encouraged to plan and file an IFR flight plan to recover at MCAS Miramar if weather at the airfield is forecasted to be at or below a 3,000 foot ceiling due to altitude restrictions on the helicopter routes listed below.

5. IFR Departures to VFR-on-top. This routing is known as the Hotel 14 Stereo plan route. Stereo routes are maintained in a binder in Flight Planning. When flying this procedure, aircrew shall utilize the following procedures:

a. Contact Flight Planning to make the request.

b. Aircraft can expect a departure heading of 340 degrees for radar vectors to the LAKEE intersection.

c. Climb to VFR conditions on top or 3,000 feet MSL assigned altitude and advise SOCAL Departure.

6002. ROTARY WING FLIGHT OPERATIONS

1. The multiple rotary wing operating procedures and areas at MCAS Miramar are outlined below and shown in Appendices F-1 through R-1.

2. All helicopter traffic patterns shall be flown within the boundaries of MCAS Miramar.

3. Rotary wing aircraft in the local pattern shall remain north of Route 52 to avoid Montgomery Field air traffic.

6003. RUNWAY USAGE

1. Runways 24L/6R and 24R/6L may be utilized for departures, arrivals, touch-and-goes, stop-and-goes, low approaches, and practice auto-rotations.

2. Aircrew who suspect that their rotary wing aircraft has FOD (i.e. mud, clumps of dirt, or similar debris) on the landing gear shall comply with the procedures described in Chapter 2.

6004. HELICOPTER SPOTS

1. Helicopter Spots 1 and 2 may be utilized by rotary wing aircraft for departures, arrivals, pattern work, and hover checks. Helicopter Spot 3 may be utilized for departures and hover checks only. See Appendices B-1, G-1 and J-1.

a. Aircraft requesting the helicopter spots for pattern work may be cleared by ATC to land on spot 1 or 2. Permission from the tower is required to depart from any spot.

b. A helicopter that has declared a landing gear emergency should plan to proceed to helo spot 2 after receiving clearance from tower. ARFF and appropriate squadron representatives should plan for this spot 2 arrival in order to prepare for an appropriate emergency response. For escort or additional vehicle support contact the Airfield ODO.

c. When Runway 24 is active, the normal traffic pattern for conducting multiple landings to these helo spots is a right-hand traffic pattern at 1,000 feet MSL.

(1) Pilots shall turn to crosswind leg prior to crossing Papa Taxiway to prevent conflict with departure traffic on Runway 24.

(2) Pilots should turn to base leg prior to crossing Miramar Road to minimize the noise impact on the immediate community.

(3) Left-hand traffic pattern to the spots when landing Runway 24 is prohibited.

d. When Runway 6 is active, pattern work to the helo spots will be approved as long as the pattern does not interfere with Runway 6 traffic.

(1) Normal traffic pattern for conducting multiple landings to these helo spots is a left-hand traffic pattern at 1,000 feet MSL.

(2) Pilots should turn to downwind leg prior to crossing Miramar Road to minimize the noise impact on the neighboring community.

(3) Pilots shall adjust their turn to final to ensure they do not overfly the Papa Taxiway.

(4) Right-hand traffic pattern to these spots when landing Runway 6 is prohibited.

e. Pilots are discouraged from conducting extended hover work on these spots for training, maintenance check flights, or other reasons. Pilots wishing to conduct extended hover work should utilize either spots 4 or 5.

f. An overhead break is available for rotary wing aircraft transiting inbound.

(1) The break point is directly over helicopter spots 1 through 3 at 1,500 feet MSL.

(2) When Runway 24 is active, aircraft shall cross the break point oriented to the southwest and execute a right break for a right downwind entry.

(3) When Runway 6 is active, aircraft shall cross the break point oriented to the northeast and execute a left break for left downwind.

(4) Downwind pattern altitude is 1,000 feet MSL.

2. Helicopter spots 4 and 5. These helo spots are used primarily for extended hover work and departing aircraft, however pattern work and arrivals are authorized. See Appendices B-1, G-1 and J-1.

a. The normal pattern is left traffic at 1,100 feet MSL outside and above LHD traffic when in use.

b. Spots 4 and 5 are unlighted and may be used with NVGs at night for hover work only.

6005. GENERAL LHD DECK OPERATIONS. LHD stands for “Landing Ship Helicopter Dock.” The LHD Deck is normally used to conduct LHD FCLP pattern work. The LHD Deck may also be utilized for rotary wing pattern work, hover work, ground taxi work, and external load operations. See Appendix S-1.

1. The LHD pattern altitudes and restrictions listed in this manual apply to all day, night and NVG operations at the LHD Deck.

2. Scheduling. The LHD Deck provides a unique capability for tenant and non-tenant units that need to conduct mandatory training prior to commencing shipboard operations. The LHD Deck can only be scheduled between the hours of 1700-1900Z++ or 2300-0700Z++ at:

https://eis.usmc.mil/sites/mcasm2/S3/airops/Lists/Airfield%20Scheduling%20Center/Pending.aspx and selecting DoD ID authentication certificate.

a. The MCAS Miramar Airfield Operations Department schedules and publishes LHD FCLP operations and can provide LHD availability information to interested units.

(1) The LHD Deck must be scheduled and approved by Airfield Operations prior to any operations commencing. Unscheduled operations are not authorized in order to minimize impact to other 3d MAW unit's flight training. Non-tenant units must contact Airfield Operations at (858)307-1282/1723 to schedule LHD Deck. Tenant units have priority over non-tenant units.

(2) Units that have scheduled use of the LHD shall take priority over units that are utilizing the facility on a space available basis.

(3) Conflicts between units over scheduling priorities shall be referred to 3d MAW Operations and MAG-16 Operations for resolution.

b. Units that plan to conduct external operations at the LHD Deck shall obtain approval from Airfield Operations no less than 24 hours prior to the evolution.

c. The LHD Deck may be used to conduct joint concurrent training by both MEU ACE helicopters and flight deck (LSE) personnel from their respective Amphibious Ready Group (ARG) ships. Prior coordination and pre-briefing must be made with both MCAS Miramar Airfield Operations and ATC to conduct such training.

3. Restrictions

a. Due to the aircraft altitude separation requirements of Class B airspace, the LHD and CV FCLP patterns shall not be flown simultaneously.

b. All operations conducted at the LHD Deck shall be conducted at pilot's own risk, since the LHD surface is not in the line of sight of the Tower.

c. Aircraft shall obtain Tower clearance for entry and exit to/from the LHD Deck traffic pattern. Tower shall establish initial sequence for traffic entering and/or exiting the pattern.

d. All aircraft operating at the LHD Deck must be in contact with the Control Tower at all times. Tower may direct aircraft to use a secondary tower frequency to reduce congestion on tower's primary UHF frequency.

e. Concurrent flight operations to side-by-side helo spots where helicopters are operating abeam each other are prohibited. This is due to the narrowness of the LHD Deck, which does not provide the same lateral separation between the port side and starboard side helicopter spots available on an actual LHD.

f. The maximum number of aircraft allowed at the LHD Deck is three.

(1) This restriction can be waived by the Airfield Operations Officer for squadron, group or MEU ACE flight operations in support of tactical

missions, exercises or deployment workups. This restriction may also be waived for joint training between MEU ACE aircraft and their respective ships' LSEs.

(2) Should the restriction be waived, prior coordination, a 24-hour notice, and pre-briefing must be conducted with the Airfield Operations Officer and the Tower Watch Supervisor (TWS) prior to commencing flight operations.

g. When the duty runway is Runway 6, a right-hand pattern to the LHD will be utilized.

h. Aircraft are prohibited from conducting any type of approach to the starboard side spots forward of spot 8 (spots 1 and 3) due to the close proximity to the CALAs, lack of lateral separation from Runway 24L/6R, and the close proximity of the windsock abeam the northwest corner of the LHD Deck.

4. Preventive Control. Preventive control is defined as an aircraft making successive operations in which repetitious, routine approval of pilot action is eliminated. This may be requested by aircrew or offered by Tower, and provides an aircrew the authorization to conduct multiple approaches within the LHD pattern without requiring tower clearance for each takeoff and landing.

a. Only 3d MAW, VMM-764, Coast Guard and Navy aircraft covered under an LOA are authorized to operate at the LHD Deck under preventive control. All other aircraft (non-3d MAW aircraft) operating at the LHD shall do so under positive control of the tower at all times.

b. Aircraft operating under preventive control are responsible for maintaining their own separation from other aircraft in the preventive control pattern.

c. Tower shall intervene as necessary to separate and sequence traffic, and for safety of flight issues that may arise.

d. Aircraft may utilize a secondary frequency (such as a squadron common frequency) so that pilots can de-conflict the landing pattern. However, all participating aircraft shall be on the same secondary frequency and shall continuously monitor Tower.

e. Operations with more than one aircraft operating under preventive control in the LHD traffic pattern shall be limited to touch-and-goes, stop-and-goes, or low approaches.

6006. FCLP PATTERN AT LHD DECK

1. The standard LHD FCLP pattern is a left-hand traffic pattern at 800 feet MSL (300 feet AGL) flown to the painted LHD helicopter deck spots on the south side (port side) of the LHD Deck (see Appendices B-1 and Q-1 thru S-1). This left-hand FCLP traffic pattern shall be utilized when the duty runway is Runway 24. The dimensions of the pattern are 5,000 feet by 3,000 feet as depicted in Appendix Q-1.

2. Aircraft may be authorized to fly a modified starboard to port FCLP approach to spot 8 only. Pilots shall notify the tower before commencing this type of approach.

a. The modified starboard to port approach shall commence with the left-hand FCLP pattern described above.

b. Upon turning to the base leg, aircrew shall maneuver to cross the stern of the LHD to set up for a modified starboard to port approach to spot 8 only.

c. Pilots shall ensure that they remain south of the primary CALA when flying this type of approach.

3. Aircraft operating at the LHD Deck shall monitor tower frequency UHF 298.925 MHz.

4. Aircrew must obtain tower approval for any deviation from the LHD FCLP pattern.

6007. EXTERNAL LIFT OPERATIONS. External lift operations may be performed on MCAS Miramar at either the LHD Deck or LZ-25 in East Miramar.

1. The traffic pattern for aircraft conducting external lift operations is a left-hand racetrack pattern with an assigned altitude of 800 feet MSL (300 feet AGL), depicted in Appendix Q-1.

2. The external load traffic pattern is the same as the LHD pattern with the following limitations, and all aircraft performing external lifts at the LHD Deck shall remain within these limits. The LHD pattern is depicted or described in Appendices J-1, K-1, and Q-1.

a. Aircraft in this pattern with external loads attached shall not overfly Highway 163, Interstate 15, Hanson Quarry, the Skeet Range or vehicles on Harris Plant Road.

b. Pilot-activated stoplights have been installed on Harris Plant Road at the point where the pattern crosses the road. The lights can be activated by three transmission clicks within five seconds on VHF 128.625 MHz. The pilot in command will visually verify the lights are operable prior to conducting external load operations. The lights are on a 15-minute timer and will shut off automatically.

c. In the event of an emergency, the pilot in command shall exercise due regard to minimizing exposure to civilian personnel in the event that avoiding the above sites is not feasible.

d. External load patterns are restricted to only one aircraft in the LHD pattern.

e. Squadrons conducting external load operations will ensure the pilot-activated stoplights on Harris Plant Road are activated during their operations.

f. Five external loads weighing 14,000, 10,050, 6,200, 3,000, and 1,400 pounds are stowed on the cement square in the asphalt area north of the LHD Deck (abeam spots 1 and 3). External load approaches shall be executed only

to the “piano keys” at the bow of the LHD Deck. Upon completion of load operation, blocks shall be returned to the cement square in the asphalt area. Pilots shall inform tower and the MAG-16 Operations Department upon completion of flight if unable to return an external block to its stowage spot or when the load is pickled at any location other than on the piano keys.

g. The LHD Deck will be closed should any external load be left on the landing surface. ARFF personnel sitting “LHD hot spot” have been directed to inform the ODO should any external load remain on the landing surface of the LHD. The LHD Deck will remain closed until the landing hazard has been removed by the unit responsible. Landings at the LHD are at the crew’s own risk; aircrew are responsible for ensuring the landing site is clear.

3. LZ-25 is located in East Miramar at Lat/Long N32 53’ 42.36” W117 00’ 25.2”, or at grid 11S MS 99346 39658 Datum WGS-84, elevation 850 feet MSL. This information is also contained in MAG-16 Special Instructions for LZ-25.

a. Minimum required weather at MCAS Miramar (NKX) to operate at LZ-25 is a ceiling of 2,600 feet MSL and 3 miles visibility or greater (which translates to a reported NKX ceiling of 1,750 feet AGL and 3 SM visibility or greater).

b. One concrete block weighing 8,500 pounds is located at LZ-25.

c. Four routes are available to LZ-25 dependent on direction of inbound aircraft requesting LZ-25 operations and aircraft inbound to MCAS Miramar for landing. Aircraft must contact Miramar Tower for arrival clearance to LZ-25. Aircraft will be routed either via a downwind entry, Yuma route outbound/inbound, or I-15 route inbound. Altitude as directed by ATC. Aircraft shall adhere to overflight of residential/congested area altitudes at all times.

d. During LZ-25 operations, all aircraft shall remain east of the North/South power lines in West Sycamore Canyon (approximate longitude W117’ 49”). Additionally, aircraft shall remain within Miramar base property line during LZ-25 operations.

e. Pattern direction shall be at the discretion of the aircrew. Only one aircraft will be established in the LZ-25 pattern at one time and the aircraft will monitor tower frequency UHF 340.2 MHz (LZ common) at all times unless directed to switch frequencies.

f. Aircraft shall remain below 1,500 feet MSL during LZ-25 operations. Aircraft shall remain east of the OCN R-120 and clear of SOCAL TRACON's Class Bravo airspace which begins at 1,800 feet MSL and above.

g. All operations will be during normal airfield operating hours at pilots’ own risk. Miramar Tower will not provide landing or departure clearances, nor will they provide Class Bravo separation or traffic advisories outside Class Bravo airspace due to limited radar coverage and radio communications.

h. Pilots should maintain extra vigilance at LZ-25 due to general aviation traffic transitioning to and from Gillespie Field through the VFR corridor.

i. Prior to arrival at LZ-25, contact Miramar Tower for arrival clearance. If inbound Miramar traffic precludes use of downwind entry, ATC will divert LZ-25 aircraft as necessary until inbound traffic is clear.

j. Prior to departing LZ-25, contact Miramar Tower for Class Bravo clearance. Remain east of the OCN R-120 in orbit (below 1,500 feet MSL) over the LZ until clearance has been issued to enter the Bravo airspace. Report number of landings/takeoffs to tower for ATC tracking. If unable to establish communication with Miramar Tower, depart the LZ to the east to the San Vicente Reservoir. Remain clear of San Diego Bravo airspace, and at San Vicente Reservoir, turn south, climb to 3,000 feet MSL and intercept the Yuma Route inbound. Contact Tower at Lake Jennings.

k. All LZ-25 operations shall be scheduled through the Miramar Air Operations Department SharePoint at https://www.mciwest.usmc.mil/inst/mcasm/S3/airops/Lists/LZ%2025%20BIRD%20BATH%20AND%20COMPASS%20ROSE%20SCHEDULING%20CENTER/calendar.aspx.

l. Aircraft with lost communication shall squawk 7600 and proceed via helicopter NORDO Procedures into Miramar. Aircraft shall remain clear of SOCAL TRACON Class Bravo airspace.

6008. MISCELLANEOUS LHD FLIGHT OPERATIONS. Other approaches (i.e. straight-in approaches to the rear of the LHD Deck, no-hover landings, daytime practice auto-rotations, etc.) may also be flown to the LHD if there are no other aircraft conducting scheduled LHD FCLPs.

a. The pattern is a standard racetrack utilizing 800 feet MSL flown in the same direction as the active runway, with the downwind leg always on the south side of the LHD Deck.

b. Helicopters may conduct hover work and/or ground taxi work at the LHD Deck with clearance from the ATCT.

6009. AUTOROTATIONS. Traffic permitting, daytime auto-rotations for training or maintenance flights are authorized to the runways and the LHD Deck only.

1. Altitudes for entry into an autorotation must be requested and approved by Tower.

2. When fixed wing traffic is operating at the airfield, altitudes for all aircraft may be adjusted as necessary to conduct simultaneous fixed wing and helicopter operations.

3. During fixed wing FCLPs to Runway 24L, auto-rotations are authorized only to Runway 24R.

4. Night time auto-rotations are authorized only to the runways.

6010. ROTARY WING NIGHT LIGHTING CONFIGURATIONS

1. The following light configurations shall be the minimum used for single rotary wing aircraft conducting night flight operations in MCAS Miramar airspace.

a. Single aircraft shall have anti-collision and position lights illuminated.

b. Single aircraft operating with the aid of Night Vision Devices may secure the lower anti-collision light and adjust position lights to facilitate operations.

2. Multiple Rotary Wing Aircraft Lighting Configurations. Multi-aircraft operations are routinely conducted by military rotary wing aircraft. During the hours of darkness, external aircraft lighting must be adjusted so that aircrew within the flight are not overwhelmed by excessive lighting. Conversely, the aircraft must be sufficiently lit to facilitate recognition for collision avoidance. In MCAS Miramar's Class B airspace, the following lighting configurations and procedures shall apply.

a. All aircraft shall have their position lights illuminated. The intensity of these lights should be set at the maximum setting that does not impact subsequent aircraft in the flight.

b. Position lights shall not be taped or similarly modified to reduce glare.

c. The last aircraft in each division or section (if only 2 aircraft are flying) shall have position lights on bright, with anti-collision lights illuminated.

d. The last aircraft in each division or section (if only 2 aircraft are flying) may secure the lower anti-collision light if the aircrew is operating with the aid of night vision devices.

e. Aircrew in the section or division, as applicable shall reduce the separation between aircraft to the minimum allowable that ensures safe operation. The intent of this procedure is to ensure that the lighting configuration and flight profile provide safe separation from other aircraft external to the flight.

6011. ROTARY WING NVG OPERATIONS. Night vision goggles (NVGs) may be worn while entering or leaving the MCAS Miramar Class Bravo airspace. Aircrew shall notify the tower, and single aircraft or formation flights shall have position and anti-collision lights on for identification.

1. Fixed wing flight operations at the airfield preclude the dimming of the airfield lighting to support NVG operations. Due to the amount of cultural lighting from both airfield and community lighting, continuous NVG operations at the airfield are not recommended.

2. Aircraft airborne in the LHD FCLP pattern may turn their anti-collision lights on and off to simulate landing on an LHD (turning them on once airborne and turning them off abeam the landing spot).

6012. HELICOPTER LOST COMMUNICATION PROCEDURES. VMC and IMC lost communication procedures for helicopters are known as LOST COMM ORANGE and are described below and in Appendix P-1.

1. VMC PROCEDURES. Squawk 7600 and circumnavigate the Bravo airspace to intercept the Interstate 15 Route inbound at or below 2,500 feet MSL. Land on Runway 24R.

2. IMC PROCEDURES. If unable to maintain VMC, squawk 7600 and intercept the NKX R-067 and cross the ten (10) NM fix at or above 4,000' MSL, and fly the final portion of the TACAN Runway 24R approach.

6013. HELICOPTER GROUND TURNS. Helicopter ground turns and APU starts may be conducted when the airfield is closed.

1. All units conducting helicopter ground turns shall ensure that a 150 pound Halon wheeled fire extinguisher is in the immediate vicinity of the aircraft and available for immediate use.

2. When the airfield is closed, the squadron shall notify ARFF dispatch at least 15 minutes prior to conducting helicopter ground turns.

6014. HELICOPTER LANDING GEAR EMERGENCIES. Helicopters arriving with landing gear emergencies such as a hung or lost nose wheel shall notify Tower. Helicopters with landing gear emergencies should anticipate to land and air taxi to helicopter spot 2.

1. ARFF will respond by establishing an emergency perimeter around helicopter spot 2. The owning squadron will be responsible for bringing the hung landing gear device (HLGD) to the scene and ARFF will place HLGD in the center of the spot.

2. Either the crew chief or a squadron representative will attempt to engage the landing gear. If this attempt fails, then the crew chief or designated squadron representative shall assist with guiding the aircraft to land on the HLGD.

CHAPTER 7

TILTROTOR OPERATING PROCEDURES AND COURSE RULES

7000. CONCEPT AND INTENT. Because a tiltrotor aircraft can operate in fixed wing and helicopter modes of flight, the intent of these prescribed tiltrotor flight procedures is to use existing fixed and rotary wing procedures to the maximum extent commensurate with safety.

7001. EXPECTED AIRSPEED. To increase predictability for pilots and controllers, the term "expected airspeed" is used in this chapter to indicate standard tiltrotor airspeeds for the given flight regime or maneuver. This does not preclude aircrew requests or controller directions that do not conform to this expected airspeed.

7002. TILTROTOR ARRIVAL/DEPARTURE PROCEDURES

1. VFR PROCEDURES

a. Class B VFR Departures. Request a "Class B clearance" providing destination and requested altitude from Clearance Delivery. VFR departures may be executed from the helicopter spots. The Class B VFR departure is the preferred MV-22 departure method.

(1) Westbound: Used for destinations SW to NW of Miramar, overwater FCFs, and coastline transits (request Class B departure to Camp Pendleton via the coast). Expect 290 heading, climb to 2,000 feet MSL. Expect switch to SOCAL TRACON once established. If desired, request coastline transit with SOCAL, expected altitude 4,500 feet MSL northbound.

(2) Northbound: Used for all destinations N to SE of Miramar (e.g. Camp Pendleton). Expect 340 heading, climb to 3,000 feet MSL. Expect switch to SOCAL TRACON once established.

b. VFR arrivals

(1) From north, offshore: Expected southbound transit altitude 5,500 feet MSL; prior to passing McClellan-Palomar Airport (heading south), contact SOCAL to request vectors for overhead or visual straight-in approach to NKX. Expected airspeed is 180-250 knots.

Note: If coastal helicopter arrivals are used, aircraft must descend to 1,700 feet MSL or below to remain clear of Class B airspace until in contact with Tower at the appropriate entry checkpoint.

(2) From all other directions, contact SOCAL for sequencing for visual approach or the overhead (if not using the helicopter routes).

c. Helicopter Routes. Tiltrotors arriving or departing MCAS Miramar VFR may use the published rotary wing procedures; airspeed shall not exceed 150 knots. Routes are detailed in Chapter 6, paragraph 6001 and shown graphically in Appendices L through O of this Manual. Aircraft using the helicopter routes shall not overtake a slower aircraft on their route. MV-22 aircraft flying the helicopter routes should be vigilant for low, slow-flying civil aircraft flying underneath the Miramar Class B airspace and in the San Diego VFR corridors, as these aircraft are unaccustomed to seeing aircraft flying at high speeds and low altitude.

d. Fixed Wing Arrivals. Tiltrotors may fly the fixed wing arrival procedures (visual approach/overhead) in compliance with Chapter 5, paragraphs 5002 and 5003. Expected airspeed is 180-250 knots, with deceleration commencing at the 180 position to either 60-100 knots (roll-on landing) or 0 knots (hover landing). For visual straight-in approaches, the expected deceleration and conversion point is 3 NM from the approach end of the duty runway.

e. Helo Spot Transition. Pilots or controllers may request tiltrotor aircraft transition from fixed wing arrival (visual/ overhead) to the helicopter spot pattern. From the visual/overhead to RWY 24R, this shall be accomplished with a right sidestep prior to the runway approach end to overfly Miramar Road, joining the helo spot pattern at 1,000 feet MSL and 150 knots or less. From the visual/overhead to RWY 6L, this shall be accomplished by a left sidestep to join the helo spot pattern at 1,000 feet MSL and 150 knots or less.

f. Tiltrotors may use the Delta Pattern (VFR only) in accordance with Chapter 5, paragraph 5004.2. Expected airspeed is 150-200 knots.

g. Touch-and-Go Patterns. Tiltrotors may use the fixed wing touch-and-go pattern in compliance with Chapter 5, paragraph 5004.3. Pilots should advise controllers of the type of landing requested (roll-on = touch-and-go, or hover = stop-and-go). Expected airspeeds: 180-250 knots in the pattern, with deceleration commencing at the 180 position (deceleration to 60-100 knots for roll-on, 0 knots for hover). Tiltrotors may also conduct touch-and-go patterns in the helicopter spot pattern in compliance with Chapter 6, paragraph 6004.

2. IFR PROCEDURES

a. Stereo routes. Tiltrotors may use the helicopter (“Hotel”), fixed wing (“Alpha” and “Tango”), and MV-22 (“Mike”) IFR stereo routes per reference (p). Departure to the GCA Box shall be a right turn to 340, radar vectors, climb and maintain 3,000 feet MSL.

b. Sections conducting IFR Departures will normally request nonstandard formation because aircraft separation may exceed 1.0 NM.

c. Instrument approaches. MV-22 aircraft may fly all published instrument approaches; expected airspeed is 170-240 knots until approaching the Final Approach Fix (TACAN approaches) or turning/intercepting final approach course (GCA pattern or ILS/LOC); 120 knots thereafter until short final. Weather conditions may cause pilots to execute an approach using Category A approach minima, in which case expected airspeeds will be 90 knots or less on the approach. Expected landings are either roll-on (60-100 knots) or hover (0 knots); pilots should advise controllers of requested landing type. If conditions permit, pilots or controllers may request that aircraft transition to the helicopter spot pattern or land on Taxiway Sierra north of Runway 24R/6L.

3. SVFR PROCEDURES: Tiltrotors may execute SVFR procedures in compliance with Chapter 6, paragraph 6001.3. Expected airspeed is 150 knots or less.

4. NOISE ABATEMENT. Tiltrotor aircraft shall comply with the rotary or fixed wing noise abatement rules applicable to the arrival/departure procedure they employ.

7003. HELICOPTER SPOTS. Tiltrotors may use the helicopter spots in compliance with Chapter 6, paragraph 6004.

7004. LHD DECK OPERATIONS

1. HELICOPTER MODE OPERATIONS. Tiltrotors may use the LHD deck and LHD deck FCLP pattern in compliance with Chapter 6, paragraphs 6005, 6006, and 6008.

2. AIRPLANE MODE LHD DECK FCLP OPERATIONS: Pilots shall request Airplane Mode pattern at the LHD deck; pattern is flown at or below 1,100 feet MSL, the downwind is aligned underneath the fixed wing RWY 24L pattern (with fixed wing aircraft at 1,600 feet on their downwind), and the upwind and final portions are aligned with the helicopter LHD pattern. Airplane Mode FCLPs at the LHD deck are not authorized with aircraft other than MV-22s in the LHD pattern. Airplane mode LHD FCLPs are not compatible with fixed wing FCLPs. All aircraft shall remain north of Highway 52 due to potential co-altitude light civil aircraft in the Montgomery Field pattern.

7005. EXTERNAL LOAD OPERATIONS. Tiltrotors may conduct external load operations in compliance with Chapter 6, paragraph 6007.

7006. TILTROTOR NIGHT LIGHTING. Tiltrotors shall comply with rotary wing night lighting procedures in Chapter 6, paragraph 6010.

7007. TILTROTOR NVG OPERATIONS. Tiltrotors shall comply with rotary wing NVG procedures in Chapter 6, paragraph 6011.

7008. TILTROTOR LOST COMMUNICATION PROCEDURES. Tiltrotors may execute either fixed wing (Chapter 5, paragraph 5009 expected airspeed 180-250 knots) or rotary wing (Chapter 6, paragraph 6012 expected airspeed 150 knots or less) lost communication procedures. Certain Tiltrotor aircraft emergencies may restrict flight to airplane mode or helicopter flight regimes.

7009. LANDING GEAR EMERGENCIES. Tiltrotors experiencing landing gear emergencies shall comply with the rotary wing procedures in Chapter 6, paragraph 6014.

7010. TILTROTOR CLOSED FIELD OPERATIONS. Tiltrotors from 3d MAW units and VMM-764 may execute closed field operations in compliance with Chapter 9 of this Manual.

CHAPTER 8

NOISE ABATEMENT PROCEDURES

8000. NOISE ABATEMENT

1. General

a. Aircraft noise is a significant concern at MCAS Miramar because of the density of populated areas in close proximity to the airfield. Neighboring communities have expanded toward the airfield and under the flight paths. This inevitable growth process can lead to reduction or curtailment of flight operations if airfield operators are insensitive to surrounding communities. Noise impacts must be reduced to the maximum extent possible while successfully executing operational and training missions, and maintaining necessary operational flexibility.

b. In the interest of both protecting this multi-billion dollar public investment and also ensuring the health, safety, and welfare of the local citizens, strict compliance with noise abatement and ATC procedures is mandatory to reduce any negative impact on our neighborhoods. Flight/course rules violations will be processed per reference (h) and applicable FARs.

c. All transient aircrew filing a DD-175 Flight Plan shall complete and submit a MCAS Miramar Mandatory Noise Abatement Procedure Form along with their DD-175. This form is available in the Flight Planning Room located in Airfield Operations, Building 9211. Appendix U is an example of this form.

8001. FIXED WING AIRCRAFT DEPARTURES AND ARRIVALS

1. Runway 24/FCLP Pattern. Fixed wing departure and arrival procedures are designed to minimize the noise impact to the local community. These are defined in Chapter 5.

2. Runway 6. Close proximity of commercial and residential areas to the north, east, and west of the airfield necessitates that noise abatement considerations be implemented. Accordingly, multiple approaches to Rwy 6 are not authorized, unless deemed operationally necessary. This restriction includes instrument approaches.

3. Maximum performance climbs and/or unrestricted climbs are not authorized without prior approval from the Airfield Operations Officer IAW local noise abatement procedures.

8002. HELICOPTER DEPARTURES AND ARRIVALS

1. Refer to Chapter 6 for normal operations noise abatement procedures.

2. All helicopter VFR and Special VFR routes shall be flown as published unless modified by ATC. If weather conditions preclude flight at published altitudes, helicopters shall fly under IFR procedures or by Special VFR procedures where permitted.

3. In compliance with reference (m), helicopter VFR arrivals between midnight and 0700 local shall fly inbound to MCAS Miramar at or above 4,000 feet MSL until beginning descent for landing, or navigate to avoid directly over flying communities along the coastline and along Interstate 15.

4. In compliance with reference (m), helicopters are prohibited from conducting repetitive instrument approaches to MCAS Miramar between 2200 local (2300 daylight savings time) and 0700. Helicopter instrument approaches to full stop landings, to enter the VFR/SVFR tower patterns, or to depart to another destination are authorized.

5. Helicopters shall transit along the coast by at least one mile laterally off the coast in accordance with reference (q). Inbound traffic to MCAS Miramar shall remain at least one mile off the coast prior to making the turn onto either the Beach or Fairways Routes toward MCAS Miramar. Outbound departures shall proceed out to at least one mile offshore prior to turning north or southbound.

8003. JET AIRCRAFT HIGH POWER TURN-UPS

1. High power for jet aircraft is defined as any power setting of 80% and above. The preferred location for conducting maintenance high power turn-ups for jet aircraft is the “hush” house.

a. Jet aircraft high power turn-ups in the hush house are not restricted by airfield operating hours.

b. Scheduling hush houses for jet aircraft high power turn-ups is provided by the MALS-11 Test Cell section; contact the MALS-11 Test Cell Supervisor.

c. If a hush house is not available, high power turn-ups may be conducted on a runway and at a time assigned by Airfield Operations, but are not authorized between the hours of 2200 and 0730 due to the noise impact on the surrounding communities. Exception to these restricted hours due to operational necessity shall be coordinated and approved through Airfield Operations.

d. High power turn-ups are not authorized on squadron flight lines.

e. Jet aircraft low power turn-ups, as defined in Chapter 5, are authorized in designated areas on squadron flight lines. Low power turn-ups are not restricted by airfield operating hours.

8004. AIRCRAFT NOISE AND DISTURBANCE COMPLAINTS

1. All complaints concerning low flying aircraft or noise complaints shall be referred to the Airfield ODO. The ODO will enter the noise complaint into the database. An example of a complaint form is shown in Appendix V-1.

2. The ODO, after taking the complaint, will contact ATC and flight planning to identify the aircraft most likely to have generated the complaint and annotate this information on the complaint form. The Assistant Airfield Operations Officer then reviews the noise complaint. Additionally, the Operations Officer for the respective tenant unit (i.e. MAG-11, MAG-16, VMR Det) will be notified when necessary. If the aircraft is transient, the aircraft’s parent unit will be notified if necessary.

8005. SUPERSONIC FLIGHTS

1. Complaints of sonic boom annoyance and damage may arise in the San Diego area. Instructions concerning supersonic flights are contained in reference (h).

2. The Airfield ODO will complete a noise complaint form for each telephone complaint received concerning sonic boom/damage. The ODO shall then investigate the facts of the case for the Airfield Operations Officer. The Airfield ODO shall be informed promptly of all complaints received during normal working hours, or at the beginning of the next workday if the complaints are received after the normal workday.

8006. PRACTICE APPROACHES. Only MCAS Miramar tenant unit aircraft are authorized to conduct practice approaches. Tenant units are encouraged to conduct multiple practice PAR, ASR, and monitored-ILS approaches to increase controller qualifications and proficiency.

CHAPTER 9

CLOSED FIELD OPERATIONS

9000. GENERAL INFORMATION

1. The purpose of this chapter is to establish safety regulations and operating instructions governing closed field operations (CFOs) conducted day or night at MCAS Miramar. The chapter also clarifies the specific tasking for aircrews and MCAS Miramar personnel in order to conduct CFOs safely and efficiently.

2. Violations of these provisions place unnecessary safety risk on all involved and may subject an offender to disciplinary action per the UCMJ and/or federal law.

3. Closed field operations will be the exception vice the standard rule in conducting flight operations.

4. CFO requests are due no later than 24 hours prior for weekday operations and no later than 1200 on Friday for weekend operations. Late CFO requests must be approved by the 3d MAW Operations Officer, the MEF Operations Officer for MEU aircraft, or the Station Operations Officer for units outside of 3d MAW and MEF.

5. The aircraft custodian and parent command assume the inherent risks associated with CFOs.

9001. CLOSED FIELD DEFINITIONS

1. Closed Field Hours are those periods during which the airfield is declared closed by the Airfield Operations Department.

2. A Closed Field Operation is defined as a single rotary wing, fixed wing or tiltrotor aircraft event during closed field hours. The event may be a single aircraft, or a section of two aircraft under a single call sign.

a. Events are defined as those operations necessary to support operational missions, training, frags, or maintenance flights that cannot be accomplished during regular airfield hours. (Examples are aircraft returning to or departing from MCAS Miramar or helicopter hover checks).

b. Section leaders shall ensure adequate flight separation is maintained through the departure and arrival. Aircraft separation should be a minimum of 1,000 feet laterally.

9002. SAFETY

1. Safety of flight shall always be the first priority during CFOs. Pilots shall exercise good judgment and prudence if it is necessary to deviate from the procedures described in this Manual.

2. All vehicles operating in the movement area during closed field hours shall broadcast their intentions in the blind on 148.3125 MHz when crossing runways as prescribed in the Air Station vehicle operators' course. See Chapter 16 for more information about ground vehicle operations on the Airfield.

3. Paramount to the safe and efficient execution of any CFO is the notification by aircrew or squadron ODO to the Station ODO at least 15 minutes prior to planned arrival/departure at 858-307-9101.

4. Aircraft shall contact SOCAL TRACON before taxi onto a runway or a helicopter spot with intentions. IFR release or VFR clearance into Class B airspace is required prior to departure.

5. Any agency intending to perform work within the aircraft movement area during CFOs shall first contact and advise the Station ODO of the nature and duration of the work to be done.

6. Aircrew vigilance is also a critical element to safety of flight during closed field hours, as there are numerous VHF-only equipped civilian aircraft operating in close proximity to MCAS Miramar at all hours.

9003. MINIMUM WEATHER CRITERIA FOR CFOs. Weather minimums for CFOs shall be not less than the minimum visual meteorological conditions (VMC) required for flight under visual flight rules (VFR). While aircraft may file for departure or arrival under instrument flight rules (IFR), the airfield must be VMC (ceiling 1,000 feet AGL and 3 miles visibility minimum) in order to conduct CFOs.

9004. RESTRICTIONS

1. Pilots are reminded that during closed field hours, Miramar's airspace remains active as Class B airspace and is owned and controlled by SOCAL TRACON. In order to mitigate risk, SOCAL TRACON will clear only one call-sign at a time into or out of Miramar's Class B airspace.

2. Aircraft are authorized to conduct only one takeoff and one landing at MCAS Miramar for each flight plan filed or clearance requested.

a. CFOs are limited to four per hour and eight per day, and must be completed within +/-15 minutes of the time period approved by Airfield Operations.

b. Training and multiple takeoffs/landings within MCAS Miramar's Class B airspace during closed field hours are prohibited, hover checks excepted.

3. Aircraft shall not commence any approach when the weather is defined by METOC as less than VMC (1,000 foot ceiling/3 miles visibility) at MCAS Miramar. METOC is the official agency for making this determination.

4. All aircrew conducting CFOs at MCAS Miramar shall comply with appropriate procedures defined in Appendix Z for IFR and VFR flight plans. A phone roster with contact information is provided in appendix Y-1.

a. Aircraft on an IFR flight plan shall fly the published missed approach if a wave-off is required.

b. Fixed wing aircraft on a VFR flight plan should anticipate a turn to 340 and climb to 3,000 feet if a wave-off is required.

5. During closed field hours, aircrew shall be responsible for providing taxi separation from all vehicles and aircraft operating on the airfield.

All movement on the airfield shall be preceded by calls in the blind on Tower (VHF 135.2 MHz).

6. All rotary wing, tiltrotor, and single aircraft fixed wing takeoffs and landings (except post-hover check departures from the spots) will be conducted from Runway 24R/6L, depending on the prevailing winds and aircrew determination. If Runway 24R/6L is closed, Runway 24L/6R will be used. Rotary wing and tiltrotor departures from helo spots 1 thru 5 must have prior coordination and approval from the Airfield Operations Officer, and the unit must call the ODO 15 minutes prior to departure to allow time for ARFF re-positioning

7. CFO formation flights are restricted to section departures and arrivals only. While operations with two aircraft are authorized, pilots are advised that ARFF is manned to support only a single aircraft mishap during CFOs.

a. San Diego Class B airspace remains active while MCAS Miramar is closed. Aircrews must ensure their flight complies with “Standard Formation” flight, according to FAA policy, maintaining at least 1,000 feet of aircraft separation for takeoffs and landings during CFOs.

(1) The Pilot/Controller Glossary defines standard formation as “one in which a proximity of no more than 1 mile laterally or longitudinally and within 100 feet vertically from the flight leader is maintained by each wingman.”

(2) Miramar Station policy of 1,000 feet of aircraft separation for section takeoffs and landings is intended to ensure that proper emergency response support is provided, and to minimize the likelihood of a multiple aircraft incidents during CFOs.

b. Fixed wing CFOs are limited to single or section VMC operations and straight-in arrivals.

c. The use of Runway 24L/6R is authorized for F/A-18 section operations, and it may be utilized to ensure safe separation during section departures and arrivals.

8. It is incumbent upon the aircrew to notify SOCAL TRACON of the need to split up a flight to allow the appropriate separation for compliance with any single aircraft requirement. Aircrew desiring radar flight following and/or advisories outside of Miramar Class Bravo airspace may do so by contacting SOCAL TRACON.

9. Passengers may be carried aboard aircraft conducting CFOs.

10. All aircraft shall conduct straight-in arrivals. The overhead break is not authorized during CFOs.

11. CFOs with live ordnance are not authorized; inert ordnance may be carried.

9005. AUTHORIZATION TO CONDUCT CLOSED FIELD OPERATIONS

1. Only MCAS Miramar tenant units, VMFT-401, and the Blue Angels are authorized to conduct CFOs. Non-tenant units, to include DFTs, are not authorized to conduct CFOs.

2. CFOs require 3d MAW Assistant Chief of Staff G-3 Officer approval for 3d MAW aircraft plus Airfield Operations Officer approval. Airfield Operations Officer approval is required for all other tenant units.

3. CFOs are not intended for TRANSPAC, MEU fly-on, MEU fly-off, and other deployments.

4. Aircrew shall obtain a complete weather brief inclusive of current and forecast weather for MCAS Miramar for the proposed departure and recovery times, and as further required by individual aircraft/squadron SOPs.

9006. Closed Field Prior Permission Required

1. CFO prior permission required (PPR) shall be received prior to all CFOs in order to facilitate airfield manning requirements per appropriate regulations.

a. Aircraft will typically be given a one-hour CFO window in which to depart or arrive.

b. Aircraft in functional check flight (FCF) status may be granted a larger window in which to depart and arrive (i.e. four hours) on a not to interfere basis with higher priority CFOs.

c. If unable to depart or arrive within the requested window, changes require the MCAS Miramar Operations Officer’s approval.

2. All CFO PPRs will be approved by the Airfield Operations Officer or higher within the Station chain of command and assigned by VAL. If determined that the Airfield Operations Department does not meet the minimum manning levels as defined by regulations, the Airfield Operations Officer will consider opening the airfield with the proper manning for scheduled flight operations.

3. In the rare case of CFO requests submitted outside normal working hours, either the squadron ODO or the aircrew shall contact Miramar METOC to request a CFO Number. After hours CFO Numbers require METOC to contact the Airfield Operations Officer or higher within the Station chain of command for approval.

4. Only the Airfield Operations Officer or higher authority within the Air Station chain of command may approve or deny a CFO request.

5. Any CFO scheduling conflicts identified by the Airfield Operations Officer shall be addressed with 3d MAW Operations Officer, who will be the final authority on prioritizing and de-conflicting scheduling issues for all 3d MAW CFO requests.

9007. ENGINE TURN-UPS AND RUN-UPS

1. While engine maintenance turn-ups and run-ups do not require CFO Numbers, units conducting these operations when the airfield is closed shall:

a. Ensure that a 150-pound Halon or Halotron wheeled fire extinguisher is in the vicinity of the aircraft and available for immediate use.

b. Notify ARFF dispatch at least 15 minutes prior to conducting the engine maintenance turn-up.

2. Fixed wing units are authorized to conduct maintenance turn-ups regardless of operating hours, with the exception of high power turns. See Chapter 5 for Engine Run-up/Turn-up Procedures and Chapter 8 for Noise Abatement Procedures.

9008. HELICOPTER AND TILTROTOR GROUND TURNS AND HOVER CHECKS

1. Helicopter and Tiltrotor ground turns and APU starts may be conducted when the airfield is closed and do not require a CFO Number. See Chapter 6 of this Manual for more details.

2. Hover checks are authorized during CFO periods and require a CFO Number.

a. Aircrew shall contact ARFF at least 15 minutes prior to the hover check, regardless of intent to transition to forward flight.

b. Aircrew shall make taxi, commencement, and completion calls in the blind on Tower frequency (VHF 135.2 MHz).

c. The primary location for rotary wing FCF hover checks is helicopter spot 3, with helicopter spot 2 as the alternate location.

d. Aircraft must advise SOCAL TRACON prior to commencing hover checks and obtain SOCAL TRACON clearance into Class B airspace prior to proceeding outbound from the spots after hover check completion.

e. Hover checks may be conducted while aircraft are arriving or departing from the runway(s), but must cease if ARFF vehicles are required to respond to any emergency situation. Hover checks may resume once the emergency is over and an ARFF vehicle are repositioned for response.

f. See Appendix Z for CFO kneeboard card checklists.

9009. ROTARY WING, TILTROTOR AND T-34 COURSE RULES. Rotary wing, Tiltrotor and tenant T-34 aircraft may utilize MCAS Miramar course rules for arrival and/or departure when they are able to operate VFR throughout the entire route of flight. Aircraft must be in contact with SOCAL TRACON prior to conducting operations inside Class B airspace, as well as taxiing onto runways or helicopter spots. See Appendix Z for IFR/VFR CFO Checklists, and Appendix X for T-34 departure and arrival procedures.

1. Aircrew shall not deviate from the approved course rules procedures when conducting CFOs.

2. Special VFR operations are not authorized and shall not be conducted within MCAS Miramar airspace during CFOs.

9010. CLOSED FIELD INSTRUMENT OPERATIONS

1. A visual approach shall be the primary instrument approach when conducting closed field operations. See Appendix Z for the IFR CFO checklist.

2. Expect an instrument approach when the weather is below a 3,100 foot ceiling and 3 miles visibility (minimum ceiling/visibility required due to Minimum Vectoring Altitude of 2,600 feet for the visual approach).

3. Arrival minima during CFOs for approved instrument approaches (ILS, TACAN and RNAV/GPS) will be limited to a 1,000 foot ceiling and 3 miles visibility (VMC) regardless of the published minima. If weather is forecast below VMC for the intended arrival time, aircrew shall plan to utilize a divert field or remain at their present location until the weather improves to VMC or the field is open.

4. PAR monitoring of ILS, TACAN and RNAV/GPS approaches is not available during CFOs.

9011. CLOSED FIELD AIRCRAFT EMERGENCIES

1. During closed field hours, the Airfield Operations Department is at reduced manning and is unable to provide the level of support that is available during normal field hours.

2. Aircraft experiencing airborne emergencies during CFOs should divert to an airfield that is open and manned to provide proper support.

3. Any situation that results in an emergency response by ARFF vehicles shall cause an immediate cessation of all CFOs at the Air Station. These situations include but are not limited to an aircraft emergency, aircraft arrestment, or structural fire within the airfield boundaries.

4. Only the Airfield Operations Officer or higher within the Station chain of command may authorize the continuation of CFOs following their cessation.

9012. FUNCTIONAL AREA RESPONSIBILITIES/ACTIONS

1. Airfield Operations sections shall comply with the procedures identified below.

a. Airfield Operations Officer

(1) Function as the overall authority responsible for the conduct of CFOs, including maintaining utilization data and assessing the value of CFOs.

(2) Ensure dissemination of all applicable instructions and guidance for conducting CFOs.

(3) Function as the liaison between Airfield Operations sections and 3d MAW, MCAS Miramar, and other aircrew for de-confliction and issue resolution.

(4) Coordinate with 3d MAW to establish unique CFO procedures as required during planned runway maintenance closures.

b. METOC

(1) Coordinate closely with the Station ODO throughout CFOs to ensure all requisite information is passed.

(2) Maintain a logbook to record all airfield maintenance and contractor activities that occur within the movement areas during periods when the airfield is closed.

c. Aircraft Rescue & Firefighting (ARFF)

(1) Provide an immediate response alert at the ready IAW applicable NATOPS directives upon notification from the Station ODO of a proposed arrival/departure time for a CFO. The immediate response alert must be in position no later than 30 minutes prior to the scheduled CFO.

(2) As directed by the Station ODO, conduct a runway surface check to visually observe and identify FOD or personnel that may be on or around runways prior to CFOs. ARFF shall report all clear or potentially hazardous situations, as appropriate, to the Station ODO. A visual check of both runways is mandatory for all F/A-18 CFOs.

(3) Observe all airborne operations, to include hover checks, which occur while the field is closed. At a minimum, this observation will be provided by the ARFF Dispatcher located in the ARFF Tower and the personnel assigned to the immediate response alert.

(4) Observe that all takeoffs and landings occur from runway 24R/6L and 24L/6R, or the spots for post-hover check departures.

(5) Provide a report to the Airfield Operations Officer for all incidents determined to be in violation of CFOs as defined by this Order.

(6) Notify the Station ODO once the final aircraft is safely parked on its line, has safely departed, or is more than 30 minutes past its forecast arrival time, as applicable.

(7) Maintain the immediate response alert until notified by the Station ODO to stand down.

d. Air Traffic Control Maintenance Division (ATCMD)

(1) Contact the Station ODO and advise the nature and duration of any work on NAALS equipment adjacent to the runways or taxiway areas when CFOs are taking place. Report to the Station ODO when the work is complete and system operational status.

(2) Ensure that all ATCMD personnel remain clear of the active runways once CFOs have been initiated until notified by the Station ODO to stand down.

(3) Provide continuous monitoring of ILS and TACAN monitor alarms during periods when the airfield is closed and CFOs are anticipated. Notify the Station ODO if the ILS or TACAN is found to be out of service or otherwise unavailable for use. If the ODO is not posted, contact SOCAL TRACON to advise.

(4) Be prepared to dispatch one individual at night to operate the airfield lighting (approach, runway and taxiway) until notified by the Station ODO to stand down. This action will be required if the Pilot Controlled Lighting System is reported inoperative.

(5) Activate the airport beacon at night for the period 30 minutes prior to CFOs until the last aircraft has safely departed or is safe on deck. Once notified by the Station ODO to stand down, secure the beacon and return the anti-collision light to service.

e. Visiting Aircraft Line (VAL)

(1) Contact the Station ODO and advise of the nature and duration of any work/operation on the runway or taxiway areas when the field is closed. Report to the ODO when the work/ operation is complete.

(2) Support VMFT-401 and Blue Angel CFOs as required in conjunction with their prior permission required (PPR) requests.

2. Station ODO. The Station ODO shall be posted a minimum of 60 minutes prior to projected arrival or departure. This ODO shall post at the Base Operations Building at the ODO station. During CFOs, the Station ODO shall:

a. Function as the communication and administrative point of contact for CFOs before or after normal airfield working hours.

b. Coordinate with all applicable Air Station elements tasked in this Order to ensure that all requisite elements are in place to affect safe departure or arrival for the aircraft conducting CFOs.

c. Notify the agencies listed below in the order of priority shown upon aircrew notification of an aircraft’s intended arrival or departure:

(1) Aircraft Rescue & Firefighting (ARFF)

(2) Recovery

(3) Air Traffic Control Maintenance Division (ATCMD)

(4) Provost Marshall’s Office (PMO)

(5) Fuels Division

d. Monitor all Unicom calls on tower frequency (VHF 135.2 MHz) made by aircraft conducting CFOs.

e. Maintain a log of all CFO activities in the movement area. This log shall include the date, time, type of operation (launch, recovery, hover check), aircraft type and number, call sign, CFO Number, time that supporting elements were advised to stand down, and other information as directed by the Airfield Operations Officer.

f. Provide an advisory call to SOCAL TRACON and the squadron ODO if an unsafe situation exists.

g. Contact the squadron ODO if an aircraft is more than 30 minutes past the scheduled arrival time. Determine whether to expect the aircraft to cancel the CFO or if the aircraft is presumed missing.

h. Contact all agencies listed above in paragraph 9012.2.c and advise them to stand down from CFOs once ARFF has reported that the last aircraft

has either safely departed with no need to recover (defined as no less than 15 minutes after takeoff) or arrived safely at its parking spot.

i. Advise SOCAL TRACON if the ILS or TACAN is found to be out of service or otherwise unavailable for use.

j. Immediately contact SOCAL TRACON in the event of a fouled runway or ARFF emergency response to advise that Miramar can no longer accept aircraft arrivals.

(1) Per the ARFF NATOPS, ARFF personnel shall be posted to observe all aircraft operations aboard the Air Station. Due to limited manning after hours, this requirement cannot be met if ARFF responds to a precautionary or actual aircraft emergency during CFOs.

(2) Only the Airfield Operations Officer or higher may authorize commencement of CFOs after an ARFF emergency response.

k. Contact the Airfield Operations Officer and/or Assistant Airfield Operations Officer for further guidance should development of any emergency situation occur, or it has been determined that an aircraft is overdue or missing.

l. Ensure all vehicles and vehicle operators entering the airfield perimeter fence line after hours possess a valid airfield driver’s license, a radio for two-way communication, and an orange-white flag for vehicle identification.

m. Ensure all vehicle operators exiting the airfield conduct a checkout, to include returning any borrowed Airfield Operations equipment.

n. Provide a report to the Airfield Operations Officer on any incident determined to be in violation of CFOs as defined by this Order.

3. Pilots and Aircrew shall comply with provisions of the above procedures and those outlined in Appendix Z for conducting CFOs.

CHAPTER 10

INSTRUMENT PROCEDURES

10000. GENERAL INFORMATION. This chapter sets forth basic instrument flight procedures for aircraft operating at MCAS Miramar and is in addition to applicable FAA regulations and DOD FLIP publications.

10001. AIR TRAFFIC CONTROL FACILITY (ATCF)

1. The ATCF is located in the Airfield Operations Building (9211), and provides service during airfield operating hours. Aircrews are encouraged to visit the ATCF to become more familiar with equipment and control procedures. The ATCF should be contacted to coordinate tours of the Air Traffic Control spaces.

2. Southern California (SOCAL) TRACON is located on Kearny Villa Road and is operated 24 hours per day. Aircrews wishing to visit TRACON spaces must contact the Federal Aviation Administration (FAA), per reference (b) during normal working hours, 0800-1600 Monday through Friday. SOCAL TRACON's San Diego area of control is:

a. A 30 nautical mile radius from northwest of MCAS Miramar, clockwise to the Mexican border (not 30 miles to the south).

b. Warning Area W-291 to the west 30nm radius.

c. A vertical limit up to 17,000 feet MSL. The San Diego Class B airspace vertical limit is 10,000 feet MSL.

10002. INSTRUMENT DEPARTURE PROCEDURES

1. All MCAS Miramar IFR departures will squawk a discrete Mode 3 code as assigned by Clearance Delivery. In order to reduce transponder clutter on TRACON radar indicators, local VFR flights in the traffic pattern shall keep transponders on standby.

a. Local IFR departures will be instructed to change their transponder to an appropriate setting when radar service is terminated.

2. To facilitate radar identification, report airborne to SOCAL TRACON within one mile of the departure runway.

3. IFR clearances will be issued on Clearance Delivery.

4. All fixed wing aircraft shall depart MCAS Miramar on an approved Departure Procedure (DP) or radar vectors to ensure positive control in Class Bravo airspace.

a. Aircraft unable to comply with the climb rate of any departure procedure (LAKEE, REDIN, SEAWOLF, TINNY, or VITKO), or who do not have the departure procedure publication in the aircraft shall advise ATC. These aircraft can expect radar vectors on departure.

b. The only exceptions to these departure procedures are military T-34 and military Aero Club model airplanes that will remain clear of Class Bravo airspace once outside Miramar airspace.

5. Section takeoffs are authorized in accordance with reference (h).

a. Flight leader separation takeoffs are authorized for tenant squadrons and are predicated upon the flight being able to maintain formation integrity.

b. Transient aircraft are not authorized to conduct flight leader separation takeoffs and other non-standard instrument departures unless prior coordination and briefings have been conducted with representatives from the MCAS Miramar ATC Division.

6. Use of both runways for multi-plane takeoffs is strongly encouraged. A maximum of four aircraft per runway is authorized for multi-plane takeoffs. Maximum trail between individual aircraft is 10 seconds. Only the flight leader shall squawk the assigned beacon code. Prior to departure, if an individual aircraft cannot depart within 10 seconds of the preceding aircraft, notify the tower and request either a “non-standard” or “radar trail departure.”

7. Radar trail departures may be authorized. They will only be authorized for flights of four or less aircraft equipped with appropriate air-to-air radar when weather is reported at or above single aircraft takeoff minimums, provided the following criteria are met:

a. Each aircraft must have operating air-to-air radar.

b. Each aircraft must maintain the same airspeed until visual contact is made.

c. Each aircraft shall fly the DP/SID as published, or lead’s ground track, and comply with local noise abatement procedures.

d. Standard formation join-up (defined as each wingman within 1 mile laterally or longitudinally and within 100 feet vertically from the flight lead) shall be accomplished within 15NM of MCAS Miramar below 6,000 feet. Aircrew are advised that these restrictions may be modified by the FAA (SOCAL TRACON).

e. Tower must be informed that the flight will be in “non-standard formation.”

f. ATC must authorize “non-standard formations.”

g. Pilots requesting radar trail departures shall notify tower of their intentions prior to departure.

10003. INSTRUMENT APPROACH PROCEDURES

1. Practice approaches by civil aircraft are not authorized, with the exception of Mercy Air helicopters for transitions to local hospitals.

2. Aircraft approaching MCAS Miramar shall monitor ATIS prior to contacting SOCAL TRACON. After establishing initial contact, the following information shall be provided:

a. Call sign.

b. Number and type of aircraft.

c. Position or estimated time of arrival at approach fix.
d. Altitude.

e. Type approach desired and if hooded.

f. Intention after approach (full stop, touch and go, low approach to IFR departure, downwind, etc.).

g. ATIS information received.

3. Prior to commencing final approach, the pilot shall be assigned the frequency to be used by the final controller.

4. All TACAN, RNAV, and ILS approaches at MCAS Miramar are provided with radar monitoring. Controllers providing this service will provide traffic advisories and issue the appropriate clearances for the completion of the approach. To avoid conflicts with aircraft on overhead/straight-in approaches, aircraft executing TACAN approaches in VMC should fly published altitudes/descent gradients.

5. The pilot shall advise the controller in the event of a missed approach. Weather and traffic permitting, successive approaches will be provided. The pilot will normally remain on final control frequency throughout the missed approach and any succeeding approach.

6. In compliance with reference (m), helicopters are prohibited from conducting repetitive instrument approaches to MCAS Miramar between 2200 local (2300 daylight savings time) and 0700. Helicopter instrument approaches to full stop landings, to enter the VFR/SVFR Tower patterns, or to depart to another destination are authorized.

7. Preventive maintenance on the ILS is scheduled every Thursday, 0800 to 1200 local time, provided the airfield is in VFR conditions. During this scheduled maintenance time, ILS approaches may not be available; however, PAR, TACAN, RNAV, and ASR approaches are still available.

10004. GCA BOX PATTERN PROCEDURES

1. For entry into the GCA Box pattern on initial departure, contact MCAS Miramar Ground Control for IFR departure instructions. For aircraft already airborne in the local area, contact SOCAL TRACON Approach for IFR pickup.

a. Fixed wing jet aircraft departing MCAS Miramar can expect to be issued radar vectors heading 340 climbing to 3,000 feet MSL. Tower will issue a departure frequency with departure clearance.

b. Fixed wing prop and rotary wing aircraft departing MCAS Miramar can expect to be issued a departure heading of 340 degrees, climbing to 3,000 feet MSL for radar vectors to approximately 5 miles north of MCAS Miramar for entry into the downwind leg at an altitude of 4,000 or 5,000 feet MSL.

10005. PAR PROCEDURES

1. PAR final controllers assume control between 15 and 9 miles from touchdown. Glide-path is intercepted at approximately 6 miles at an altitude of 2,600 feet MSL for Rwy 24. The glideslope is 3.0 degrees. The Visual Glideslope Indicator (VGSI) is not coincident due to different threshold crossing heights. Due to terrain, the lowest altitude that SOCAL TRACON can descend an aircraft outside 9 DME is 4,000 feet MSL. Pilots are advised that this often results in aircraft intercepting the glide slope from above the glide-path.

2. PAR final controllers utilize broken key transmission procedures. Pilots who desire to relay information or requests to the controller should transmit this information during transmission breaks. Pilot transmissions on final should be kept to a minimum to facilitate controller service.

3. At approximately 3 miles from touchdown, a clearance or other appropriate instructions will be given for landing, touch-and-go, or low approach, with active runway, winds, etc. A wave-off shall be executed at 1 mile if landing clearance has not been received.

4. An aircraft cleared for low approach shall not climb above 1,500 feet MSL until clear of the airport traffic pattern, since the visual overhead or break altitude is 2,100 feet MSL.

5. Pilots who continue descent on an approach below the published decision height will be provided with control instructions until over the landing threshold. Pilots are advised that course and/or glide path information given after decision height is advisory only.

6. After landing, the pilot will be directed to stop squawking Mode 3 and contact the tower.

7. As with all ATC facilities, pilots are reminded that a tower directed wave-off is mandatory.

8. Preventive maintenance on the PAR radar is scheduled every Tuesday, 0800 to 1200 local time, provided the airfield is in VFR conditions. During this scheduled maintenance time, PAR approaches may not be available; however, ILS, TACAN, RNAV, and ASR approaches are still available.

10006. SECTION INSTRUMENT APPROACHES

1. Section landings shall comply with criteria specified in reference (h).

2. Section instrument approaches are authorized for day and night.

3. Pilots shall inform SOCAL TRACON of the intentions of both aircraft prior to the approach, to include providing any additional pertinent information, (e.g., wingman NORDO, wingman land and flight leader downwind, etc.).

4. The wingman will maintain a close position on lead in order to present one target on the radarscope to the controller.

5. When the weather at MCAS Miramar is less than the published circling minima, section approaches shall be conducted in accordance reference (h).

6. When issued a wave-off, both aircraft must follow the PAR final controller's instructions. Clearing turns left of the Rwy 24R centerline are not authorized due to possible conflict with parallel traffic on Rwy 24L.

10007. SECTION APPROACHES FOR SIMULTANEOUS LANDINGS ON RWYS 24R AND 24L

1. The procedure is a section non-precision approach to Runway 24R. The section lead must make request during initial contact with SoCal TRACON, and confirm intentions with MCAS Miramar final controller upon hand-off to conduct simultaneous landings.

10008. ASR APPROACHES. ASR approaches are available to Runways 24L/R and 6L only.

1. The procedure is a section non-precision approach to Runway 24R. The section lead must make request during initial contact with SoCal TRACON, and confirm intentions with MCAS Miramar final controller upon hand-off to conduct simultaneous landings. . Pilots will typically receive landing clearance at approximately three miles, but cannot maneuver for simultaneous runway landings until they inform the final controller that runways 24R and 24L are in sight and wish to proceed visually. The controller will instruct the pilots to proceed visually. The flight will then proceed and land on cleared runways. The section will be treated as a flight at all times.

2. Section precision approaches in order to split the duals are not authorized.

3. If FCLPs are in progress, pilots should expect to use a single runway to lessen the disruption of the FCLP patten.

4. Weather minimums: May only be conducted in VMC conditions.

10009. MISSED APPROACH PROCEDURES.

1. Runway 24. Standard missed approach procedures and climb out procedures for Rwy 24 are the same and read as follows: “Climb and maintain 1,500, fly runway heading, abeam Miramar TACAN turn right heading 340, then climb and maintain 3,000.”

2. Runway 6. Standard missed approach procedures for Rwy 6 are as follows: “Climb and maintain 4,000, leaving 1,500 turn left heading 360.” Multiple practice approaches to Rwy 6 are not authorized.

CHAPTER 11

AIRCRAFT EMERGENCY RESPONSE PROCEDURES

11000. AIRCRAFT PRE-MISHAP PLAN. Reference (ai), the Station Aircraft Pre-Mishap Plan, prescribes detailed instructions and procedures to be followed by station and tenant personnel of Miramar in response to an aircraft mishap. The Airfield Operations Officer is responsible for implementing these instructions.

11001. GENERAL RESPONSIBILITIES. All agencies listed below have specific responsibilities defined in the current edition of the Station Aircraft Pre-Mishap Plan and should refer to this directive for guidance. Phone numbers for all agencies are listed in Appendix Y.

1. Aircraft Rescue and Fire Fighting (ARFF). The ARFF Unit Officer-in-Charge (OIC) is responsible to the Airfield Operations Officer for the organization, supervision, training, and readiness of the ARFF.

a. The ARFF OIC, or designated representative, will have control of the firefighting and rescue operations at the immediate scene of any aircraft mishap as outlined in reference (c). The crash and rescue bill is available in the ARFF building (9227) Administrative Office.

b. During all deliberate salvage operations, the ARFF OIC or designated representative will serve as the Airfield Operations Salvage Liaison. The ARFF OIC will directly coordinate with the MWSS Salvage Officer for all requested airfield/base resources toward the accomplishment of the operation. The Salvage Liaison will be involved during all phases of salvage operations in order to mitigate damage to airfield surfaces, structures or assets, and to preserve the best interest of Airfield Operations.

c. The ARFF OIC or designated representative will serve as the Salvage Officer for any salvage/recovery operations requiring immediate action when the tenant MWSS Salvage Officer is unavailable due to operational commitments.

2. Base/Structural Fire Department. During emergencies, the MCAS Miramar Base Fire Department will move a structural fire fighting vehicle and an Advanced Life Saving (ALS) support vehicle to standby positions in front of ARFF building 9227 as outlined in the Aircraft Pre-Mishap Plan. In the event of an actual crash, the Duty Fire Chief will proceed to the scene and provide assistance to the ARFF on-scene Incident Commander, as required. In the event of a combination of aircraft and structural fires, a unified command will be established, with the Base Fire Chief in primary control of the firefighting and rescue operations and ARFF providing assistance as required.

3. Incident Commander. The Incident Commander is the ARFF OIC or SNCOIC for an aircraft mishap, or the Base Fire Chief if a combined structural fire and aircraft mishap site. The Incident Commander is the responsible authority at the mishap scene.

4. Provost Marshal. The Provost Marshal will provide the perimeter security around any crash site until relieved by the responsible unit. Only ARFF and Fire Fighting personnel will be authorized immediate access to the scene of a crash. Unit Commanding Officers of aircraft involved, the Aircraft Mishap Board, and other personnel required to provide technical assistance (as

outlined in the Aircraft Pre-Mishap Plan), will be authorized access to the crash site at the earliest possible time, consistent with safety.

5. Aircraft Mishap Board (AMB). The Senior Member of the squadron or detachment AMB will assume control of the wreckage and is responsible for its security after the rescue and firefighting operations are completed.

6. Explosive Ordnance Disposal (EOD). The EOD Response Element (RE) will report to the incident commander and will be positioned as directed to support the incident. During the early phase of an incident, the EOD RE will serve in an advisory to the firefighting operation. . EOD will be prepared to support the incident until the completion of the accident investigation, providing final disposition on aircraft explosive components as needed.

7. Search and Rescue (SAR). Fleet Area Control and Surveillance Facility (FACSFAC) is the Search and Rescue (SAR) Mission Coordinator for crashes or emergencies involving naval units within the Southern California Fleet Operating Area. FACSFAC controls the standby alert helicopters located at NAS North Island. FACSFAC will also assist and relay information to Navy SAR helicopters airborne in the W-291 training area; the Coast Guard Station, San Diego; and the Rescue Coordination Center (RCC), Langley Air Force Base, Virginia. The RCC is designated SAR Mission Coordinator for off-station land crashes or emergencies.

8. S-4, Air Station Installation Logistics. Upon notification, provide assistance as required within the capabilities of the installation.

9. METOC Services. Upon notification of a crash, the Duty METOC Observer/Forecaster will take an immediate weather observation and provide additional METOC support as required.

10. Communication Strategy & Operations. The duty spokesperson will be responsible for gathering and releasing information concerning the crash scene to civilian sources. The Photo Division will dispatch the duty photographer to the crash scene when directed by the Emergency Operations Center (EOC), reporting to the Senior Member of the AMB or senior ARFF representative, if the senior member of the AMB is unavailable.

11. Airfield Operations Duty Officer (ODO). Provide assistance as outlined in the Aircraft Pre-Mishap Plan.

11002. AIRCRAFT MISHAP RESPONSE

1. In the event an aircraft mishap occurs on the Air Station, the tower will temporarily suspend airfield operations until the emergency condition has been rectified, if required. During this time, all taxiing aircraft shall stop, and aircraft fueling or defueling shall be suspended until ARFF assets are released from the emergency or reconstituted to provide support of airfield operations. All airborne aircraft in the local pattern shall circle the airfield and await further instructions from Tower. Pilots in the area shall maintain radio discipline. All unauthorized vehicles and personnel shall remain clear of the mishap area.

2. The reporting custodian of the aircraft involved shall ensure that qualified representatives are dispatched to the mishap area immediately to provide technical assistance for recovery/salvage, and to assist in the aircraft mishap investigative effort as may be required.

3. The Incident Commander shall retain control of the mishap site until all potential hazards are satisfactorily mitigated (flash fires, composite materials, etc.), coordinating with the senior member of the AMB.

11003. EMERGENCY RESPONSE PROCEDURES. Per reference (ai), an emergency may be declared by the pilot, ATC personnel, or officials responsible for the operation of the aircraft. Upon notification of an actual or declared emergency or of a crash, the Air Traffic Control Tower (ATCT) will activate the crash circuit and set either “Standby” or “Crash” condition.

1. Standby Condition. Set for any in-flight or ground emergency other than an actual crash. The ARFF Incident Commander determines which crash vehicles are to standby according to the nature of the emergency.

a. The responding vehicle crews will proceed as quickly as possible to their designated positions and await further instructions from the Incident Commander.

b. Pertinent information will be passed to the ARFF Incident Commander by Miramar Ground Control, who will then relay the information to all crews.

c. Personnel, other than ARFF and Aircraft Recovery Marines, are to remain clear of the immediate area until the emergency is secured by the ARFF Incident Commander.

2. Mishap Condition is set for both on-station and off-station mishaps.

a. Response is immediate by all designated crash vehicles.

b. The Base/Structural Fire Department dispatches an Advanced Life Saving ambulance to the ARFF Building 9227 as required.

c. For an on-station mishap, the overall Incident Commander will secure the mishap once the entire scene is determined to be safe enough to turn over to the Aircraft Mishap Board.

3. When the Crash Phone is activated, ARFF Marines will respond immediately via the most direct and safest route possible. The Ground Controller will provide as much assistance as possible, to include stopping all other vehicular traffic and taxiing aircraft.

4. Once the ARFF vehicles are in position and ready to receive the emergency aircraft, the Ground Controller may allow other ground vehicles or aircraft to move to areas of the Airfield that are well clear of the ARFF vehicles.

5. Once the emergency aircraft has landed, the ARFF vehicles will be cleared onto the runway in order to assess the situation and take appropriate measures. Once the aircraft is determined to be safe, ARFF will escort the aircraft back to its line. Clearance for the emergency aircraft to proceed across a runway (either under its own power or via a tow vehicle) enroute to its line also constitutes clearance for the escorting ARFF vehicles to cross the runway. The Ground Controller shall stop all other vehicular traffic that might interfere with escorting the emergency aircraft back to its flight line.

6. Fixed wing tactical aircraft can expect to have their landing gear pinned by ARFF Marines for all emergency responses except hung ordnance and low

fuel. ARFF Marines will not go underneath any aircraft to inspect it unless the gear is pinned.

7. Securing from an emergency condition will be accomplished as follows:

a. For an In-Flight/Ground Emergency, once the emergency aircraft has been declared safe, the “Standby” shall be terminated only with the concurrence from the ARFF Incident Commander, the tower, and the pilot.

b. For off-station mishaps, this authority may be delegated to the designated on-scene Incident Commander.

11004. AIRCRAFT FUEL SPILLS

1. High-Speed Refueling Pits. In the event of a fuel spill of 25 gallons or more, ARFF will be immediately notified by both the aircrew and refueling personnel in accordance with reference (t). The aircrew will immediately shut down the aircraft’s engine(s). The aircraft will then be towed out of the fuel pit after shutdown. ARFF will standby and provide fire protection while squadron personnel clean up the fuel spill in accordance with Base Environmental procedures as indicated in Chapter 2 of reference (t), the MCAS Miramar Spill Contingency Plan.

2. Other Fuel Spill Situations. For fuel spills during other evolutions (i.e. cold refueling an aircraft, during aircraft maintenance, defueling, etc. on the parking ramps or in the hangars,) ARFF will be notified immediately by the most expeditious means. Fuel will not be washed down unless there is an immediate threat to life or aircraft. ARFF will take appropriate measures to contain the fuel spill; however, the squadron is responsible for the cleanup. The MCAS Miramar Spill Contingency Plan also provides procedures to be followed for these other fuel spill situations.

a. The unit causing the spill is responsible for complying with cleanup procedures. Fuel is to be picked up by use of absorbents followed by coordination with the MCAS Miramar S-7 Environmental Management Department’s (EMD’s) Waste Management Division for disposal. The ARFF Incident Commander may determine that a spill is large enough that a vacuum truck or de-fueler will be necessary to remove the majority of the fuel. If the fuel spill occurred because of a refueling equipment malfunction, refueling personnel are responsible for the cleanup.

b. Additionally, the following actions shall be completed:

(1) Immediately notify ARFF Dispatch.

(2) Immediately notify the Airfield ODO.

(3) Maintain adequate materials on hand for fuel spill containment and cleanup.

3. Submit a completed Spill Response Notification Form to the MCAS Miramar Environmental Office for all fuel spills. This form is found in reference (t).

11005. HAZARDOUS MATERIAL (HAZMAT) RESPONSE. All aircraft mishap scenes are considered a hazardous material area and should be treated appropriately. Any requirements for HAZMAT containment or removal shall be coordinated

through the Miramar Communications Center (MCC) Dispatch at PMO, 858-307-7643. In the event of a major HAZMAT spill, units should take the following immediate action steps:

1. Attempt to contain the spill as much as possible in accordance with the unit's HAZMAT SOP or the MCAS Miramar Spill Contingency Plan per reference (t).
2. Contact MCC Dispatch and ARFF Dispatch.

3. Contact the S-7 EMD for further guidance on handling and disposal.

11006. EXPLOSIVE MISHAP RESPONSE

1. Explosive mishaps include all of the following:

a. An Explosive Mishap is an unplanned explosion or fire involving an explosive material/system. This includes inadvertent actuation, jettison, and launch release of ordnance, to include canopies and ejection seats, which results in a fatality or injury to personnel, fire, explosion or damage to property.

b. A Dangerous Defect is one found upon visual examination or local test in an explosive material/system that could result in an explosive mishap (i.e. ruptures of explosive container exposing filler, protruding primers, partially armed fuses, safety devices missing or defective, etc.)

2. Should an explosive mishap occur on the airfield, the unit shall immediately notify the following agencies:

a. MCC and ARFF Dispatch centers are manned continuously and will notify other emergency response agencies such as the Station Fire Department, Medical, PMO, etc.

b. MCAS Miramar Explosive Ordnance Disposal (EOD).

c. The Station ODO when the airfield is open.

d. The Station Command Duty Officer when the airfield is closed.

e. The Explosive Safety Office. If an explosive mishap occurs after normal working hours, contact Explosive Safety the first working day after the incident. Ensure to include Explosive Safety as an information addressee on all correspondence related to an explosive mishap.

11007. AIRCRAFT SALVAGE OPERATIONS

1. All deliberate salvage operations will be conducted by the MAG's corresponding MWSS. The MWSS Salvage Organization will be supported by the Airfield Operations Salvage Liaison as well as ARFF personnel through fire suppression, overhaul, and scene safety.

2. The MAG will assign an appropriate Salvage Officer from the MWSS who will conduct all aspects of salvage operations in accordance with NAVAIR 00-80R-20, Navy NATOPS U.S. Navy Aircraft Salvage Operations Manual (Ashore).

3. The Salvage Officer will directly coordinate with the Airfield Operations Salvage Liaison for airfield/base resources requests needed for swift and

safe accomplishment of the salvage operation. This includes EOD support to render safe and/or remove explosive hazard material.

4. The ARFF OIC or designated representative will serve as the Salvage Officer for any salvage/recovery operations requiring immediate action when the tenant MWSS is unavailable due to operational commitments.

5. For transient aircraft, the ARFF OIC will request crane support through the MWSS-373 Memorandum of Agreement for immediate crane support. The crane should be dispatched to the airfield within a 60-minute response window during normal field hours.

CHAPTER 12

ORDNANCE OPERATIONS

12000. GENERAL INFORMATION. This chapter delineates rules and regulations regarding ordnance operations that are specific to MCAS Miramar and accordance with references (j), (l), and (ag). Units shall ensure that all operations involving the use of any type of ordnance are conducted in compliance with all current and applicable orders and directives, to include this order.

12001. POLICIES REGARDING THE USE OF ORDNANCE

1. Both tenant and non-tenant units may be authorized to conduct ordnance operations aboard MCAS Miramar.

2. Squadron or unit ordnance officers shall brief pilots on the provisions of this instruction and reference (j) prior to ordnance operations.

12002. ORDNANCE DEFINITIONS

1. Crew Served Weapons. A crew-served weapon is defined as any weapon that is loaded and operated by an air crewman, such as a .50 caliber machine gun, a 7.62 machine gun, or GAU Gatling gun.

2. Certified Safety Observer is a tenant service member, whether USN or USMC, that is certified to observe ordnance operations to ensure safety. Visiting units will be certified per their service component requirements.

3. Qualified Ordnance Personnel are any USN or USMC individuals certified per reference (w). Visiting units will be certified per their service component requirements.

4. Unexpended Ordnance. Unexpended Ordnance is defined as that ordnance for which no attempt has been made to release or fire. Typically, situations that involve unexpended ordnance require no special aircraft handling or routing.

5. Hung Ordnance. Hung ordnance is defined as live or practice airborne weapons that cannot be fired or dropped because of weapons, rack, or circuit malfunction. However, special attention must be paid to the displayed status of such ordnance with regards to locked and/or unlocked indications, as well as the physical appearance of the ordnance itself during the battle damage check while over the range. Ordnance remaining on an aircraft after an attempted release with a locked indication and no visibly protruding components will not require emergency services (i.e. EOD and ARFF) response. Aircraft returning to MCAS Miramar with hung ordnance displaying unlocked indications and/or visibly protruding components shall be treated by Airfield Operations as an airborne emergency.

6. Ordnance Arming/De-arming. Arming is the process of making ordnance and associated aircraft equipment ready immediately prior to flight for subsequent aerial delivery. De-arming is making safe or “safing” ordnance and associated systems immediately after the flight. These operations occur in a designated area on the airfield and consist of either removing or installing pins, performing stray voltage and tone checks, and enabling or disabling external stores ejection rack connections or linkages.

7. Ordnance Loading. The process of configuring aircraft and associated systems for the suspension and carriage of aircraft munitions.

12003. SAFETY PRECAUTIONS

1. Squadrons or units should maintain Standard Operating Procedures (SOPs) for ordnance operations in accordance with applicable directives. For most flying squadrons, NAVAIR loaded weapons/stores manuals and weapons checklists serve as SOPs for aircraft-related operations. SOPs are only required for evolutions not contained in a NAVAIR approved checklist.

2. Stray voltage checks conducted prior to final arming of live ordnance shall be conducted in the designated arming/de-arming areas, identified in Appendix B-1.

3. Fueling and defueling procedures with ordnance on board are addressed in Chapter 13. Simultaneous fueling/defueling and ordnance operations are not authorized.

4. All ordnance operations shall cease during Thunderstorm Condition 1 (T1) with lightning within 10 miles. Ordnance should be made as safe as practical and personnel should seek cover.

a. Aircraft already loaded not requiring arming procedures may taxi and launch at the discretion of the aircraft commander.

b. Aircraft already loaded with ordnance requiring arming shall not be armed until the storm has passed.

c. Aircraft returning to base with ordnance that requires de-arming during an electrical storm shall remain in the de-arming area until the lighting threat passes.

d. Ordnance operations may only commence once the lightning activity has moved 10 miles away from MCAS Miramar as determined by METOC.

5. A certified safety observer shall be present during all ordnance handling and arming/de-arming operations.

6. Personnel loading ordnance in these areas shall be properly equipped with all required personal protective equipment (PPE).

7. Aircraft shall be properly grounded prior to any ordnance loading or downloading evolution.

a. Grounding cables must be tested and certified at less than 6 ohms for clip-to-clip grounding cables and less than 25 ohms for reel type grounding cables. All failed cables must be immediately removed from service until repairs are performed and the cable passes an electrical test and visual inspection.

b. Tie down chains are not authorized for use as grounding devices during ordnance loading and downloading operations.

8. Smoking is prohibited within 50 feet of any ordnance or fuel handling/loading operations.

9. Appropriate weapons checklists shall be used during all ordnance evolutions.

10. Chaff and decoy flares may be loaded on the squadron flight line in accordance with applicable checklists.

11. No ordnance shall be left loaded on aircraft overnight with the exception of captive air training missiles (CATMs). If CATMs remain loaded overnight, the following requirements must be adhered to:

a. Safety pins installed.

b. Cartridge activated devices (CADs) removed or electrically disconnected.

c. Mechanical locks in place to prevent inadvertent firing.

d. Umbilical disconnected and covers installed.

e. Flight line security shall be in accordance with reference (v).

12. Ordnance personnel shall not perform release and control system checks on aircraft loaded with live or inert ordnance. The same applies to aircraft with internally mounted M61A1/A2 gun systems loaded with TP/TPT ammunition. In case of the latter, aircraft may be hangared for up to 24 hours, provided the ammunition is cycled into the storage drum. Otherwise the ammunition will have to be downloaded.

13. Only the number of practice bombs required for the daily flight schedule shall be built up at any one time. At the end of daily flight operations, all practice bombs shall be disassembled with signal cartridges removed, and properly stored.

14. Aircraft shall not be washed while loaded with any type of ordnance.

15. Foreign Object Debris (FOD) walk shall be conducted by the loading unit prior to engine turn-up.

16. No overhead breaks or FCLPs are authorized for aircraft returning to MCAS Miramar with unexpended or hung ordnance.

17. Aircraft carrying any type of ordnance that cannot be safed per the applicable NAVAIRSYSCOM weapons and stores loading manual and checklist shall not be refueled at MCAS Miramar until the ordnance situation has been rectified.

18. Aircraft with any type of hung ordnance are prohibited from taxiing on Taxiway Quebec and the Transient Aircraft Line.

19. Any aircraft with crew served weapons shall ensure that no ammunition is loaded in any portion of the receiver mechanism prior to performing any operations within the MCAS Miramar airspace.

20. Maintenance repairs shall not be conducted on aircraft loaded with ordnance except for routine servicing and minor maintenance (“turn-around maintenance”) that will ready the aircraft for the next launch. In these situations, all ordnance, racks, and launchers shall be safed as specified by

the applicable NAVAIR weapons/stores loading checklists prior to conducting any servicing or minor maintenance.

21. Hazard of Electromagnetic Radiation to Ordnance (HERO) unsafe operations shall only be conducted in the Primary CALA. Ordnance personnel shall maintain vigilance for mobile HERO threats (i.e. ARFF, PMO, PWD maintenance vehicles, and cell phone use).

22. Aircraft carrying any releasable ordnance (i.e. missiles, bombs (live or inert)) or armed with 20mm are prohibited from conducting multiple practice approaches in the GCA box pattern, FCLPs, and/or touch-and-go landings. Actual GCA recovery for inclement weather is authorized.

23. When safety devices are required for any type of ammunition, they shall be used.

12004. CALA SCHEDULING

1. Squadrons shall schedule use of the primary and secondary Combat Aircraft Loading Areas (CALAs) through the Explosive Safety Office.

2. Requests must be received no later than five (5) working days in advance of required CALA services and coincide with ammunition requisition request submittal. CALA spot scheduling will be based on a “first come, first served” basis with deferment to mission priority requirements.

3. Space availability will be determined by the total net explosive weight (NEW) and safe separation distances required between loaded aircraft in accordance with reference (j).

4. The Explosive Safety Office will provide a schedule of CALA spot assignments and operations to the Airfield Operations Department by 1500 on the day prior to scheduled CALA operations.

12005. VISITING AND TRANSIENT AIRCRAFT ORDNANCE

1. Visiting and transient units are authorized to conduct ordnance operations in compliance with the procedures defined in this order and in reference (j).

2. Prior to arriving at MCAS Miramar for the purpose of conducting ordnance operations, transient units must first seek approval from the Commanding Officer MCAS Miramar by submitting a Naval message request per Appendix C.

3. All deployment requests shall include the supporting Marine Aviation Logistics Squadron (MALS) as an information addressee on the message (MALS ELEVEN//ORD// for fixed wing aircraft, MALS SIXTEEN//ORD// for rotor wing aircraft, and MALS FOUR SIX//ORD// for reserve aircraft).

4. Visiting and transient units will comply with the provisions of this order and reference (j).

5. Per reference (j), visiting units must receive an explosive safety in-brief given by the MCAS Miramar Explosive Safety Officer (ESO) prior to conducting ordnance operations. Requests for this explosive safety in-brief shall be included in the “Remarks” section of the Deployment request (see Appendix C).

6. Uploading services are not available from either the MCAS Miramar Airfield Operations Department or the Visiting Aircraft Line.

7. Transient aircraft units are not permitted to keep live or inert ordnance loaded on aircraft overnight, with the exception of CATMs which must be properly secured, and they must be hosted by a tenant squadron. Hosted transient aircraft will comply with the ordnance overnight restrictions and requirements.

8. For further information, contact the MCAS Miramar Explosive Safety Office.

12006. ORDNANCE HANDLING AREAS. There are several areas on the airfield where live and practice ordnance and explosive cargo can be loaded or downloaded.

1. Combat Aircraft Loading Areas (CALAs). The Primary and Secondary CALAs are the only locations approved for hazard class/division (C/D) 1.1 and 1.2 high explosives (HE) and forward firing ordnance loading. Each area is approved for a maximum of 30,000 pounds NEW. All ordnance loading/unloading evolutions shall be conducted in the CALAs unless otherwise authorized in this order. The MCAS Miramar CALAs are described in Chapter 1 and shown in Appendix B-1. Refer to reference (j) for details of CALA use.

a. Movement of aircraft, equipment, and personnel to and from the CALA is the responsibility of the using unit.

b. Aircraft without ordnance may be towed or taxi to/from the CALAs. Towing an aircraft with ordnance loaded is prohibited. Aircraft being towed to and from the CALA shall contact Ground Control to receive permission to cross the runway. During closed airfield hours, aircraft being towed to the CALA will call “in the blind” on Tower frequency 135.2 MHz before crossing the runway.

c. Aircraft taxiing to the CALA shall contact Ground Control to receive clearance for entry into either the Primary or Secondary CALA.

d. Aircraft taxiing to and from both the Primary and Secondary CALA should utilize a counterclockwise flow in order to minimize congestion and maximize safety.

(1) The counterclockwise flow is initiated by crossing the parallels at midfield, then continuing on Taxiway Sierra.

(2) At the southeast end of Taxiway Sierra, aircraft shall continue the counterclockwise flow with a left turn (north) onto Taxiway Echo.

e. Only essential personnel involved in the loading/down-loading and launch/recovery of aircraft will be authorized in the CALA.

f. In order to facilitate early morning launches, aircraft may be staged in the CALAs the night prior with permission from the Explosive Safety Office or Assistant Airfield Operations Officer.

(1) Ordnance shall not be staged or left loaded on an aircraft overnight in the CALA.

(2) This requirement does not apply to emergency divert aircraft.

2. Parking Aprons

a. Only C/D 1.3 and 1.4 ordnance may be loaded on the parking ramp.

b. Forward firing ordnance may not be loaded or downloaded on the flight line with the exception of 20MM, 25MM, and 30MM Target Practice (TP) ammunition loaded on aircraft gun systems at designated aircraft parking areas, and crew served weapon ammunition loaded onto transport utility or assault support aircraft for carriage. Forward firing ordnance will only be armed and de-armed at approved forward firing arm/de-arm locations per reference (j) or over dedicated firing ranges. Arming and de-arming of 20MM TP ammunition on AH-1 platform aircraft may be conducted at helicopter landing spots 1, 2, and 3 while maintaining a safe heading of 250 degrees magnetic.

12007. ORDNANCE ARMING/DE-ARMING

1. All aircraft, ordnance, and weapons will be armed, safed, and de-armed in compliance with the applicable NAVAIRSYSCOM weapons loading checklist and manual.

2. Ordnance Arming/De-arming Areas. Aircrew should position their aircraft in such a manner that it does not impede the movement of other aircraft.

a. All arming and de-arming procedures shall be conducted in designated locations. Arming evolutions involving practice bombs, aircraft parachute flares, chaff, and decoy flares must be conducted in each unit’s final check area prior to entering the taxiway. However, 20mm TP arming/de-arming on F/A-18 aircraft will occur in a designated arming area, typically Runway 24R or Runway 6L.

b. The arm/de-arm locations are identified with a “lollipop” located at each approved location. These lollipops are directional indicators only. Headings depicted on the lollipops are approximating magnetic headings.

c. The lollipops along Taxiway Sierra are painted on the shoulder. Aircraft shall not park on the shoulder; they are to remain on the aircraft movement surface.

d. The arm/de-arm locations aboard MCAS Miramar are depicted in Appendix B-1, described in Chapter 1, and reviewed here:

(1) Runway 24R Arm/6L De-arm: Located at the approach end of 24R between Taxiways Papa and Quebec. Aircraft heading is 185 degrees magnetic.

(2) Runway 6L Arm/24R De-arm: Located on Taxiway Oscar. Aircraft heading is 139 degrees magnetic.

(3) Echo Arm: Located at the exit of the CALA, just prior to Taxiway Echo. Aircraft heading is 164 degrees magnetic.

(4) Foxtrot Arm/De-arm: Located on Taxiway Foxtrot. Aircraft heading is 189 degrees magnetic.

(5) Taxiway Sierra Arm/De-arm: Located on Taxiway Sierra, just east of the intersection to 24L. Aircraft heading is 229 degrees magnetic.

e. Only qualified/certified ordnance personnel may arm/de-arm an aircraft loaded with ordnance.

f. A qualified safety observer shall be present during all ordnance arm/de-arm evolutions.

g. No one shall be permitted under an aircraft after weapons safety devices have been removed for launch or prior to installation of the safety devices after flight.

h. All forward firing ordnance on fixed and rotor wing aircraft shall be armed and de-armed in the designed arm/de-arm areas, except for crew served weapons and F-35 B/C internally or externally loaded AIM-120 missiles. Armed Fire Devices (AFD) will be inspected only in the re-arming area, CALA's (immediately after engine shutdown).

(1) Aircraft shall be positioned at the heading indicated lollipops in each loading and arm area.

(2) Arming/de-arming helicopters and fixed wing aircraft concurrently is authorized.

i. Crew-served weapons aboard aircraft shall have no ammunition loaded in any portion of the receiver mechanism (.50 cal/M240) or feeder mechanism (GAU-17) outside of the approved range area. GAU-17 ammunition may be pinned in the feed chute providing it is disconnected from the feeder.

j. Aircraft returning to MCAS Miramar with hung or unexpended ordnance shall be de-armed/safed in a designated de-arm area.

k. Rotary wing aircraft are authorized to arm/de-arm their chaff and flare systems in the following areas: Helicopter Landing Spots 1 through 5, the LHD deck, or on any runway not currently in use. See Appendix B-1 for these locations.

l. Explosives class 1.1/1.2 bombs may be armed in the CALAs following aircraft final check.

m. Inert ordnance (practice bombs with signal cartridges installed) may be armed/de-armed on the flight line following aircraft final checks.

12008. ORDNANCE JETTISON AREA

1. A designated ordnance jettison area is located in the FLETA HOT area of W-291. The approximate center of this area is located at N 32 15', W 118 02'.

2. Pilots that require the use of W-291 to jettison ordnance shall contact "Beaver Control" for clearance per reference (p).

3. In the event an emergency jettisoning of ordnance is required, Beaver Control shall be notified as soon as possible.

4. It is the responsibility of the pilot to ensure the area is clear of any surface units prior to jettisoning ordnance.

12009. INADVERTENT RELEASE

1. In instances involving inadvertent release or jettison of ordnance or an aircraft crash with ordnance aboard, the MCAS Miramar Airfield ODO shall contact the Miramar Explosive Ordnance Disposal (EOD) Team.

2. Should the suspected impact location be on land, the ODO shall coordinate with PMO and local law enforcement agencies in order to ensure the immediate area surrounding the ordnance is evacuated.

3. PMO shall establish a security perimeter at a safe distance until the area is declared safe by EOD.

12010. HUNG ORDNANCE PROCEDURES

1. Aircraft returning to MCAS Miramar with hung or unexpended ordnance shall be de-armed/safed in accordance with the applicable NAVAIRSYSCOM weapons and stores loading manual and checklists.

2. Unless otherwise defined in this order, aircraft arrival at MCAS Miramar with hung ordnance, either live or inert, shall be treated as an emergency situation.

3. Regardless of the type or nature of the hung ordnance, squadron ordnance personnel are still required to visually inspect and safe all ordnance in a designated de-arm area prior to the aircraft returning to the line or entering the fuel pits.

4. Pilots of aircraft arriving at MCAS Miramar with hung ordnance (including forward firing ordnance) shall advise SOCAL TRACON that their aircraft has “hung ordnance” and request a GCA or visual straight-in approach for a full stop landing.

a. The tower shall notify Airfield Rescue and Fire Fighting (ARFF) and station EOD personnel by regular/crash phone of all aircraft inbound to MCAS Miramar with hung ordnance. ARFF will respond immediately. EOD will assume a standby alert status at their workspace.

b. After a normal landing and roll out, an aircraft with hung ordnance shall proceed directly to the appropriate de-arming area at the end of the duty runway. The aircraft will hold in the de-arm area until it has been inspected and safed by ordnance personnel.

5. Primary response to hung ordnance shall be performed by ordnance personnel from the aircraft’s squadron.

a. Squadron personnel are best qualified to conduct hung ordnance procedures since they are trained and certified on specific aircraft ordnance handling and safing procedures.

b. Pilots will notify and request assistance from their ordnance personnel on their squadron’s tactical radio. Tower may also assist in contacting the squadron if the need exists.

c. Squadron ordnance personnel should utilize their own squadron vehicles for transportation to the aircraft. If a vehicle is not available, they may request transportation assistance from either the Airfield ODO or from VAL.

6. Responding ARFF units will follow the aircraft to the appropriate de-arm area and wait for further instruction from squadron ordnance personnel. Once squadron ordnance personnel safe the hung ordnance, the responding ARFF units will stand down from the emergency (with the concurrence of the aircraft commander), and the aircraft is free to taxi on its own to the CALA(s).

a. Should squadron ordnance personnel be unable to safe the ordnance, or if they encounter ordnance conditions that are outside their area of expertise, they will contact Station EOD via the ARFF Incident Commander.

b. Station EOD personnel shall respond and safe the ordnance. If Station EOD cannot safe the hung ordnance, the aircraft shall be downloaded in the de-arm area under the supervision of EOD personnel.

7. When transient or divert aircraft land with any type of hung or unexpended ordnance, the ODO shall request a de-arming/ downloading crew from 3d MAW ALD, who will also provide other essential personnel, equipment, and magazine stowage as needed.

8. ARFF safety regulations forbid installing landing gear down locks, conducting hot brake checks, or cooling hot brakes on aircraft loaded with ordnance. These evolutions can be conducted only after the ordnance has been safed by qualified ordnance personnel.

9. Aircraft with jammed guns shall notify ground control when clear of the runway and shall proceed to the de-arm area.

a. Aircraft gun jams/malfunctions shall be cleared in the de-arm area.

b. Guns shall be de-armed prior to leaving the de-arming area.

c. Once the ordnance crew has safed the guns, the aircraft may taxi to the assigned CALA for downloading.

d. Squadron ordnance crews shall ensure that missiles that have not been subjected to a firing attempt have handling safety devices installed in the de-arming area prior to the aircraft moving to the loading area.

e. Ordnance personnel will maintain vigilance against mobile HERO threats (i.e., ARFF radios, cell phones) while clearing 20mm aircraft gun ammunition.

10. Aircrew with a jammed crew-served weapon shall attempt to render that weapon safe prior to returning to MCAS Miramar. If the jam is so severe it cannot be safed, the aircraft will notify ground control and proceed to the de-arm area as directed to await further action by squadron ordnance personnel. If the stuck/jammed round is beyond the capabilities of squadron ordnance personnel to safe the weapon, the owning unit will notify Station EOD to remove the stuck round.

11. Straight-in full stop landings are required for all aircraft carrying hung ordnance.

12. All aircraft with the following conditions shall proceed to the appropriate de-arm area for safing prior to returning to the assigned CALA:

a. Unexpended forward firing.

b. High explosive ordnance either unexpended or hung ordnance.

c. UH-1 aircraft with crew served weapons. If no forward firing ordnance is loaded, UH-1 aircraft may return to their assigned flight line after de-arming.

13. Aircraft returning with hung ordnance shall inform the controlling agency that a hung ordnance condition exists. The following approach procedures apply to hung ordnance arrivals:

a. Radar Approach (IMC) - SOCAL TRACON will provide radar vectors for a straight-in approach to landing utilizing PAR.

(1) Approach control will attempt to minimize over flight of populated areas.

(2) Aircraft may not be given priority in the approach sequence; however, pilots shall still inform the final controller of the hung ordnance condition so efforts can be made to minimize the likelihood of a wave-off requirement.

b. VFR Entry - Arrivals for Rwy 24 will be given a visual straight-in approach only. Arrivals for Rwy 6 will be via left downwind entry from KUDOS. Pilots should avoid over flying populated areas to the maximum extent possible.

c. HERO conditions will be set aboard the Air Station prior to aircraft with hung ordnance arriving as indicated per reference (x).

12011. COMMUNICATION PROCEDURES WITH ORDNANCE ABOARD

1. Flights operating at MCAS Miramar with ordnance aboard shall advise MCAS Miramar controllers of any ordnance handling requirements (i.e. arming, de-arming).

a. This is required to facilitate sequencing of arriving and departing aircraft.

b. An example would be when checking in with tower at Atlas, e.g., “Bat 1, Atlas, straight-in, full stop, de-arm.”

2. The possibility exists that an aircraft with ordnance aboard could experience lost communication.

a. Should the aircraft be flying unaccompanied by another aircraft, the pilot shall:

(1) Avoid flying over populated areas to the maximum extent possible.

(2) Comply with lost communication procedures outlined in Chapters 5 through 7.

b. If the aircraft is in formation, it should be escorted as a wingman to final approach and landing.

CHAPTER 13

AIRCRAFT FUELING AND DEFUELING OPERATIONS

13000. GENERAL INFORMATION. This chapter discusses aircraft refueling and defueling procedures, fuel pit operations, restrictions, cryogenic operations, and fuel spill environmental considerations at MCAS Miramar. See Appendix B-1 for fuel pit locations.

1. MCAS Miramar provides JP-5 fuel during aircraft refueling operations.

2. The Fuels Branch may be contacted regarding any related questions and numbers may be found in Appendix Y-2.

13001. STANDARD PROCEDURES AND ACTIONS

1. The hours of operation for the fuel pits generally coincide with published weekday airfield operating hours. The standard procedure for tactical aircraft refueling is utilizing the hot pits when they are open.

2. Truck cold refueling is available 24 hours per day, 6 days per week Sunday through Thursday, Fridays from 0700-2300, and is closed Saturdays. However, due to limited assets, both tenant and non-tenant aircraft can expect delays for truck cold refueling and defueling operations.

3. Units that desire use of the hot pits during weekends or truck cold refueling support on Saturdays must make coordination with the Fuels Branch at least 48 hours prior to the requested date.

a. Initial requests may be coordinated via phone call to the appropriate Fuels Branch authority. See Appendix Y-2.

b. Upon verification of a request, the unit should submit an e-mail to the Fuels Branch at smbmiramarmcas.s4fue@usmc.mil and provide the following information: number of aircraft, anticipated arrival times at the fuel pits, number of pits requested, and the proper number of ground crews available IAW aircraft requirements. The Fuels Branch will respond to the email request, acknowledging receipt.

c. The e-mail process will serve as confirmation for both parties and provide assurance and verification that the refueling event is planned.

13002. SAFETY PRECAUTIONS. The following safety precautions are extremely important and are cited here for emphasis. Refer to references (e) and (t) for specific safety procedures and requirements.

1. Fuel operators will discontinue any refueling operation that does not appear to be progressing in a normal fashion (such as appearing to be taking much longer than would normally be expected, pressures are too high, etc.).

2. Crew changes and hot seating shall not be conducted in the fuel pits. Pilots shall remain in their cockpit during hot refueling operations to facilitate a proper response to any emergencies that may develop.

3. Once a refueling evolution has commenced, no aircraft engines or auxiliary power units shall be started or stopped. External power shall not be connected, disconnected or switched on or off.

4. The engine with the propeller or intake nearest the aircraft fueling receptacle shall be secured. Deviations are permitted only when stated in the specific aircraft NATOPS.

5. Prohibitions on refueling procedures for aircraft loaded with ordnance are described later in this chapter.

6. All refueling operations shall cease immediately anytime that lightning is reported or sighted within 5 NM of MCAS Miramar and during Thunderstorm Condition 1 (T1). Only the ODO or the duty METOC forecaster may advise Fuels Branch that fueling operations can again commence once the Airfield has secured from T1.

13003. HOT BRAKE PROCEDURES. All aircraft shall have a hot brake check prior to entering the hot fuel pits. If hot brakes are suspected, the pilot will be directed to taxi to a safe location away from the pits, other aircraft, and personnel (such as between taxiways) for a 15-minute mandatory cool-down period. After the mandatory 15 minutes have elapsed, ARFF will recheck the brakes. The tower should not be called for an earlier check. Depending on the results of the check, pilots can expect one of the Following:

1. If the brakes are deemed safe, the aircraft may return to the hot pits for fuel.

2. If hot brakes are still suspected, the aircraft will be directed to either shut down or taxi back to its squadron line for brake cooling and cold refueling. The aircraft will be escorted by an ARFF vehicle while either taxiing or being towed back to its line.

13004. TRAINING.

1. All personnel involved in aircraft refueling and defueling operations shall be properly trained and qualified. Squadrons are responsible for training their ground crews for aircraft refueling and defueling. Fuel pit familiarization training is provided by the Fuels Branch and may be requested at any time. Refer to references (e) and (t) for specific training requirements.

13005. IN-LINE EAST FUEL PITS (FIXED-WING HOT PITS)

1. Refueling points 1 through 4 are designed for use by tactical jet aircraft. Tenant F/A-18 squadrons are the primary users of the in-line east pits.

2. Taxi procedures. The standard procedure for aircraft entering the in-line pits is to approach from the south off Papa Taxiway and orient the aircraft to the north for refueling. Alternatively aircraft may enter from the north via Golf Taxiway at MCAS Miramar Ground Control’s discretion, and Ground will clear aircraft into and out of the in-line east fuel pits. See Appendix B-1 for location.

3. Manning. Squadrons shall provide the necessary ground crews to man the nozzle operator and fire watch positions. All aircraft shall be under positive control of a taxi director at all times while the aircraft is taxiing into or out of the fuel pits. Positive control will continue until

the aircraft is well clear of both the fuel pit and other aircraft. Refer to references (e) and (t) for detailed refueling procedures and practices.

13006. IN-LINE WEST FUEL PITS (ROTARY-WING HOT PITS)

1. Refueling points 5 through 8 are designed for use by rotary wing and fixed wing aircraft. Tenant CH-53E, MV-22 and KC-130 squadrons are the primary users of the in-line west pits.

a. Tenant F/A-18 aircraft may use the fuel pits when the in-line east fuel pits are down.

b. In this case, the requesting unit must obtain prior authorization from Airfield Operations before entering the in-line west fuel pits.

2. Taxi procedures. The standard procedure for aircraft entering the in-line pits is to approach from the south via Mike Taxiway and orient the aircraft to the north for refueling. Alternatively aircraft may enter from the north via Quebec Taxiway at Ground's discretion. Aircraft that enter from the north shall face in the direction they intend to exit the fuel pits while refueling. Refueling point 5 will be used primarily by KC-130 aircraft and refueling points 6-8 by rotary and tilt rotor aircraft. Aircraft other than KC-130 aircraft may refuel at pit 5 as long as KC-130 aircraft are not affected. Ground will clear aircraft into and out of the in-line west fuel pits. See Appendix B-1 for location.

3. Manning. Squadrons shall provide the necessary ground crews to man the nozzle operator and fire watch positions. All aircraft may taxi without a taxi director, following the taxi lines to the appropriate stopping point for their aircraft. Refer to references (e) and (t) for detailed refueling procedures and practices.

13007. REFUELING AIRCRAFT WITH ORDNANCE

1. Detailed instructions for hot refueling with ordnance aboard Marine Corps Air Station Miramar are contained in reference (x) NAVAIR 00-80T-103. Hot refueling of aircraft loaded with high explosive (HE) and hung ordnance of any type is prohibited. However refueling with the following is allowed:

a. Dummy ordnance.

b. Practice ordnance containing only flash or signal cartridges.

c. Training missiles without live warheads and motors.

d. Internally carried pyrotechnics and signal underwater sound charges.

e. Aircraft peculiar cartridge actuated devices (CADS).

f. De-armed internally mounted guns loaded with target practice ammunition.

g. USMC aircraft loaded with specific sympathetically initiated decoy flares and chaff as designated in references (e) and (t) are authorized for hot refueling operations.

2. Pilots shall inform Ground that all armament systems have been safed prior to entering the fuel pits.

3. Aircraft arming and de-arming shall occur in designated arm/de-arm areas prior to refueling aircraft.

4. Qualified personnel shall verify ordnance is safe prior to aircraft entering the fuel pits, defined as weapons safed in accordance with appropriate aircraft loading manuals.

5. Per reference (y), aircraft carrying decoy flares may cold refuel. Qualified personnel shall verify ordnance is safe prior to commencing any refueling operations.

6. Aircraft determined to have unsafe or suspect payloads shall not be refueled. Aircraft carrying any type of ordnance that cannot be safed in accordance with the applicable NAVAIRSYSCOM weapons and stores loading manual and checklist will not be refueled at MCAS Miramar.

7. Simultaneous cold or hot refueling, when cold or hot loading, or cold or hot downloading of weapons on USMC aircraft is authorized with restrictions listed in reference (y).

13008. FUEL SPILLS. Immediate action shall be taken when fuel spills occur to minimize the environmental impact.

1. All refueling operations shall cease immediately anytime a spill is observed and will not resume until all affected areas are thoroughly cleaned up. The aircraft's unit will be responsible for spill cleanup and hazardous waste disposal.

2. Upon arrival ARFF will become the on scene incident commander and will assume control of the spill area. ARFF will standby during cleanup and will make the determination on when the spill has been mitigated and when refueling in the area can resume.

3. Refer to Chapter 11 for further discussion of fuel spills and references (t) and (y) for detailed spill response procedures.

13009. DEFUELING SERVICES. The Fuels Branch provides defueling services 24 hours a day, 6 days per week Sunday through Thursday, Fridays from 0700-2300 and is closed Saturdays. Defueling services may be requested by contacting Fuels Dispatch at (858)307-1391/1393.

1. Aircraft defueling has the lowest priority for Fuels Branch operations on the flight line. Depending on the operational tempo, it may take 2 to 4 hours to respond to defueling requests.

2. The defueling process requires that fuels operators conduct an offsite evaluation of the fuel samples from each tank that is to be defueled. Once the sample has been evaluated offsite, the Fuels Dispatcher will contact the requesting unit to inform them that the defueling truck is enroute.

3. A defueling operation for an aircraft leaking fuel shall be considered an emergency and handled promptly. Units requesting emergency defueling will comply with the spill response, cleanup and reporting requirements listed in Chapter 11 and references (t) and (y).

13010. CRYOGENIC SERVICES. The Fuels Branch provides cryogenic services Monday through Friday from 0630-1500. Squadrons requiring cryogenic support will bring their cryogenic equipment for servicing to the LOX plant located at building 9221. For after-hours access to the LOX plant servicing area, squadron cryogenic personnel may check out keys to the servicing area from the MALS-11 ODO. Refer to reference (y) for specific cryogenic procedures and practices.

CHAPTER 14

TRANSIENT AND NON-TENANT AIRCRAFT OPERATIONS

14000. STANDARD PROCEDURES. The following procedures are established to provide guidance for aircrew and units that are not physical tenants of MCAS Miramar.

14001. NON-TENANT UNIT DEPLOYMENTS TO MCAS MIRAMAR. All non-tenant units planning to send a detachment to operate out of MCAS Miramar must conduct coordination with Airfield Operations no later than 90 days prior to arrival.

1. For planning purposes, a detachment is defined as a non-tenant unit that is planning to deploy to MCAS Miramar and conduct multiple daily flight operations with three or more aircraft, at any given time, for three days or more. To further clarify the definition of a detachment, the non-tenant unit will require multiple fueling and start-up evolutions each day, and can reasonably expect to conduct maintenance during the detachment. Detachments are expected to bring, and provide, their own maintenance support unless otherwise coordinated with a tenant unit or Airfield Operations. Detachments requiring AU47A-5 support, commonly known as a “huffer,” must provide two individuals per aircraft start. One individual must be plane captain qualification and the other must have a tug license.

2. Detachments may have a sponsor squadron volunteer to host them, and aid in operational planning and execution (i.e. airspace scheduling, sharing of office/maintenance spaces, fueling, GSE manpower support, etc…). Both the host unit, and detachment, will adhere to the procedures and requirements set forth in StaO 3550.1 reference (z) for requesting approval and accommodations to deploy at MCAS Miramar. Appendix C is an example of a detachment request

14002. HANDLING PROCEDURES FOR AUTHORIZED CIVILIAN AIRCRAFT LANDINGS

1. Commercial and civilian aircraft shall only be authorized to land at Miramar when operating in support of official business. These aircraft must receive a Prior Permission Required (PPR) number before conducting operations. Except during the annual Air Show, all commercial and civilian aircraft operating at Miramar shall abide by the following:

(a) PPRs shall be requested by contacting VAL during normal working hours.

(b) Procedures for requesting PPRs for aircraft arriving in support of the Air Show are addressed in the station Air Show instruction and bulletin.

(d) PPR numbers will only be issued to aircraft owners who hold a current civil aircraft landing permit.

(d) Military Aero Club aircraft are authorized to use MCAS Miramar only for official business travel per reference (ab). A PPR and written orders are required for military Aero Club aircraft to land at MCAS Miramar.

(e) The ODO shall ensure that the following items are completed for all commercial and civilian aircraft that land at MCAS Miramar either prior to an approved landing, or immediately after an emergency landing. The ODO shall ensure that:

(1) The aircraft is parked on the transient line.

(2) DD Form 2400 (Civil Aircraft Certificate of Insurance) is filled out.

(3) DD Form 2401 (Civil Aircraft Landing Permit) is filled out.

(4) DD Form 2402 (Civil Aircraft Hold Harmless Agreement) is filled out.

(f) The Civil Airlines Information Sheet [MCAS-MIR-SDIEGO 3770/5 (Rev. 6-99)] and the notification of the Comptroller and Supply Departments for the collection of monies due, if any, must be completed. See Appendix E-1 for a copy of the Civil Airlines Information Sheet.

(g) A flight plan, either DD-175, DD-1801, FAA form 7233-1, or FAA from 7233-4 shall be filed prior to departure. Flight plan forms are available at the ODO counter. The METOC Service Branch provides weather briefing services.

14003. HANDLING PROCEDURES FOR UNAUTHORIZED CIVILIAN AIRCRAFT LANDINGS

1. Airfield Operations will assume responsibility for private pilots to coordinate aircraft repair and/or expedite the departure when the aircraft is in a safe and operable status.

2. For airliners, Airfield Operations shall coordinate with the air carrier Operations Manager at Lindbergh Field to determine the disposition of passengers, aircrew, and aircraft.

3. Actions to be taken when airfield is open

a. Air Traffic Control (ATC)

(1) Pull the crash phone to notify ARFF, PMO, EOD, and the ODO

(2) Instruct the aircraft to exit the runway and taxi to one of the three designated inspection areas. Designated inspection areas, listed in order of preferred use, are the Strategic Lift Parking/Secondary CALA, 24R departure end arm/de-arm area, or the Primary CALA. ATC will determine inspection location that minimizes impacts to flight operations and provides the greatest stand-off area to tenant aircraft, equipment, and structures. ARFF will act as the follow-me vehicle, with PMO flight line security following in trail. If the pilot is not on one of ATC’s frequencies, ARFF will display the Ground Control frequency to the pilot via the large frequency sign maintained in each vehicle. Use the ALDIS Lamp to communicate as necessary.

(3) Do not land or taxi other aircraft near the unauthorized aircraft until cleared by PMO.

(4) Notify the FAA of the unauthorized aircraft via the Domestic Events Network (DEN).

(5) If the airfield is shut down by the unauthorized aircraft incident, notify SOCAL TRACON to divert inbound aircraft.

(6) Upon receiving the “All Clear” from PMO, relay via crash phone.

(7) Coordinate with SCT for departure appropriate based on pilot’s certifications and aircraft navigational capabilities. Preferred departure is VFR on runway heading at an appropriate altitude to allow for transition and hand-off to SCT. If IFR departure is required, ensure proper coordination with SCT to provide radar vectors to on-course or destination airport as appropriate.

b. Aircraft Rescue and Fire Fighting (ARFF)

(1) If the unauthorized landing is the result of an emergency, render aid before proceeding with unauthorized landing

(2) Position all available emergency vehicles in a manner to impede aircraft’s ability to easily access the parking ramp or buildings until PMO arrives. Authorized to use roof or bumper turret as necessary

(3) Do not use force to detain pilot unless life or property are in imminent danger

(4) Perform duties as the follow-me vehicle to designated inspection area as directed by ATC. VAL will assume these duties once “All Clear” is given.

c. Provost Marshal’s Office (PMO)

(1) Secure/contain the unauthorized aircraft.

(2) Detain the pilot and any passengers on-board the aircraft.

(3) Search the aircraft and seize any contraband. If necessary, contact additional enablers (i.e. EOD or the San Diego Police Department). Employ military workings dogs whenever possible during the search of the aircraft.

(4) Once pilot, passengers when required, are detained and the aircraft is cleared of contraband (if applicable), give “All Clear” signal to ARFF, ATC, and VAL.

(5) If determined that the pilot had criminal or hostile intent, continue processing as an unlawful entry. Aircraft will remain in inspection area until PMO, or investigating authority, gives permission to relocate it to transient line parking. If determined that the pilot did not have criminal or hostile intent, cite as required and release so that the pilot can re-position aircraft to transient aircraft parking.

d. Airfield Operations Duty Officer (ODO)

(1) Notify VAL, Operations Officer/Chief, Station CDO, Squadron ODOs, COMMSTRAT, and CP&L of the unauthorized landing.

(2) Notify the Station Aviation Safety Officer if an unauthorized landing occurred subsequent to an emergency.

(3) Contact EOD via EOD duty cell phone at (858)864-4201 if incident occurs after 1630L Monday thru Friday, weekends, or holidays.

(4) Ensure the following are completed prior to the pilot departing the Air Station:

(a) Pilot statement.

(b) Contact information, to include a local phone number and address.

(c) A copy of the pilot's license, driver’s license, aircraft registration, and airworthiness certificate.

(d) A DD Form 2400 (Civil Aircraft Certificate of Insurance), DD Form 2401 (Civil Aircraft Landing Permit), and DD Form 2402 (Civil Aircraft Hold Harmless Agreement).

(5) Any landing fees that are deemed necessary by the Commanding Officer will be handled in accordance with reference (ab).

(6) Arrange transportation for the pilot and any passengers if necessary.

(7) Once the pilot has completed all required documents, and received permission to depart from the Airfield Operations Officer or Assistant Airfield Operations Officer, coordinate with ATC the date, time, and type of departure required, VFR or IFR. The Airfield Operations Officer or Assistant Airfield Operations Officer will determine type of departure based on pilot’s certifications and aircraft navigational capabilities.

e. Visiting Aircraft Line (VAL). Upon receiving the “All Clear” from PMO, tow or lead the unauthorized aircraft to the transient line with the follow-me vehicle.

f. Explosive Ordnance Disposal (EOD). When requested by PMO, EOD will exploit, render safe, and provide final disposition for any item that is a suspected improvised explosive device. EOD is available 24/7. After 1630L, Monday thru Friday, and during weekends and holidays, ODO shall contact EOD via the EOD duty cell phone at (858)-864-4201.

4. Actions to be taken when the airfield is closed.

(1) Identify unauthorized landing due to no ATC on duty.

(2) Notify PMO, EOD, Operations Officer/Chief, and Station CDO. EOD will be contacted via EOD duty cell phone at (858)864-4201.

(3) If the unauthorized landing is the result of an emergency, render aid before proceeding with unauthorized landing response.

(4) Position all available emergency vehicles in a manner to impede aircraft’s ability to easily access the parking ramp or buildings until PMO arrives. Authorized to use roof or bumper turret as necessary.

(5) Do not use force to detain pilot unless life or property are in imminent danger.

(6) Perform duties as the follow-me vehicle to the designated inspection location. VAL will assume follow-me duties once they have arrived, and PMO has given the “All Clear”.

b. Provost Marshal’s Office (PMO)

(1) Secure/contain the unauthorized aircraft.

(2) Detain the pilot and any passengers on-board the aircraft.

(3) Search the aircraft and seize any contraband. If necessary, contact additional enablers (i.e. EOD or the San Diego Police Department). Employ military workings dogs whenever possible during the search of the aircraft.

(4) Once pilot, passengers when required, are detained and the aircraft is cleared of contraband (if applicable), give “All Clear” signal to ARFF, ATC, and VAL.

(5) If determined that the pilot had criminal or hostile intent, continue processing as an unlawful entry. Aircraft will remain in inspection area until PMO, or investigating authority, gives permission to relocate it to transient line parking. If determined that the pilot did not have criminal or hostile intent, cite as required and release so that the pilot can re-position aircraft to transient aircraft parking.

(6) Maintain any and all evidence.

c. Airfield Operations Officer/Manager/Chief

(1) Recall VAL to provide support.

(2) Notify SOCAL TRACON at (858)537-5946, COMMSTRAT, and CP&L.

(3) Notify the Station Aviation Safety Officer if an unauthorized landing occurred subsequent to an emergency.

d. Visiting Aircraft Line (VAL)

(1) Upon receiving the “All Clear” from PMO, tow or lead the unauthorized aircraft to the transient line with the follow-me vehicle.

(2) Ensure the following is completed prior to the pilot departing the Air Station:

(a) Pilot statement.

(b) Contact information, to include a local phone number and address.

(c) A copy of the pilot's license, driver’s license, aircraft registration, and airworthiness certificate.

(d) A DD Form 2400 (Civil Aircraft Certificate of Insurance), DD Form 2401 (Civil Aircraft Landing Permit), and DD Form 2402 (Civil Aircraft Hold Harmless Agreement).

(3) Any landing fees that are deemed required by the Commanding Officer will be handled in accordance with reference (ab).

(4) Aircraft will remain overnight and/or until airfield is opened for normal operations.

5. Except during the annual Air Show, the following procedures shall apply to all commercial and civilian aircraft operating at Miramar:

a. Parking will be on the transient line.

b. Unless in an emergency, air carrier passengers shall remain in the aircraft until they can be loaded directly onto a bus or directly escorted into the VAL building.

6. Practice approaches by civil aircraft are not authorized, except those possessing an authorized DOD Landing Permit.

14004. INTERNATIONAL ARRIVALS. Customs, immigration, and agriculture inspections may be made available with 24-hour prior notice by contacting the VAL.

14005. NOISE ABATEMENT. All visiting and transient aircrew and detachments shall comply with noise abatement procedures as defined in Chapter 8.

14006. COMPLIANCE WITH LOCAL FLIGHT REGULATIONS. All visiting and transient aircraft and detachments shall comply with applicable procedures in this Manual.

CHAPTER 15

VISITING AIRCRAFT LINE OPERATIONS

15000. GENERAL INFORMATION. This chapter expands specific topics related to Visiting Aircraft Line (VAL) operations.

1. The Transient Chief is responsible for ensuring that visiting pilots and crewmembers receive every courtesy and service available during their stay at MCAS Miramar.

2. Transient aircraft will be parked on the VAL unless prior coordination has been made for host squadron parking. Transient aircraft hosted by a tenant squadron will receive maintenance assistance from that squadron's maintenance department.

3. All VIP aircraft can expect to be parked in front of the Airfield Operations Building.

4. Transient aircraft hosted by a tenant squadron will obtain all services, including ground transportation aboard the air station, from the host unit. Transient aircraft parked on the VAL requiring maintenance will be coordinated through VAL personnel and tenant maintenance facilities. Maintenance support for such aircraft is extremely limited.

5. Pilots-in-command of visiting aircraft are responsible for the security of all equipment left aboard their aircraft. Transient pilots-in-command/formation leaders are required to file flight plans either in person or via the remote filing service with MCAS Miramar Flight Clearance prior to their departure.

6. Civilian aircraft desiring to land at MCAS Miramar must comply with the requirements of reference (ab) prior to arrival. In the event of an emergency landing, the required Aviation Facility License and Application Form must be completed prior to departure per reference (ab). The statement of conditions pertaining to the emergency should be included on the license form. The Airfield ODO will assist in the preparation of all paperwork. See Chapter 14 for more information.

15001. PRIOR PERMISSION REQUIRED (PPR) INFORMATION

1. All transient aircraft must obtain a Prior Permission Required (PPR) number before landing at MCAS Miramar. PPRs may be obtained by calling the VAL. For phone numbers see Appendix Y-1 or Y-2.

2. VIPs shall receive priority handling. These PPRs will be issued by the VAL and then phone transferred to the Airfield ODO to record information pertinent to the VIP visit.

3. A tenant squadron planning to pick up or drop off passengers and/or cargo on the Transient Aircraft Line in front of the Airfield Operations building must obtain a PPR prior to conducting this passenger/cargo evolution. This will ensure that the VAL has the appropriate taxi director(s), personnel, and other equipment in place for support.

4. Foreign aircraft will be required to have a Naval Aircraft Landing Number (NALAN) issued by the Chief of Naval Operations.

5. Civilian aircraft may not land at MCAS Miramar unless in possession of a valid Naval Facilities License per reference (ab) or experiencing an actual aircraft emergency.

6. Transient aircraft are not permitted to keep live or inert ordnance loaded overnight with the exception of captive air training missiles (CATMs), which must be properly stored, and they must be hosted by a tenant squadron. Uploading services are not available from either the MCAS Miramar Airfield Operations Department or the VAL. Hosted transient aircraft will comply with the ordnance overnight restrictions and requirements discussed in Chapter 12, paragraph 12005.7 of this Manual.

15002. DISTINGUISHED VISITORS (DVs)/VIPs

1. Upon receipt of an ETA for a Code 7 or higher, the Station ODO will notify all personnel/agencies identified in notification checklist located in the ODO desktop procedures. Refer to Appendix A-2 for some common Military VIP Codes. See reference (ad) for a complete list.

2. DVs/VIPs and their aircrews will be provided every applicable courtesy. The ODO will ensure that transportation is coordinated and available upon arrival. Aircraft either picking up or dropping off DVs/VIP passengers are normally parked in front of the Airfield Operations building.

3. The VIP lounge is available on the first floor of the Airfield Operations Building to accommodate DVs/VIPs during delays on the deck. It is equipped with amenities including a telephone, a television, and a restroom.

15003. AIR FREIGHT AND PASSENGER SERVICE

1. The Air Freight/Passenger Service Section is available to provide normal service associated with passengers and/or freight arriving or departing from the Passenger (PAX) Terminal, the VAL, the VIP Lounge, or the Airfield Operations lobby. The Air Freight/Passenger Service Section is located within the VAL Section’s Building 9100, just west of aircraft parking Ramp 3.

2. Customs must be notified of all flights originating from any location outside of the United States and its territories. Section 15009 of this chapter provides more information.

3. Passenger and cargo manifesting services are provided. Units shall check in with the Air Freight and Passenger Office four hours prior to the scheduled flight departure, and individual passengers shall check in two hours prior for space available flights.

15004. REFUELING SERVICES

1. Contract fuel delivery is available during normal airfield operating hours. Refer to the current IFR Enroute Supplement for types of fuel available.

2. Hot refueling services are available only during airfield hours. Transient aircraft desiring to use the hot pits must provide a trained and ready ground crew to refuel their aircraft. Otherwise, cold refueling by truck will be provided.

3. Contact the MCAS Miramar Fuel Division for all fuel requests. See Appendix Y-1 or Y-2 for airfield phone directories.

4. Priority fuel requirements will be handled by contacting the VAL.

15005. TRANSPORTATION

1. VAL personnel will meet all transient aircraft and provide transportation for crew members to Airfield Operations only.

2. Commercial bus transportation is available from the MCAS Miramar main gate to the local area.

3. It is advisable for all transient crew to make hotel/rental car reservations before arriving at MCAS Miramar.

4. Transportation off base will not be provided by VAL personnel. All means of securing transportation to and from the Passenger Terminal will be the aircrew's responsibility. If an aircraft arrives after local transportation agencies are closed, the Transient Chief will make a phone available for patrons to secure a taxi cab.

15006. AVAILABLE ACCOMMODATIONS

1. Limited messing and berthing facilities are available aboard the Air Station for both enlisted and officer personnel. "Government Quarters Not Available" stamps are available at the Consolidated Bachelor Quarters (CBQ) office (Building 4312). Space is extremely limited. Prior liaison with the CBQ office for both enlisted and officer bachelor accommodations is required. Billeting assignments will be made through the CBQ Reservations Desk (Building 4312), telephone number commercial (858) 307-4235, DSN 307-4235.

2. Messing for officer and enlisted personnel is available at the MCAS Miramar Galley (Building 5500).

15007. STORAGE OF CLASSIFIED MATERIALS AND WEAPONS. There are no provisions for storing classified material or weapons at the Air Terminal or Airfield Operations Building. Couriers or other personnel desiring to store such publications or weapons should contact the Airfield ODO who will coordinate for the proper safeguarding of classified material or weapons.

15008. SPACE AVAILABLE TRANSPORTATION INFORMATION

1. Registration for space available transportation may be made by phone (858) 307-4283, by fax (858) 307-8729, or in person at the Space Available Counter located in the Passenger Terminal, Building 9100.

2. Show time for all space available passengers will be two hours prior to departure time.

3. For eligibility on Space "A" Air Transportation, refer to reference (ad).

4. For further information about Space "A" travel and available flights, contact the VAL.

15009. CUSTOMS, AGRICULTURAL, AND IMMIGRATION INSPECTIONS

1. Customs and Agricultural Inspections are required for all aircraft arriving from all foreign or American overseas bases (Alaska, Hawaii, and Puerto Rico excluded for customs). Additionally, an immigration inspection is required whenever a civilian passenger is aboard an aircraft arriving from overseas.

2. Customs, Agricultural, and Immigration Inspectors are available with a minimum of 24 hours prior notice for scheduling. During normal working hours contact Customs at Lindbergh Field, telephone (619) 307-5370; after working hours contact Customs at (619) 690-8800, extension 8850.

3. Aircraft arriving from American overseas bases, which have been pre-cleared through customs, should indicate this clearance in the remarks section of the DD-1801 or ICAO Flight Plan. Copies of the Passenger Manifest will be provided to the Customs Representative immediately upon arrival.

15010. IN-FLIGHT MEALS

1. In-flight meals may be obtained by contacting VAL. VAL and MCAS Miramar Food Services require a prior notice of three working days to coordinate and provide in-flight meals.

2. VAL personnel will provide the necessary forms and information required for ordering in-flight meals. These meals must be paid for upon receipt. Locally based units shall prepare and submit request forms directly to the MCAS Miramar Food Services Officer.

3. The Food Services Officer will consider short-notice in-flight meal requests on a case-by-case basis, i.e. for transient aircrews, emergency response aircrews, or short-fused critical flight support missions.

CHAPTER 16

AIRFIELD SECURITY/GROUND OPERATIONS

16000. Airfield Security. The Provost Marshal is responsible for security aboard the airfield. This is accomplished through a combination of physical security measures and enforcement of access control policy. The Operations Department coordinates with the Provost Marshal to safely conduct aviation operations, identify potential threats, and manage risk.

1. During a terrorist/security incident, the Provost Marshal Office (PMO) provides an Incident Commander who is responsible for resolving the situation. This includes coordinating with responding agencies, i.e., the San Diego Police Department (SDPD) Northeast Division. SDPD is on call to respond to any incident (if requested).

16001. Airfield Security Coordination. Airfield Operations and PMO shall coordinate security requirements as directed in the following paragraphs.

1. Airfield Operations sections/personnel shall comply with the procedures identified below.

a. Airfield Operations Officer

(1) Develop procedures, procure equipment, and provide training and enforcement regarding vehicle operations.

(2) Ensure overall aircraft and personnel safety on the airfield.

b. Airfield Operations Duty Officer (ODO)

(1) Monitor and maintain awareness with all personnel operating or conducting business on the airfield to ensure their presence is authorized.

(2) Research violations and enforce compliance with the Airfield Driver/Vehicle Operator Indoctrination Course (AVOIC) program for personnel and aircrew operating on the airfield, to include flight line license checks, speeding, and vehicle operations within the movement/non-movement areas. Take corrective action as required by relevant directives.

(3) Provide escort services as required for all visitors or contractors upon request, especially for non-radio equipped vehicles on the flight line.

(4) Assist Airfield Operations and Air Traffic Control (ATC) personnel with authorizing access to the flight line.

c. ATC

(1) Implement a tiered license identification badging system that permits easy recognition of vehicles and drivers in the movement and non-movement areas of the flight line.

(2) Establish a curriculum for initial, remedial, or recurrent instruction and training for personnel and contractors who require access to the flight line.

(3) Maintain training records and a database of driver licenses issued to all individuals authorized to operate on the flight line.

(4) Assist Airfield Operations personnel with authorizing and issuing driver licenses to all personnel operating on the flight line.

(5) Report all ground vehicle violations to the Airfield ODO or Airfield Operations Officer for action.

d. Mission Assurance-Installation Protection

(1) Monitor the Force Protection Condition (FPCON) and coordinate with the Airfield Operations Officer regarding issues that may affect flight operations.

(2) Ensure FPCON requirements are implemented in accordance with antiterrorism and physical security plans.

(3) Ensure Mass Notification Systems are operable and tested on a regular basis.

(4) Be prepared to stand up the Emergency Operations Center (EOC) during emergencies, mishaps, drills/exercises, and special events like the MCAS Miramar Air Show.

(5) Coordinate training exercises involving Airfield Operations, ARFF, PMO, Fire, and other emergency responders in order to be prepared for multiple scenarios, i.e., Active Shooter, Mass Casualty, and Aircraft Mishap.

2. PMO

(1) Assist the Airfield ODO with conducting random license checks on the flight line of all visitors and contractor personnel.

(2) Perform random perimeter checks of the flight line for suspicious activity, especially during airfield non-operating hours.

(3) Ensure that inspections, briefing, or training as required are provided to all vehicle delivery drivers accessing the flight line.

(4) Respond to all aircraft emergencies, mishaps, and hangar emergencies on the flight line to provide support as needed to AirOps and ARFF personnel.

(5) Establish policies and procedures for surrendering flight line driver licenses, permits, or placards to AirOps personnel when a vehicle or an individual is no longer authorized to operate on the flight line.

(6) Ensure that all flight line gates, automated entry control systems, and perimeter fencing are in working condition and secured as required by a Level 2 Restricted Area.

(7) Encode Common Access Cards (CAC) and RAPIDGate cards for tenants, transient personnel, and contractors granted access to the flight line after authorization has been obtained through AirOps.

(8) Report all ground vehicle or pedestrian violations on the flight line to the Airfield ODO.

16002. Airfield Access - Automated Entry Control System (AECS). Only authorized military and civilian personnel will be allowed access onto the airfield through the AECS.

1. Automated access to the flight line is obtained through the PMO Physical Security Office. Once written authorization is obtained through Airfield Operations, authorized personnel will have access encoded on their CAC/RAPIDGate credential. Individuals that do not rate a CAC/RAPIDGate credential must be escorted by authorized personnel. Access onto the airfield is then accomplished by presenting or swiping the encoded ID card/ credential at the turnstile gate or the vehicle access gate card readers, depending on the access granted. After entering the vehicle access gate, the driver shall wait until the gate closes behind the vehicle before proceeding.

2. Personnel on foot are not authorized to use the vehicle access gates to enter the airfield; they should only enter the airfield through pedestrian turnstiles.

3. All additional requests for vehicle access to the airfield shall be considered by the Airfield Operations Officer, Assistant Airfield Operations Officer, or Airfield Operations Chief on a case-by-case basis. The vehicle operator must be able to produce a valid Airfield Driver License, proof of current insurance, current vehicle registration, and nature of business when requesting vehicle access onto the airfield.

16003. Vehicular Traffic on the Airfield. All personnel intending to drive on the airfield shall complete the requirements listed below.

1. AVOIC. In accordance with reference (a) all personnel who operate vehicles on the airfield, to include Ground Support Equipment (GSE) vehicle operators, shall either attend the AVOIC given by ATC personnel only for airfield drivers accessing the movement area (i.e. runways, taxiways, helo spots, fuel pits, CALA, etc.), or view the Ramp/Non-Movement PowerPoint slideshow via the AirOps SharePoint site for airfield drivers accessing the non-movement area (i.e. vehicle traffic lanes, hangar spaces, ramp spaces, etc.). Attendance at this course for movement area drivers, or viewing the PowerPoint slides for non-movement area drivers shall be documented and an Airfield Driver License will be issued to all personnel prior to operating a vehicle within the airfield boundary.

a. Personnel will have their Airfield Driver License in possession anytime they are operating a vehicle or GSE on the airfield. Typically movement area licenses are green in color, and non-movement area licenses are yellow in color with the operator’s info (i.e., name, unit, type of access, and expiration date) on the license for easy identification of privileges on the flight line. If any personnel or individual does not possess a CAC, a photo shall be imprinted onto the license.

b. Airfield Driver Licenses for movement area drivers shall expire annually. Airfield Driver Licenses for non-movement area drivers shall expire in line with their CAC, or three (3) years from the date of issuance, whichever comes first. This criteria does not apply to transients, visiting units, deployed units, or contractor personnel onboard MCAS Miramar, and their licenses will expire at the end of their visitation period or contract.

2. Vehicle/Fire lane. A vehicle/fire lane runs along the northern edge of the ramps directly in front of the hangars. This vehicle/fire lane serves several purposes:

a. It provides a clear path on the flight line for vehicles to transit.

b. It ensures that vehicles are not traveling between aircraft parked on the ramps, thereby greatly reducing the chance of a collision with an aircraft, equipment and personnel.

c. It is to be used by emergency vehicles responding to emergencies in the immediate vicinity of the hangars unless otherwise directed.

d. For the reasons listed above, it is imperative that tenant units on the flight line ensure that the vehicle/fire lane in front of their respective hangar remains clear, and they are prohibited from blocking this lane with aircraft, GSE, embark boxes, or any other equipment/item that will obstruct the lane.

3. General Operating Procedures

a. All vehicles requesting to cross Runways 24R/L shall be instructed to use the perimeter road. Those vehicles unable to utilize the perimeter road due to operational necessity are authorized to request to cross the runways at the approach end of 24R/L. All Airfield Operations vehicles are authorized to request to cross at all approved runway crossing points.

b. All vehicles on the airfield, both radio and non-radio equipped, should use the vehicle/fire lane to the maximum extent possible.

c. All vehicles except those responding to an emergency on the airfield shall give way to taxiing aircraft.

d. Vehicles responding to an emergency on the airfield have right of way over ALL vehicles and taxiing aircraft. When an emergency is in progress on the airfield, all non-emergency response vehicles and taxiing aircraft shall utilize caution and hold their position if advised by ATC.

e. All non-radio equipped vehicles and non-licensed personnel must receive clearance from the ODO before entering the airfield. Privately owned vehicles (POVs) will not be permitted on the airfield parking aprons, taxiways, runways, or immediate surrounding areas, unless specific permission is obtained from the Airfield Operations Officer or Airfield Operations Chief. All vehicles proceeding onto taxiways or runways are required to follow all radio instructions from the control tower. Non-radio equipped vehicles must be continuously escorted by a radio equipped vehicle or aircraft. Authorized non-radio equipped vehicles may use the designated vehicle/fire lane adjacent to the northern edge of the ramp areas (running in front of the hangars), or on the perimeter road (Walsh Road, Austin Avenue, or Johnson Road) without a radio-equipped escort.

f. Only radio-equipped or escorted vehicles will be cleared by the tower to cross an active runway.

g. Radio-equipped vehicles contact Miramar Ground on 148.3125 MHz for clearance to proceed across runways.

h. Vehicles not radio-equipped or that experience radio failure shall use the perimeter roadway when proceeding to or from the south side of the field.

i. Maximum speed for all vehicles, except forklifts, on all airport surface areas (runways, taxiways, vehicle fire lanes, etc.) is 15 MPH unless responding to an emergency or when asked to expedite by the control tower. The maximum speed for forklifts on the airfield is 7 MPH. All vehicles operating in close proximity to aircraft, hangars and personnel (including the Vehicle Fire Lane) shall not exceed 5 MPH. Driving regulations shall be enforced in accordance with reference (v). At no time shall a vehicle responding to an emergency be driven in excess of a safe and reasonable speed for the existing daylight, weather, or surface conditions.

j. At night, vehicles in the parking apron area will illuminate their amber rotating beacon, headlights or parking lights only when in the vicinity of aircraft.

k. At night, vehicles operating on Runways 24R/06L and south thereof will have white headlights (if equipped) and amber fog lights on (if equipped). Operators must ensure their headlights do not blind Landing Support Officers (LSO) and/or pilots operating aircraft on the ground or in the air. If the possibility exists of blinding any of the above, headlights shall be extinguished before they create a hazard. The vehicle shall proceed with only amber lights or parking lights provided it no longer presents a hazard to LSOs/pilots. If vehicle movement is not safe using this lighting configuration, the vehicle shall remain stopped until using headlights is no longer a hazard.

l. Foreign Object Damage (FOD) is an ever-present problem. Vehicle operators shall keep their vehicles on concrete surfaces to the maximum extent possible to reduce the amount of rocks and debris carried onto aircraft operating areas. Asphalt surfaces shall be used only when necessary to avoid aircraft. Unpaved surfaces shall not be used unless absolutely necessary to gain access to an area on the airfield. Vehicle operators shall pick up FOD when observed and/or report FOD areas to the control tower or the ODO. Upon entering the vehicle access gate the driver shall exit the vehicle, check for FOD in the tire treads and ensure that all gear is secure.

m. Vehicle operators shall drive on prepared surfaces around the airfield to the maximum extent possible. In addition to the FOD hazard discussed above, numerous environmentally sensitive areas exist all around the airfield, and some of these are identified by signs and/or by small marker flags in the ground surrounding these areas. Other areas are not identified at all. Vehicles straying into environmentally sensitive areas run the risk of destroying endangered wildlife and their habitat. Additionally, MCAS Miramar could be assessed federally mandated fines, and the operator of the vehicle could subject to criminal prosecution.

n. Non-radio equipped vehicles must obtain a radio from the ODO to maintain voice communication with Miramar Ground Control.

o. All vehicles not regularly used on the airfield that are non-radio equipped shall carry and display a 3-foot square flag attached to a staff and flying above the vehicle, or be equipped with an amber rotating beacon, whenever operations on aircraft operating areas are necessary. The flag

shall consist of a checkerboard pattern of international orange and white squares not less than one foot on each side.

p. POVs are prohibited in the CALAs.

4. Towing Aircraft

a. Permission must be obtained from the ODO prior to towing aircraft on aircraft movement areas, i.e., runways and taxiways. All tow vehicle operators must have a radio escort to cross any runway, and the ODO shall be contacted if a radio escort is required.

b. An aircraft may be towed to any location on the ramp area at squadron discretion. Aircraft towed to and from the fuel pit area shall use the designated tow lane immediately north of the inboard taxiway.

c. Aircraft being towed shall have wing walkers and a qualified safety observer who shall be ready to apply brakes if necessary.

d. Tow vehicles shall operate with amber headlights on during hours of darkness.

e. Aircraft and equipment under tow during hours of darkness shall display aircraft position lights or other adequate external lighting to prevent collision by other vehicle/aircraft operators.

f. Taxiing aircraft have the right-of-way over all vehicles and equipment under tow.

g. Tow vehicle operators must have a valid GSE Driver License and Airfield Driver License.

5. Enforcement

a. All vehicles operated on the airfield at MCAS Miramar are subject to being stopped by any PMO personnel, the Airfield Operations Officer, Airfield Operations Chief, or duty ARFF crew.

b. Vehicle operators are required to produce an Airfield Driver License at the request of any PMO personnel, Airfield Operations Officer, Airfield ODO, or Airfield Operations Chief.

c. Vehicle operators believed to be in violation of established airfield driving procedures will be escorted to Airfield Operations, Building 9211, where they will be brought to the Airfield Operations Chief.

d. Violations of established airfield driving procedures will be reported to PMO, Station, Wing, Group and Squadron Safety Officers. Repeat offenders or vehicle operators who are considered major safety violators will have their Airfield Driver License suspended or revoked by the Airfield Operations Officer and/or Airfield Operations Chief.

e. In cases where vehicles are found operated by individuals without a valid Airfield Driver License, the operator will automatically be escorted to the Airfield Operations Chief or Airfield Operations Officer in Airfield Operations, Building 9211. The individual’s Staff Non-Commissioned Officer

(SNCO) or immediate supervisor will be required to come to Airfield Operations to pick up the operator.

16004. Pedestrian Traffic on the Airfield. The only pedestrians allowed on the airfield shall be personnel in direct support of flight operations aboard the airfield such as aircrew, wing walkers, hot brake checkers, aircraft, surface electronics maintenance personnel, and Airfield Operations personnel. Station S-4 awarded contractors are authorized onto the airfield, but are limited to the area(s) of their work and travelling the shortest distance from entering the airfield to their job site(s). Contractors shall submit a list or employees to the Airfield Operations Officer through Station S-4.

1. Pedestrians not in direct support of flight operations aboard the airfield shall be under escort at all times to ensure their safety and security of airfield assets. Airfield Operations, 3d MAW units, etc. may authorize access and escort these pedestrians.

a. Such personnel would include members of the press, family members or friends of personnel assigned to the airfield, school, or community groups for PAO authorized tours, etc.

b. During normal working hours, visitors who require airfield access will be the responsibility of the unit sponsoring the visitors.

c. After normal working hours the access notification process will consist of squadron duty personnel alerting the Military Police Dispatcher that entry to the secured aircraft parking area is required. The military dispatcher will then hang up and call the squadron duty personnel back to verify the authenticity of the call. The dispatcher will inform the appropriate MP flight line sentry of the identities of these personnel approved for access and verify them at the entry site if they are not in the AECS database.

2. For further information or to answer questions about access to the airfield, contact Airfield Operations. See Appendix Y-1, or Y-2 for phone numbers.

APPENDIX A-1

ABBREVIATIONS

AECS	Automated Entry Control Point
AFD	Airfield Fueling and Defueling
AIM	Aeronautical Information Manual
ALD	Aviation Logistics Division
AMB	Aircraft Mishap Board
APU	Auxiliary Power Unit
ARFF	Aircraft Rescue & Firefighting
ARG	Amphibious Ready Group
ARTCC	Air Route Traffic Control Center
ASR	Airport Surveillance Radar
ASO	Aviation Safety Officer
ATC	Air Traffic Control
ATCMD	Air Traffic Control Maintenance Division
ATCT	ATC Tower
ATCF	ATC Facility
ATCFO	ATC Facility Officer
ATIS	Automatic Terminal Information Service
ATREP	Air Traffic Representative
CADS	Cartridge Activated Devices
CALA	Combat Aircraft Loading Area
CATM	Captive Air Training Missile
CBQ	Combined Bachelor Quarters
CDO	Command Duty Officer
CG	Commanding General
CO	Commanding Officer
CONUS	Continental United States
CP&L	Community Plans & Liaison
DME	Distance Measuring Equipment
DOD	Department of Defense
DP	Departure Procedure
DV	Distinguished Visitor
ELT	Emergency Locator Transmitter
EMD	Environmental Management Department
EOC	Emergency Operations Center
EOD	Explosive Ordnance Disposal
ESO	Explosive Safety Officer
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
ETE	Estimated Time Enroute
FAA	Federal Aviation Administration
FACSFAC	Fleet Area Control and Surveillance Facility
FAR	Federal Aviation Regulation
FCLP	Field Carrier Landing Practice
FLIP	Flight Information Publication
FLOLS	Fresnel Lens Optical Landing System
FOD	Foreign Object Damage/Debris
FSDO	Flight Standards District Office
GCA	Ground Controlled Approach
GEMD	Ground Electronics Maintenance Division
GIS	Geographic/Geospatial Information System
GP	General Planning
GOVAIR	Government Air
GSE	Ground Support Equipment
HAZMAT	Hazardous Material
HE	High Explosives
Helo	Helicopter
HERO	Hazards of Electromagnetic Radiation to Ordnance
HLGD	Hung Landing Gear Device
HMH	Marine Heavy Helicopter Squadron
HMLA	Marine Light Attack Helicopter Squadron
H&HS	Headquarters and Headquarters Squadron
ICAO	International Civil Aviation Organization
IFLOLS	Improved Fresnel Lens Optical Landing System
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
LHD	Landing Helicopter Deck (ship or simulated deck for FCLP operations)
LOA	Letter of Agreement
LOX	Liquid Oxygen
LSO	Landing Signal Officer
MAG	Marine Air Group
MALS	Marine Aviation Logistics Squadron
MAW	Marine Aircraft Wing
MCAS	Marine Corps Air Station
MCC	Miramar Communications Center
METOC	Meteorological and Oceanographic
MEU	Marine Expeditionary Unit
MSL	Mean Sea Level
MWSS	Marine Wing Support Squadron
NAF	Naval Air Facility
NALAN	Naval Aircraft Landing Number
NATOPS	Naval Aviation Training and Operating Procedures Standardization
NAVAIRSYSCOM	Naval Aviation Systems Command
NAWS	Naval Air Weapons Station
NEW	Net Explosive Weight
NIMA	National Imagery Mapping Agency
NM	Nautical Mile
NOLF	Naval Outlying Landing Field
NORDO	No Radio
NOTAM	Notice to Airmen
NVD	Night Vision Device
NVGs	Night Vision Goggles
ODO	Operations Duty Officer
OLS	Optical Landing System
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	Office of the Chief of Naval Operations Instruction
PAPI	Precision Approach Path Indicator
PAR	Precision Approach Radar
PAX	Passengers
PIC	Pilot in Command
PMO	Provost Marshal’s Office
POV	Privately Owned Vehicle
PPR	Prior Permission Required
RCC	Rescue Coordination Center
RWY	Runway
SAR	Search and Rescue
SOCAL	Southern California
SOPs	Standard Operating Procedures
SVFR	Special VFR
TACAN	Tactical Navigation System (UHF)
TFOA	Things Falling Off Aircraft
TP	Target Practice
TRACON	Terminal Radar Approach Control
TWS	Tower Watch Supervisor
TWY	Taxiway
U.S.	United States
USMC	United States Marine Corps
VFR	Visual Flight Rules
VAL	Visiting Aircraft Line
VIP	Very Important Person
VMC	Visual Meteorological Conditions
VMGR	Marine Aerial Refueler Transport Squadron
VMFA	Marine Fighter Attack Squadron
VMFAT	Marine Fighter Attack Training Squadron
VMM	Marine Medium Tiltrotor Squadron
VMR Det	Marine Transport Squadron Detachment
3D MAW	Third Marine Aircraft Wing

APPENDIX A-2

VIP CODES

MARINES	CODE	NAVY	CODE	AIRFORCE	CODE	ARMY	CODE
CMC	M2	SECNAV	V2	SECAF	A2	SECARMY	R2
ASST CMC	M3	VCNAVOPS	V3	ASSTSECAF	A3	ASSTSECAR	R3
O-9	M4	O-9	V4	O-9	A4	O-9	R4
O-8	M5	O-8	V5	O-8	A5	O-8	R5
O-7	M6	O-7	V6	O-7	A6	O-7	R6
O-6	M7	O-6	V7	O-6	A7	O-6	R7

(See FLIP GP for complete list)

APPENDIX A-3

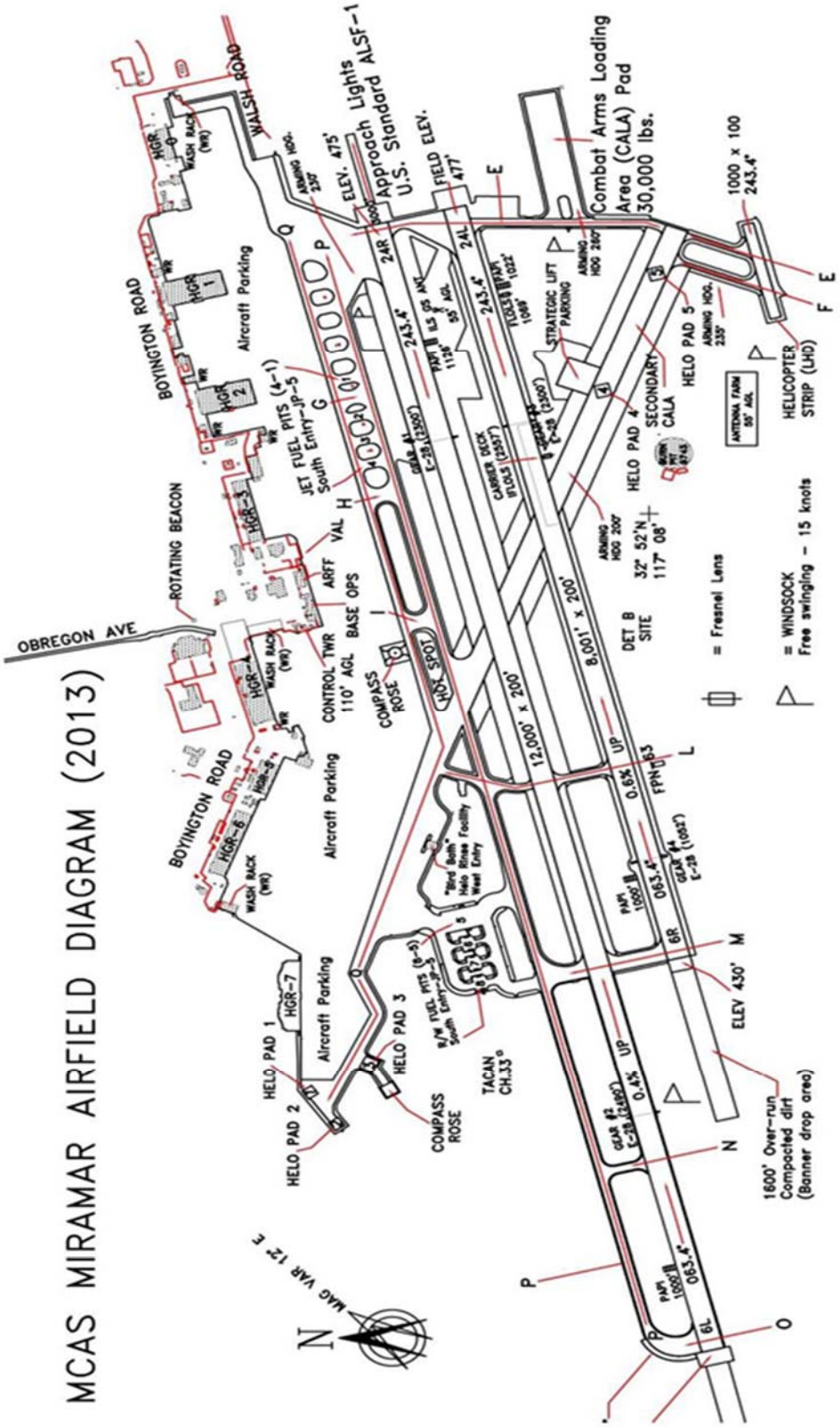
OBSTRUCTIONS/PROMINENT OBJECT HEIGHTS

The following obstructions or prominent objects on or near the airfield may constitute hazards to flight operations:

OBSTRUCTION	LOCATION	HEIGHT (MSL)
Control Tower	1,500′ north of Rwy 24R	562′
Rotating beacon	2,500′ north of Rwy 24R	536′
Black Mountain	NKX 003R/6.9 DME	1,563′
Mt. Woodson	NKX 033R/12 DME	2,894′
Holiday Inn	NKX 038R/2.1 DME	610′
Iron Mountain	NKX 045R/11.8 DME	2,696′
Hangars	1,300′ north of Rwy 24R	None above 530′
UCSD Antennas	NKX 052R/4.0 DME	990′
Aerial Cable	NKX 059R/6.9 DME	1,132′
Ridge Line	NKX 060R/3.7 DME	859′
Ridge Line	NKX 064R/5.7 DME	1,059′
Water Tank	NKX 084R/2.4 DME	600′
Mt. Fortuna	NKX 092R/5.0 DME	1,292′
Cowles Mountain	NKX 105R/7.0 DME	1,612′
San Miguel Mountain	NKX 120R/15.1 DME	2,791′
Radio Antenna sites	1,800′ south of Rwy 24R	None above 510′
Mt. Soledad	NKX 235R/5.2 DME	1,051′
Plaza building	NKX 261R/2.7 DME	685′
ASR Radar antenna	4,900′ north of Rwy 24R	440′

APPENDIX B-1

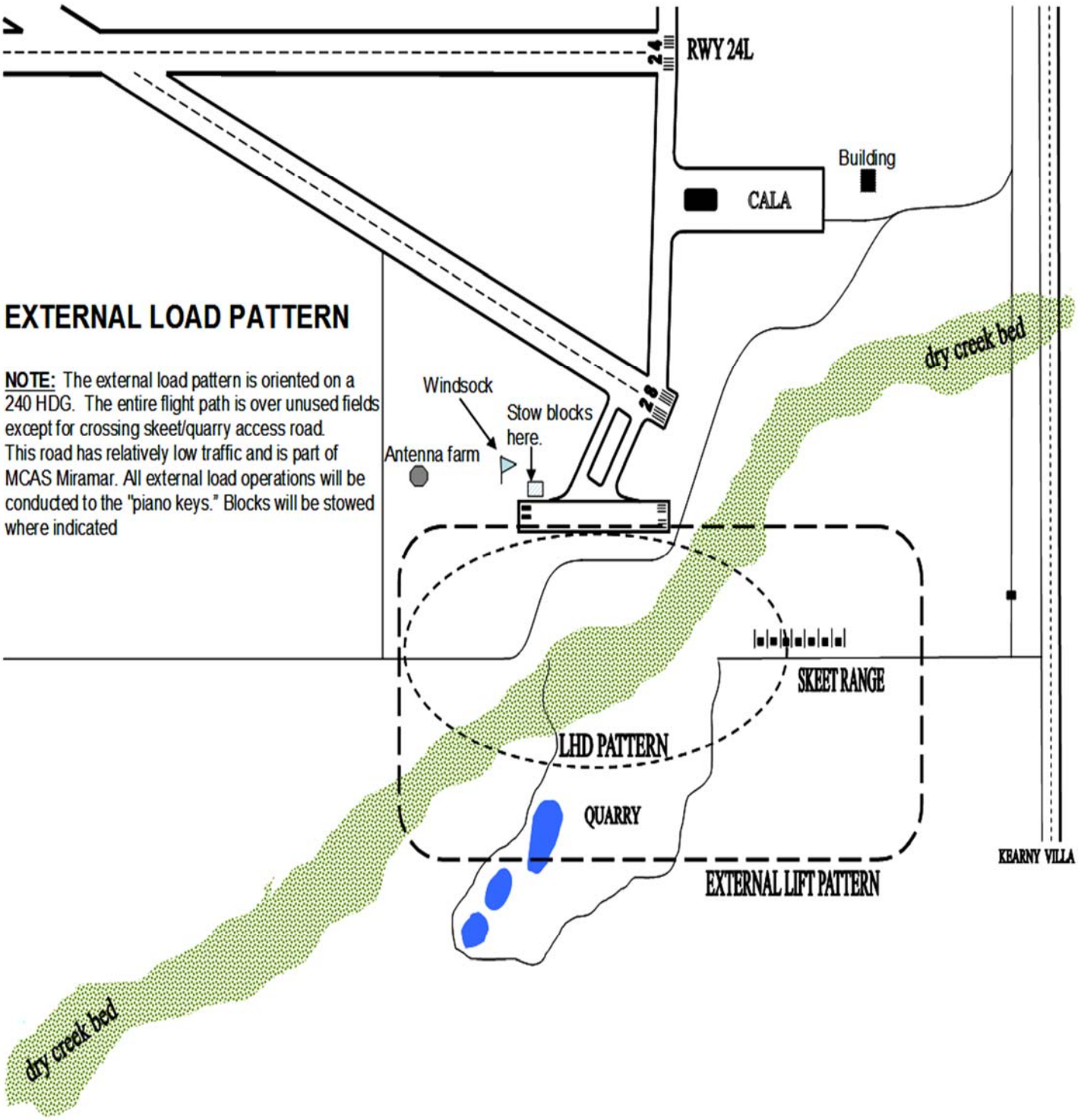
MCAS MIRAMAR AIRFIELD DIAGRAM



AIRFIELD

APPENDIX B-2

EXTERNAL LOAD PATTERN



APPENDIX B-3

INTERSECTION RUNWAY DISTANCES REMAINING

For planning purposes, the distances remaining for the most commonly used intersections are:

a. Runway 24R at Taxiway Sierra - 7,500 feet to end of runway.

b. Runway 24R at Taxiway Sierra – 5,010 feet to departure end arresting gear on Runway 24R.

c. Runway 24L at Taxiway Sierra - 4,500 feet to end of runway.

d. Runway 24L at Taxiway Sierra - 3,500 feet to departure end arresting gear on Runway 24L.

e. Runway 6R at Taxiway Sierra - 3,500 feet to end of runway.

f. Runway 6L at Taxiway Sierra - 4,500 feet to end of runway.

g. The following are available runway distances between the arresting gear for Runways 24L/6R and 24R/6L:

(1) Distance between the approach and departure end arresting gear on Runway 24R/6L is 7,200 feet.

(2) Distance between the approach and departure end arresting gear on Runway 24L/6R is 4,650 feet.

(3) Distance from the intersection of Runway 24R and Taxiway Sierra to the departure end arresting gear on Runway 24R is 5,010 feet.

(4) Distance between the approach and departure end arresting gear on Runway 24L is 4,650 feet.

APPENDIX C-1

NON-TENANT UNIT DEPLOYMENT REQUEST FORM

MCAS MIRAMAR LOGISTICS SUPPORT REQUEST

R **DDHHHHZ MMMYY**

FM **[REQUESTING SQUADRON/AGENCY]**
TO CO MCAS MIRAMAR, CA//S3/AIR OPS/
TO CG THIRD MAW//G3//
INFO CG MARFORPAC//G3//
INFO CG I MEF//G3//
INFO CG MCIWEST//G3//
INFO CO MAG ELEVEN//S3//
INFO CO MAG SIXTEEN//S3//
UNCLAS//
MSGID/GENADMIN/**[UNIT]**//
REF/A/DOC/MCAS MIRAMAR//DTD//
NARR//REF A IS POLICY LTR PROCEDURES TO REQ TRNG ABOARD MCAS MIRAMAR//
POC//
SUBJ/LOGISTICS SUPPORT REQUEST (LSR) FOR **[UNIT]** DEPLOYMENT TO MCAS MIRAMAR//
GENTEXT/RMKS/1. LSR FOR **[UNIT]** DEPLOYMENT TO MCAS MIRAMAR. OPERATIONAL AND LOGISTICAL SUPPORT REQUIRED IS AS FOLLOWS:
A. UNIT: (**NAME/BASE/LOCATION**)
B. HOST: (**Y** OR **N**), IF YES [**UNIT**]
C. POC: (**NAME/RANK/TEL/EMAIL**)
D. ARR/DEP DATES:
   1. ADVANCE PARTY: (**MMDDYY - MMDDYY**)
   2. MAIN BODY: (**MMDDYY - MMDDYY**)
   3. TRAIL MX: (**MMDDYY - MMDDYY**)
E. NUMBER/TYPE A/C: (**I.E. F-18, CH-53, KC-130, ETC.**)
F. CONCEPT OF OPS:
   1. MSN TYPE/TRNG AREA – **[I.E. Mojave Viper, JTF EX, Dissimilar Air Combat Training (DACT), Unit Level Training (ULT), ETC.]** / **[I.E. W-291, R2501, ETC.]**
   2. SORTIES/FLIGHT HOURS – **[# per day]** / **[# per day]**
F. Southwest Tactical Training Ranges (SWTTR):
Coordinating Instructions:
SWTTR provides Mission Coordination, real-time instrumentation and communication for exercise control and ground control intercepts, Link-16, tactical employment of surface-to-air threats, weapons impact scoring, moving land targets and debriefing products for military aviation units training in and around MCAS Miramar, NAF El Centro and MCAS Yuma ranges. Contact a SWTTR Mission Coordinator at (928)269-5742 (Yuma) OR (858)307-6116 (Miramar) or via email at swttr.fct@navy.mil.
Services requested:

(X) Mission Coordination and Control
(X) GCI and/or RTO Consoles
(X) Tactical Combat Training System (TCTS)
(X) Ground Tracking System
(X) Link-16
(X) EW Threat Emitters
(X) MANPADS and Smokey SAMs
(X) Moving Land Target (MLT)

(X) Weapons Impact Scoring System (WISS)

G. MESSING/BILLETING: OFFICERS: **(#)** MALES/ **(#)** FEMALES
SNCOS: **(#)** MALES/ **(#)** FEMALES
ENLISTED: **(#)** MALES/ **(#)** FEMALES
CIVILIAN: **(#)** MALES/ **(#)** FEMALES

H. CALA/ORDNANCE REQMTS: [**DATES/TYPE/AMOUNT ORD**]

I. AIRFIELD SERVICES:

1. COMM/ADP: (#) DSN LINES
(#) CLASS A LINES
(#) LAN TERMINALS
(#) UHF Air-to-Air
(#) VHF Air-to-Air
(#) HANDHELD RADIOS (amount based on availability)
(Y/N) UHF GROUND-TO-AIR FREQUENCY (Ready Room / Maintenance Control)

2. RAMP/HANGAR/RWY ACCOMODATIONS:
(a) HANGAR SPACE: [**# A/C/Sq ft**]
(b) MAINT. SPACE: [**Sq ft/# Spaces**]
(c) LINE SPACE FOR PARKING: [**# A/C**]
(d) OFFICE SPACE: [**# Spaces/Sq ft**]
(e) POWER REQR: [**Office/Hangar/Maintenance**]
(f) FLIGHT EQUIP STORAGE: [**SQ ft**]
(g) OVERHEAD CRANE: [**Y/N**]
(h) ACFT WASH REQR: [**Y/N**]
(i) FIRE EXTINGUISHERS: [**#/TYPE**]
(j) SAFES/CLASS MAT STORAGE: [**#/Sq ft**]

3. GSE:
(a) SUPPORT REQ'D (I.E.TOW TRACTORS, POWER UNITS, TOW BARS, ETC.)
(b) APPROX WEIGHT/CUBE OF GEAR TO BE MOVED (ADVANCED, MAIN BODY, AND TRAIL MX)

4. HAZMAT: [NSN, NOMENCLATURE, U/I, QTY]

5. FUEL/POL:
(a) JP-5: (#) GAL/DAY; TOTAL (#) GAL
(b) MOGAS: (#) GAL/DAY; TOTAL (#) GAL
(c) DIESEL: (#) GAL/DAY; TOTAL (#) GAL
(d) MOBILE REFUELER: (**Y/N**)
(e) MOBILE DE-FUELER: (**Y/N**)
(f) HOTPITS: (**Y/N**)
(g) POL: (**Y/N**)

6. FLIGHT LINE ACCESS: Contact AirOps at DSN 267-1282, COMM (858) 307-1282 to receive the excel document for flight line access.

7. CUSTOMS/AGRICULTURE: [**Y/N**]

8. SPECIAL REQR/COORD NOT PREVIOUSLY IDENTIFIED.

9. COMMANDER/OIC REMARKS://

NOTE TO REQUESTING AGENCY:

1. ALL FLIGHTS WILL BE SCHEDULED AND FLOWN WITHIN PUBLISHED AIRFIELD HOURS. REQUESTS TO EXTEND NORMAL AIRFIELD HOURS ISO DEPLOYMENT **MUST** BE APPROVED BY CG MCI WEST AND COORDINATED WITH MIRAMAR AIRFIELD OPERATIONS (858) 307-4419/4277 VIA SEPARATE CORRESPONDENCE AND SHALL BE APPROVED PRIOR TO RELEASE OF LOGISTICS SUPPORT REQUEST (LSR).

2. PRIOR PERMISSION REQUIRED (PPR) NUMBERS ARE REQUIRED. PLEASE CONTACT VAL DSN 267-4284 OR COMM (858)307-4284.

3. UNIT SITE SURVEY TEAMS SHOULD HAVE A REPRESENTATIVE FROM APPROPRIATE SHOPS (S-1, S-3, S-4 and MAINTENANCE) TO CONDUCT A FACILITIES AND RECONNAISSANCE SITE SURVEY 60 DAYS PRIOR TO DEPLOYMENT. ADVON PERSONNEL SHOULD ARRIVE ONE WEEK PRIOR TO DEPLOYMENT TO ENSURE HANGAR/RAMP SUITABILITY. DETACHMENT OIC MUST CONTACT THE AIRFIELD OPERATIONS CHIEF AT DSN 307-1723 OR COMM (858)307-1723 TO SCHEDULE IN-BRIEF WITH THE STATION OPERATIONS OFFICER UPON ARRIVAL AND DISCUSS TRAINING PLAN.

APPENDIX D-1

FLIGHT SCHEDULE FORMAT

UNITED STATES MARINE CORPS
Headquarters and Headquarters Squadron
Marine Corps Air Station Miramar
P. O. Box 452013
San Diego, CA 92145-2013

Wednesday, December 23, 2015

ODO:	HOURS UNTIL PHASE		SCHEDULED		DEC	QTR	FY
JULIAN:	168207	UC-12W	2	6.5	84 / 66.4	252 / 233.2	1000 / 233.2
S/R:	165939	UC-35	1	2.5	166 / 54.9	506 / 324.2	2000 / 324.2
S/S:	166500	Total	3	9.0	FCST / ACT	FCST / ACT	FCST / ACT
LPOD:							

FLIGHTS

EVENT	TMS	C/S	BRF/ETD/ETA	TFT	CREW	T&R	TMR	MSN	Fuel	Route	NOTES
1					P CP						
2					P CP						
3					P CP						

FLIGHT NOTES:
1.
2.
3.

FLIGHT NOTES:
1.
2.
3.
4.
5.

QUESTIONS OF THE DAY:

AIM QUESTION	Q:
CRM TOPIC OF THE DAY	Q:
UC-12W QUESTION	Q:
UC-35D QUESTION	Q:

OPSO _____ DOSS _____ XO _____

CO _____
LtCol MITCHELL CRIGER

APPENDIX E-1

CIVIL AIRLINES INFORMATION SHEET

CIVIL AIRLINES INFORMATION SHEET
MCAS-MIR-SDIEGO 3770/5 (REV. 6-99)

INSTRUCTIONS

1. All date/time groups shall be in local time.
2. Attach completed aircraft weight and balance form to this sheet.
3. Departing Flights must file a DD-175 or FAA-7233-1 Flight Plan
4. Passengers must remain aboard aircraft or in transport vehicles.
5. Vehicle movements on parking ramp must be cleared by the Operations Duty Officer.
6. Information sheet to be filled in for each landing and each take-off by an Airline Representative.

Airline Carrier	Pilot

Airline Carrier Flt #	Type Aircraft	Aircraft Serial #
Arrival Date/Time(L)	**Departure Date/Time(L)**	**Max Allowable Gross Weight**
Take-Off/Arrival Weight	**Total Number of PAX**	**PAX Manifest Filed (location)**
Amount of Fuel Requested	**Type of Fuel Requested**	**ODO Signature**

The following is to be filled out by the duty weather forecaster: (attach document if required)

Applicable San 12 Forecast	Existing San WX on Arrival	Existing San WX 30 Min prior to departure

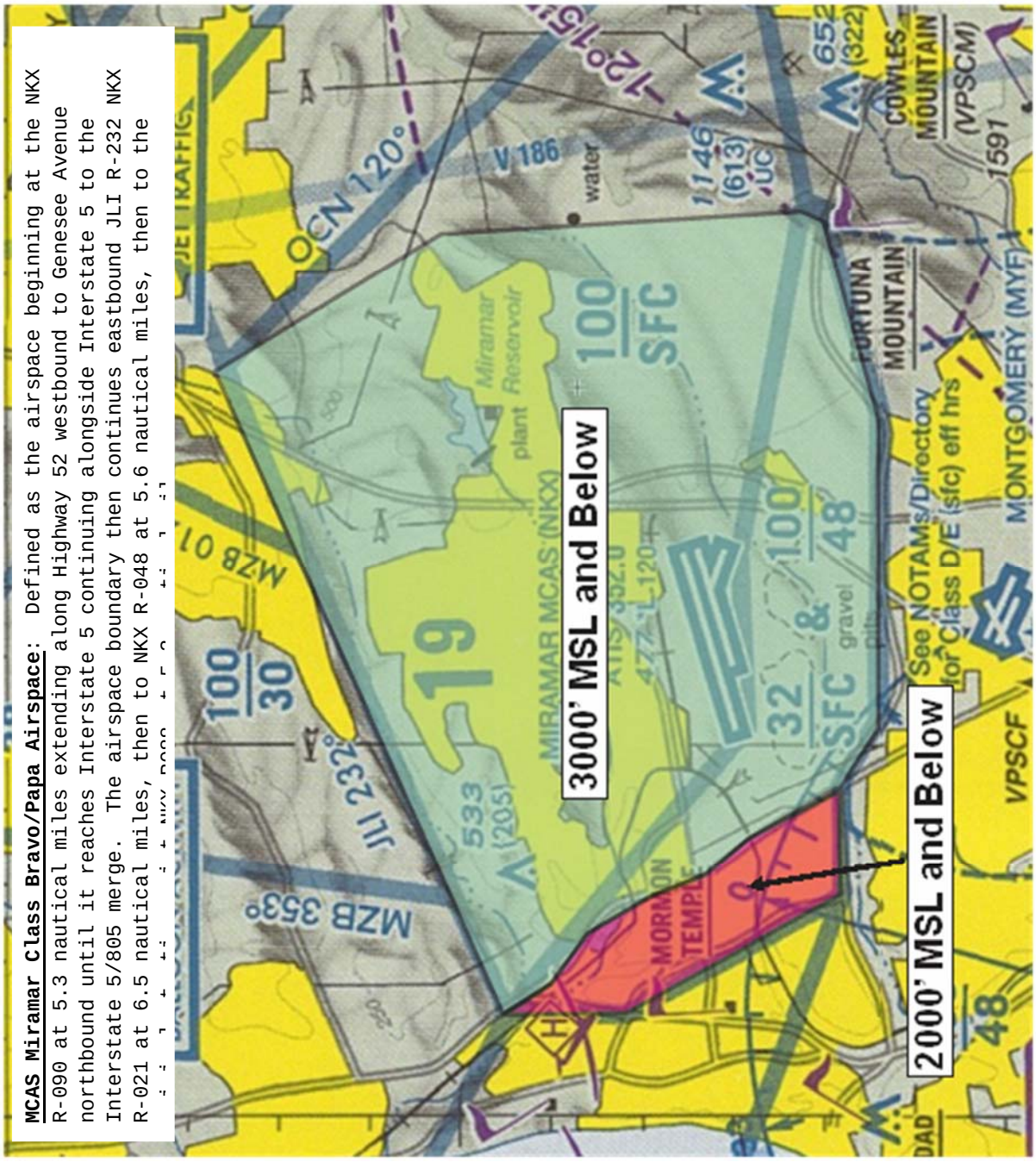
Remarks: (If an unusual event or accident involved please anotate as much information as possible, **facts only**, attach document if required).

Airline Representative Signature and Title: Date/Time

_____ _____

APPENDIX F-1

PAPA AIRSPACE MAP



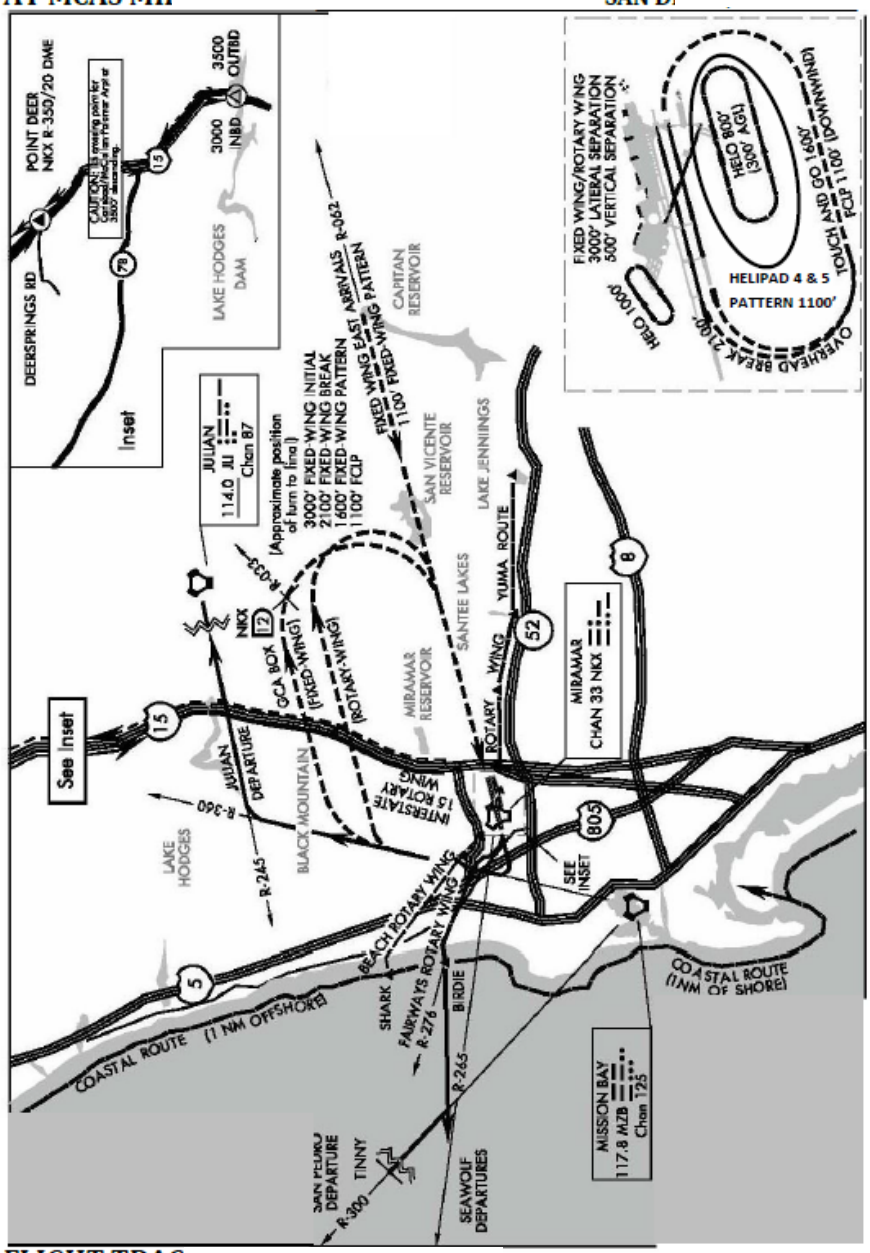
APPENDIX F-2

SOCAL TRACON CLASS B AIRSPACE CHART

APPENDIX G-1

STANDARD FIXED AND ROTARY WING ARRIVALS INTO MCAS MIRAMAR

FLIGHT TRA Airspace Routes MCAS MCAS Miramar (KNKX)
AT MCAS MI at MCAS Miramar SAN D



FLIGHT TRAC Airspace Routes MCAS M MCAS Miramar (KNKX)
AT MCAS MIR at MCAS Miramar SAN DI

WARNING: This page is for reference only, and is not to be reproduced and used for navigation purposes. Contact MCAS Miramar Airfield Operations for the most current diagram authorized for navigation.

APPENDIX G-2

F-35B/C SIMULATED FLAMEOUT LETTER OF AGREEMENT

Southern California Terminal Radar Approach Control, Marine Corps Air Station Miramar, and Marine Aircraft Group 11

LETTER OF AGREEMENT

EFFECTIVE: April 1, 2019

SUBJECT: F35 Lightning Precautionary/Simulated Flame Out Approach Procedures

1. PURPOSE: To define responsibilities and procedures used by Southern California Terminal Radar Approach Control (TRACON), Marine Corps Air Station Miramar (KNKX), and Marine Aircraft Group 11 for coordination and control of precautionary/simulated flameout procedures at KNKX.

2. SCOPE: These procedures are supplemental to the procedures contained in the current Letter of Agreement between Southern California TRACON and Marine Corps Air Station Miramar and FAA Order 7110.65, Air Traffic Control. TRACON, as used in the agreement, applies to Southern California TRACON, Foss Tower applies to MCAS Miramar Air Traffic Control Tower (Foss tower), GCA applies to MCAS Miramar Ground Controlled Approach (Foss GCA); and MAG11 applies to Marine Aircraft Group 11.

3. DEFINITIONS:

a. Simulated Flame Out (SFO): A practice flameout approach at idle thrust simulating an engine failure, which is subject to ATC approval, or denial, based on traffic and flown in VFR conditions.

b. Precautionary Flame Out (PFO): A flameout approach executed at any time the reliability of the engine comes into question which requires emergency handling.

NOTE-
An SFO can be a single aircraft or flight of two, in either case the aircraft will execute a low approach and remain in the tower pattern for landing, a PFO will land with the wingman remaining in the tower pattern.

4. RESPONSIBILITIES:

a. TRACON:

(1) Must be responsible for the approval/disapproval of SFO approaches at KNKX.

(2) Will only approve SFO approaches between sunrise and sunset.

(3) Must coordinate SFO approaches with Foss Tower prior to approval.

(4) Must transfer communications to Foss Tower no later than High Key for the overhead pattern and no later than nine (9) miles for a straight-in.

Southern California Terminal Radar Approach Control, Marine Corps Air Station Miramar, and Marine Aircraft Group 11

b. Foss Tower must:

(1) Coordinate any requests for aircraft departing to execute an SFO approach with TRACON prior to departure.

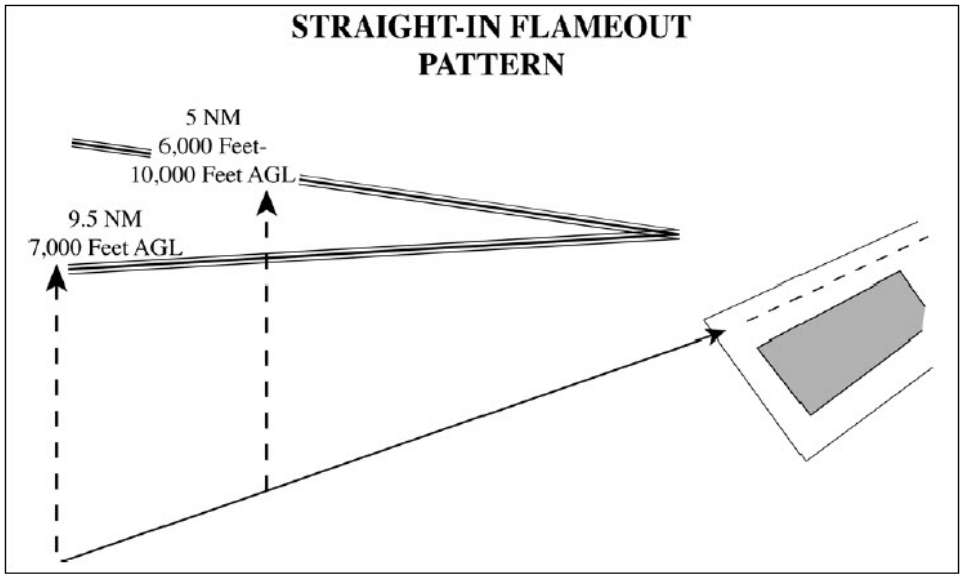
(2) Coordinate any known arrival requests for SFO approaches as soon as they are advised with call sign and approximate time of arrival.

c. MAG11 must coordinate in advance SFO requests with Foss Tower with an approximate time of arrival or departure.

5. PROCEDURES:

a. Precautionary/Simulated Flameout Approaches:

(1) Straight-in: The straight-in approach is executed as a final approach along the extended runway centerline. Expect most straight-in approaches to begin at ranges greater than 10NM with an altitude in the mid to upper teens, in any case no lower than 10,000' MSL. For an SFO, the pilot will intercept a 10° Flight Path Angle (FPA) at approximately a 10NM final. The pilot will capture 12° Flight Path Angle (FPA) if engine confidence is eroding during a PFO approach.



Southern California Terminal Radar Approach Control, Marine Corps Air Station Miramar, and Marine Aircraft Group 11

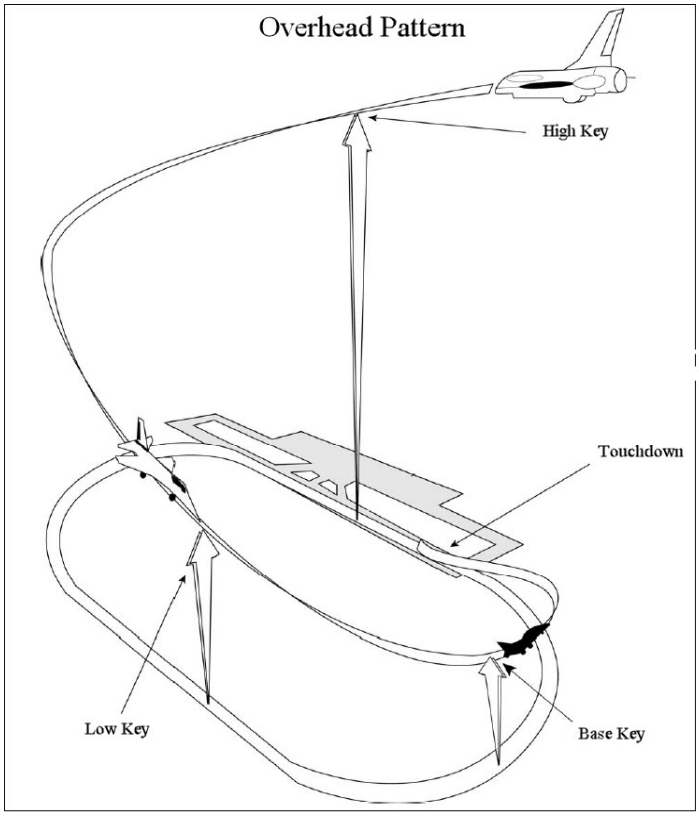
(2) Overhead:

(a) The Overhead SFO airspace is defined as a 2NM radius from the KNKX runways from the surface up to 16,000' MSL.

(b) Overhead SFO approaches will commence directly over the intended point of landing at "High Key" and normally at an altitude between 9,000' AGL and 11,500' AGL. Aircraft who depart KNKX for an SFO will climb north and east of the airport to the start altitude prior to commencing.

(c) Turns for the runway 24L/R SFO overhead approach will be to the left, south of the runways.

NOTE –
SFO approaches for runway 6L/R will not be approved.



Southern California Terminal Radar Approach Control, Marine Corps Air Station Miramar, and Marine Aircraft Group 11

(3) Actual Flameout Approach. In the event of an actual engine flameout, the pilot will attempt to maneuver the aircraft in accordance with the above patterns to any runway and in any turn direction as dictated by the pilot's needs. ATC should expect the aircraft to immediately execute "Lost Comm" until the pilot is able to re-channelize a backup radio. If the aircraft is not in a position to intercept a flameout profile, ATC can expect the pilot to maneuver the aircraft into a steady state to prepare for ejection.

RICHARD M SAVAGE
Digitally signed by RICHARD M SAVAGE
Date: 2019.02.08 10:32:54 -08'00'

Rick Savage (A)
Air Traffic Manager
Southern California TRACON

DOCKERY.CHARLES.B.1019341689
Digitally signed by DOCKERY.CHARLES.B.1019341689
Date: 2019.02.19 09:34:20 -08'00'

Charles B. Dockery
Colonel, U.S. Marine Corps
Commanding Officer
Marine Corps Air Station Miramar

DORAN.SIMON.M.1083583971
Digitally signed by DORAN.SIMON.M.1083583971
Date: 2019.02.25 09:12:35 -08'00'

Simon M. Doran
Colonel, U.S. Marine Corps
Commanding Officer
Marine Aircraft Group 11

MARK G KUCK
Digitally signed by MARK G KUCK
Date: 2019.02.08 11:08:54 -08'00'

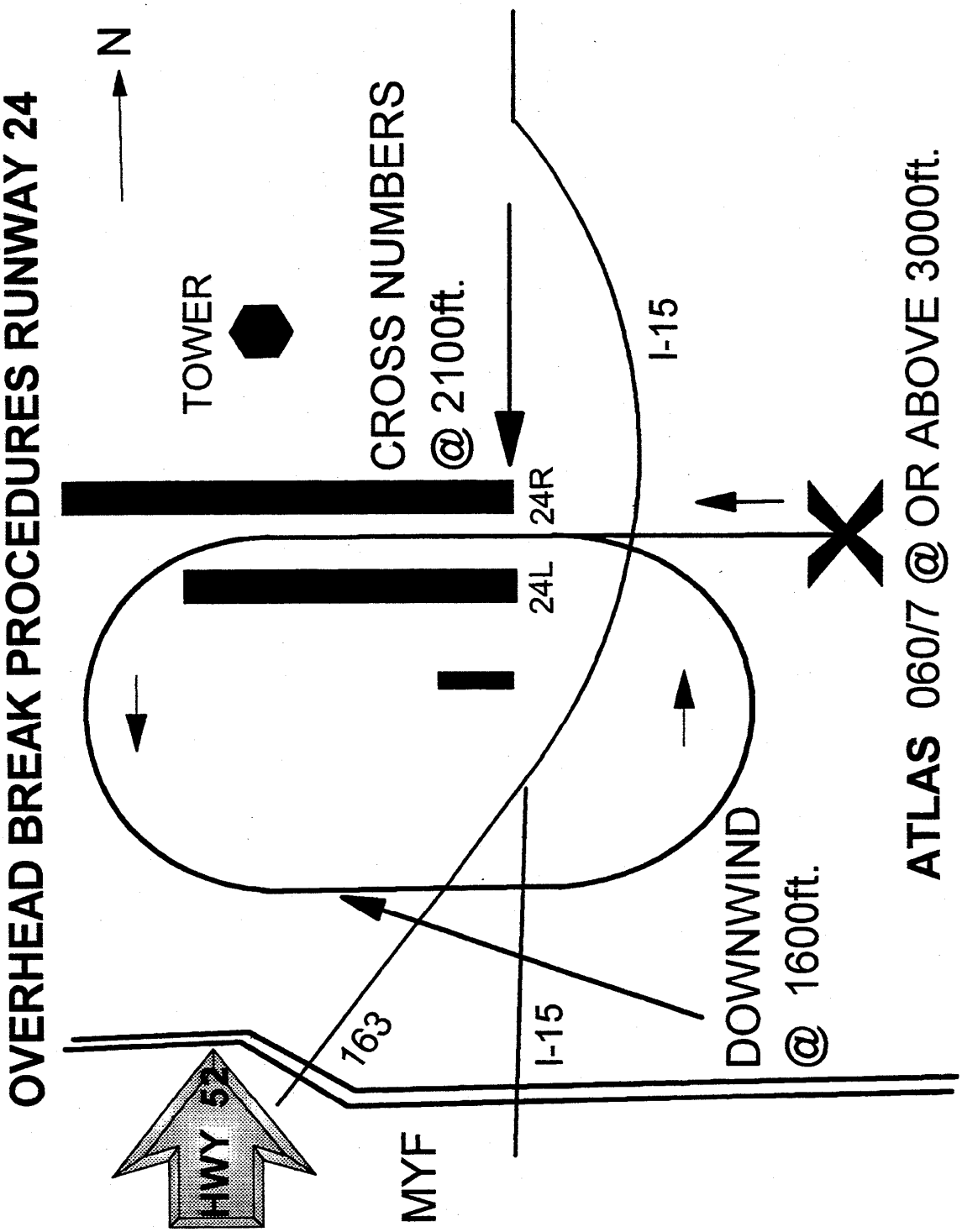
Mark Kuck
Air Traffic Representative
Western Service Center

GONZALEZ.JULIO.CESAR.JR.1048544041
Digitally signed by GONZALEZ.JULIO.CESAR.JR.1048544041
Date: 2019.02.08 16:16:35 -08'00'

Julio C. Gonzalez
Major, U.S. Marine Corps
Regional Airspace Coordinator
Marine Corps Installations - West

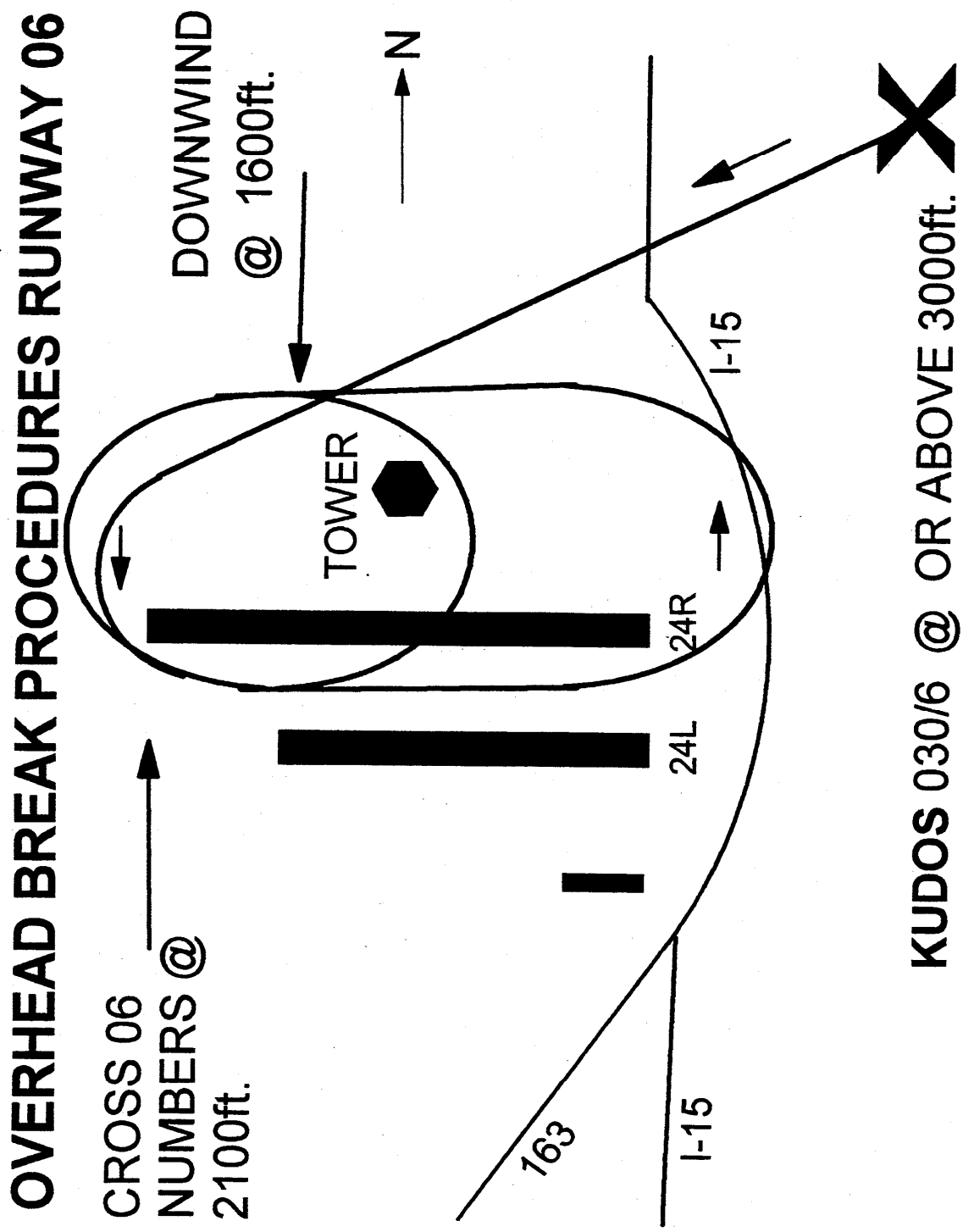
APPENDIX H-1

RWY 24 OVERHEAD BREAK PROCEDURES



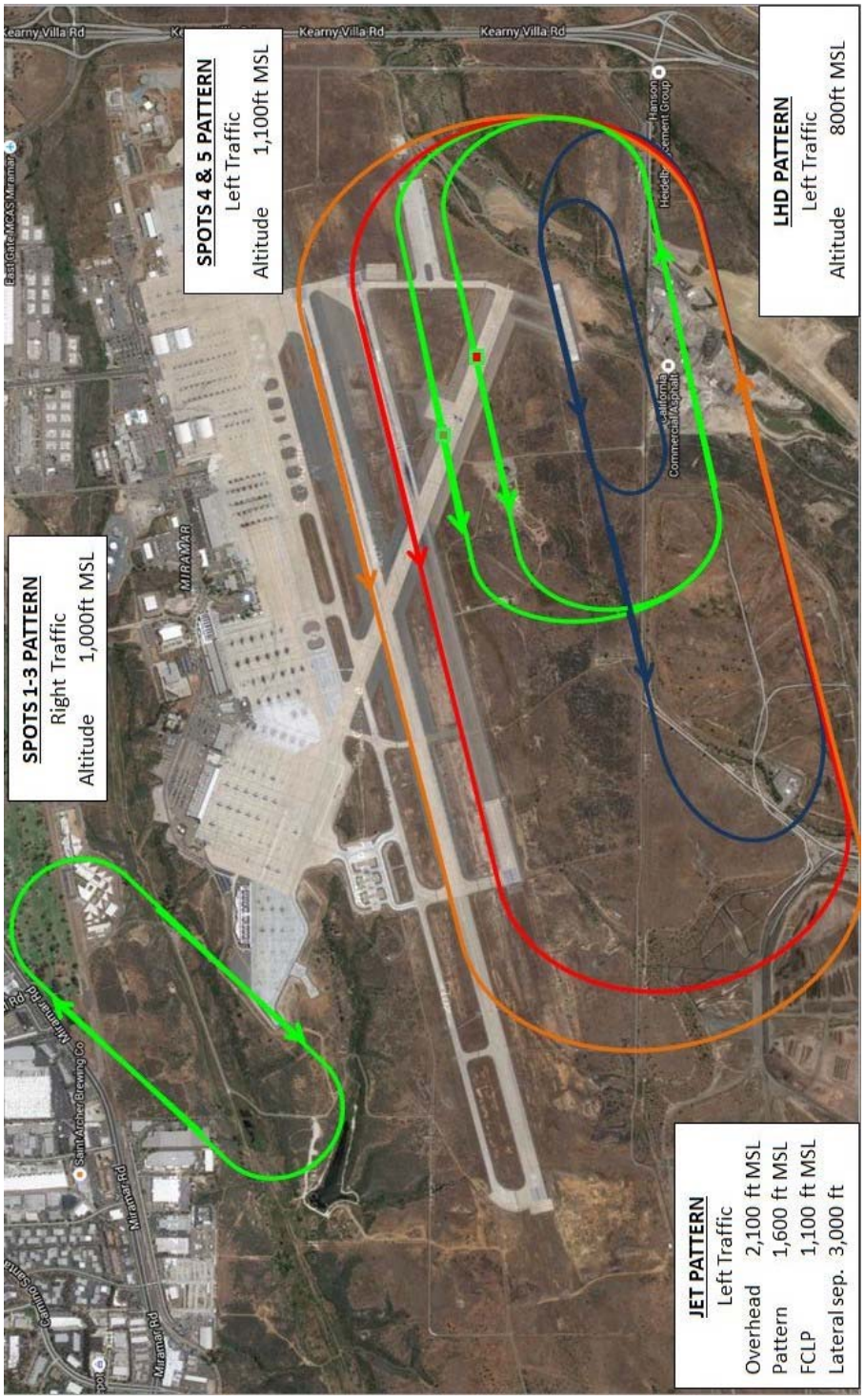
APPENDIX I-1

RWY 6 OVERHEAD BREAK PROCEDURES



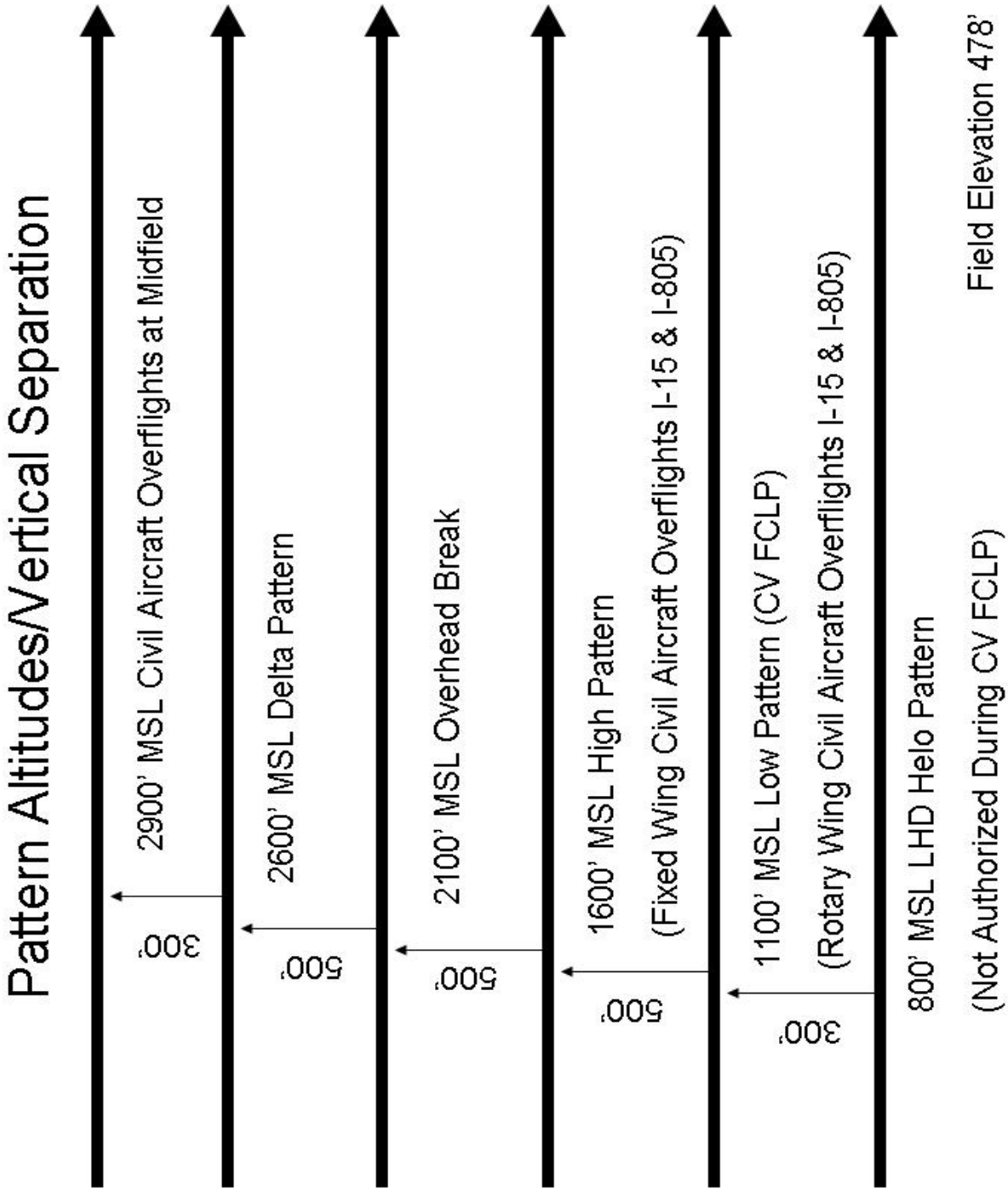
APPENDIX J-1

FIXED WING AND HELICOPTER VFR TRAFFIC PATTERNS



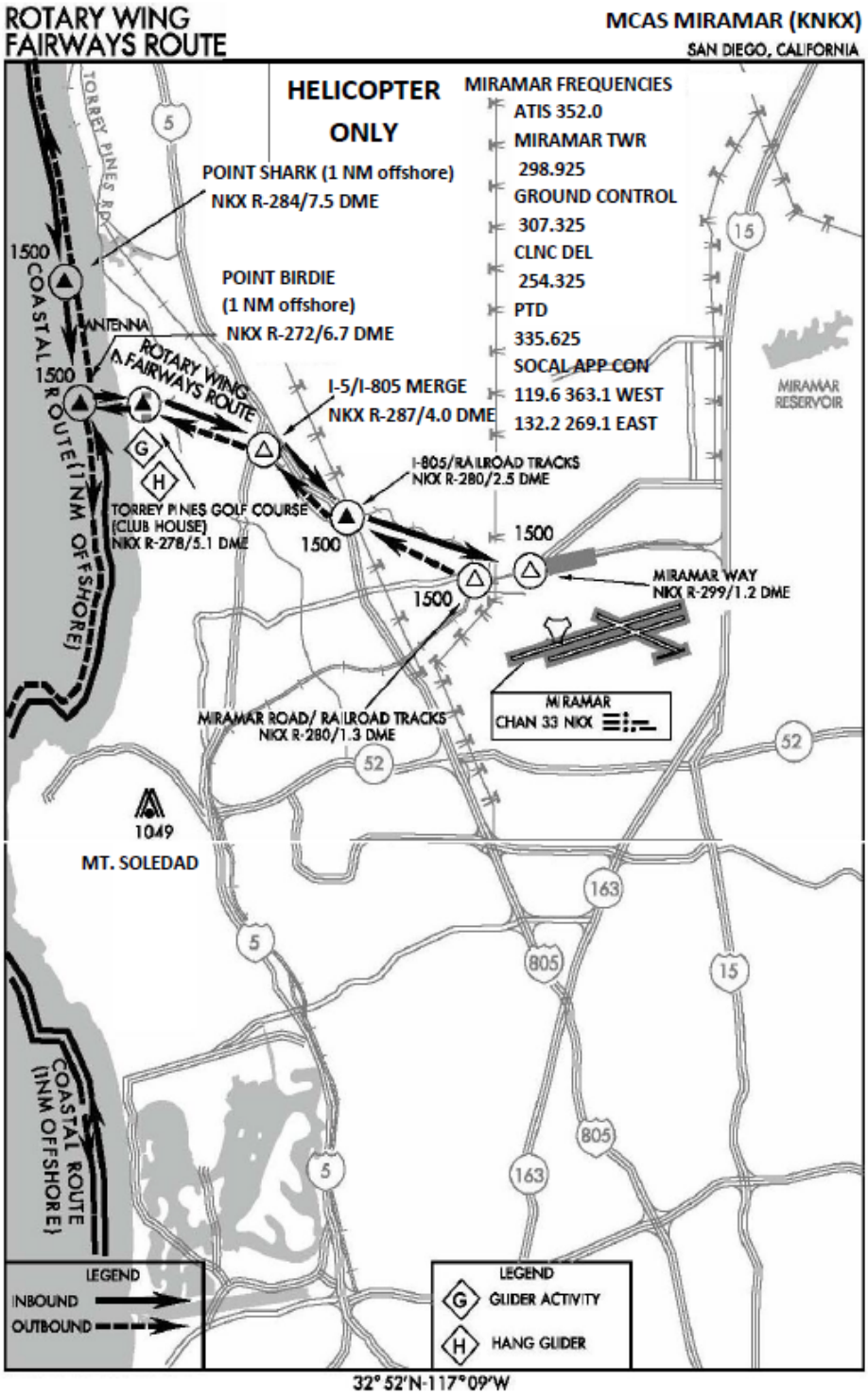
APPENDIX K-1

VERTICAL SEPARATION BETWEEN PATTERN ALTITUDES



APPENDIX L-1

FAIRWAYS HELICOPTER VFR ROUTE PICTORIAL DIAGRAM



APPENDIX L-2

FAIRWAYS HELICOPTER VFR ROUTE PROCEDURES

ROTARY WING
FAIRWAYS ROUTE

MCAS MIRAMAR (KNKX)
SAN DIEGO, CALIFORNIA

HELICOPTER PROCEDURES

Consistent with weather, mission or destination, use of the over water arrivial/departure routes is expected.

A. ROUTE DESCRIPTION. The Fairways Route is defined as airspace from Point Shark to Point Birdie to I-805/Railroad Track Intersection.

B. INBOUND
1. Approaching POINT SHARK (1NM offshore) at 1500', contact Miramar Tower for route assignment. (For BEACH ROUTE, see page 4). Remain a minimum of 1 NM offshore until route assignment for noise abatement.
2. When cleared on FAIRWAYS ROUTE, maintain 1500' and proceed southbound on Coastal Route, (Remain 1 NM offshore), through POINT BIRDIE, report Point Birdie.
3. Proceed inbound direct to TORREY PINES CLUBHOUSE then direct to the southern edge of the I-5/I-805 MERGE.
4. Proceed inbound and report I-805 at RAILROAD TRACKS with intentions.
5. Cross MIRAMAR WAY/MIRAMAR ROAD intersection at 1500', to land as directed.
6. Aircraft inbound shall maintain VFR at the published route altitude.

C. OUTBOUND
1. Climb and maintain 1500' join route at MIRAMAR ROAD/RAILROAD TRACKS intersection.
2. Proceed to the southern edge of I-5/I-805 MERGE.
3. Report TORREY PINES GOLF COURSE (Club House) clear.
4. Proceed to POINT BIRDIE (1 NM offshore) for noise abatement.

D. GENERAL
1. Expect possible delays on the FAIRWAYS ROUTE due to jet traffic.
2. Keep opposing route traffic on right (right to right pass).
3. Highest obstruction Mt. Soledad at Lat. 32° 50' 18"N Long. 117° 14' 59"W.
4. ATC will deconflict inbound and outbound air traffic.
5. VFR Helicopters that cannot enter the MCAS Miramar helicopter routes at the published altitudes for the route, must arrive and depart MCAS Miramar via IFR flight procedures.
6. Keep opposing traffic on left (left to left pass) while established on Coastal Route.

E. WEATHER MINIMA 1500' AGL – 3 reported.

F. SVFR Not authorized.

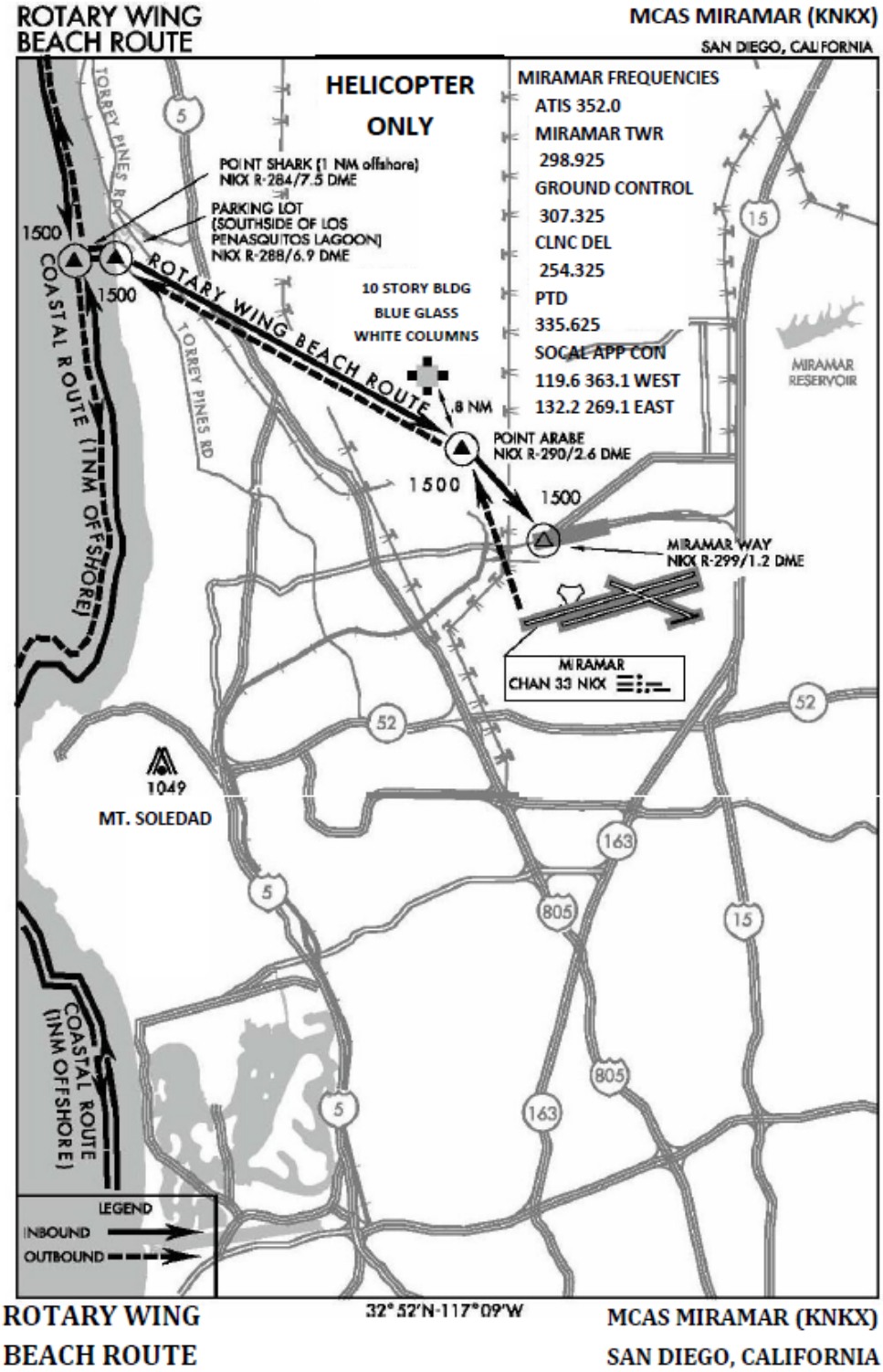
CAUTION: Extensive Hang Glider/Paraglider training and operations at Torrey Pines Glider Port and vicinity. Torrey Pines Golf Course is utilized as a VFR reporting point for Montgomery Field.

ROTARY WING
FAIRWAYS ROUTE

MCAS MIRAMAR (KNKX)
SAN DIEGO, CALIFORNIA

APPENDIX M-1

BEACH HELICOPTER VFR ROUTE PICTORIAL DIAGRAM



APPENDIX M-2

BEACH HELICOPTER VFR ROUTE PROCEDURES

ROTARY WING **MCAS MIRAMAR (KNKX)**
BEACH ROUTE **SAN DIEGO, CALIFORNIA**

HELICOPTER PROCEDURES

Consistent with weather, mission or destination, use of the over water arrivial/departure routes is expected.

A. ROUTE DESCRIPTION. The Beach Route is defined as airspace from Point Shark to Point Arabe.

B. INBOUND
1. Approaching POINT SHARK (1NM offshore) at 1500', contact Miramar Tower for route assignment. (For FAIRWAYS ROUTE, see page 2). Remain a minimum of 1 NM offshore until route assignment for noise abatement.
2. When cleared on BEACH ROUTE, overfly PARKING LOT (South side of Las Penasquitos Lagoon) at 1500' or as assigned.
3. Report POINT ARABE at 1500' or as assigned with intentions.
Note: POINT ARABE is located 0.8 NM SE of 10-story building with white columns and blue glass.
4. Cross MIRAMAR WAY/MIRAMAR ROAD intersection at 1500', then enter downwind to land as directed.
5. Aircraft inbound shall maintain VFR at the published route altitude.

C. OUTBOUND
1. Climb and maintain 1500' join route to POINT ARABE.
2. Report PARKING LOT clear, (South side of Los Penasquitos Lagoon).
3. Proceed West, then to POINT SHARK (1 NM offshore).

D. GENERAL
1. Expect possible delays on the BEACH ROUTE due to jet traffic.
2. Keep opposing route traffic on right (right to right pass).
3. Highest obstruction Mt. Soledad at Lat. 32° 50' 18"N Long. 117° 14' 59"W.
4. ATC will deconflict inbound and outbound air traffic.
5. VFR Helicopters that cannot enter the MCAS Miramar helicopter routes at the published altitudes for the route, must arrive and depart MCAS Miramar via IFR flight procedures or request SVFR handling.
6. Keep opposing traffic on left (left to left pass) while established on Coastal Route.

E. WEATHER MINIMA 1000' AGL – 3 reported.

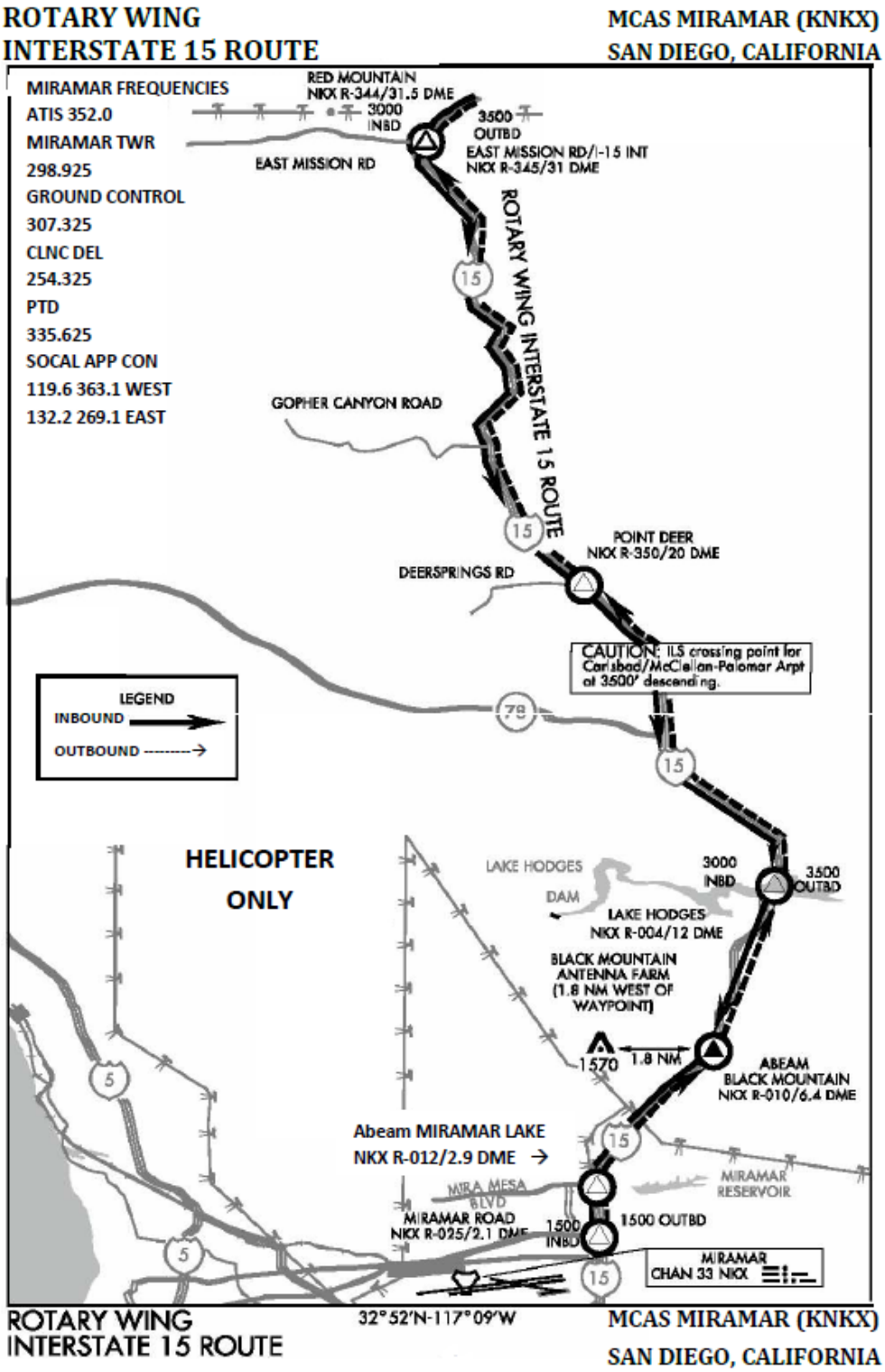
F. SVFR
1. SVFR weather minima 700' AGL – 1 reported.
2. Route altitude 1000' (500' AGL).

CAUTION: Extensive Hang Glider/Paraglider training and operations at Torrey Pines Glider Port and vicinity. Torrey Pines Golf Course is utilized as a VFR reporting point for Montgomery Field.

ROTARY WING **MCAS MIRAMAR (KNKX)**
FAIRWAYS ROUTE **SAN DIEGO, CALIFORNIA**

APPENDIX N-1

I-15 HELICOPTER VFR ROUTE PICTORIAL DIAGRAM



APPENDIX N-2

I-15 HELICOPTER VFR ROUTE PROCEDURES

ROTARY WING **MCAS MIRAMAR (KNKX)**
INTERSTATE 15 ROUTE **SAN DIEGO, CALIFORNIA**

HELICOPTER PROCEDURES

Consistent with weather, mission or destination, use of the over water arrivial/departure routes is expected.

A. ROUTE DESCRIPTION. I-15 Route is defined at the airspace over I-15 from Miramar Road to abeam Red Mountain.

B. INBOUND
1. Follow I-15 Freeway southbound.
   a. From MCB/MCAS Camp Pendleton/MCAGCC 29 Palms: All aircraft shall join the I-15 route North of RED MONUTAIN at 3000'.
   b. All other aircraft shall join the I-15 route North of Deersprings Rd/I-15 Int. (POINT DEER) at 3000'.
2. Attempt contact SOCAL Appraoch 127.3/323.0 for traffic advisories. Unless otherwise advised, begin a VFR descent at Gopher Canyon Rd., to cross Deersprings Road (POINT DEER) at 2500' over Southbound lanes.
3. Crossing Highway 78, begin a climb to 3000'.
4. Report abeam BLACK MOUNTAIN to MCAS Miramar Tower with intentions and request clearance into MCAS Miramar Class B Airspace.
5. Abeam MIRAMAR LAKE begin descent to cross MIRAMAR ROAD at 1500' for pattern entry as directed.
6. Aircraft inbound shall maintain VFR at the published route altitude.

C. OUTBOUND
1. Cross I-15/MIRAMAR ROAD intersection at or above 1500'.
2. Climb over northbound lanes at 3000' or as assigned.
3. Report abeam BLACK MOUNTAIN climbing to 3500', exiting Class B Airspace.
4. Follow I-15, attempt contact SOCAL Approach 127.3/323.0 for traffic advisories, north of Lake Hodges, unless advised, begin a VFR descent to cross Highway 78 at 2500' over northbound lanes.
5. Cross Deersprings Road (POINT DEER), begin a VFR climb to 3500'.
   a. For MCB/MCAS Camp Pendleton/MCAGCC 29 PALMS: Follow I-15 to abeam Red Mountain before exiting the route.
   b. All other aircraft shall follow I-15 to Point Deer before exiting.

D. GENERAL
1. CAUTION: Carlsbad/McClellan-Palomar Airport ILS RWY 24 approach crosses I-15 Freeway 6.4 NM North of LAKE HODGES at 3500' MSL.
2. MCB/MCAS Camp Pendleton/MCAGCC 29 Palms traffic shall utilize published transitions.
3. Remain over I-15 for noise abatement.
4. VFR Helicopters that cannot enter MCAS Miramar helicopter routes at the published altitudes for the route, must arrive and depart MCAS Miramar via IFR flight procedures.

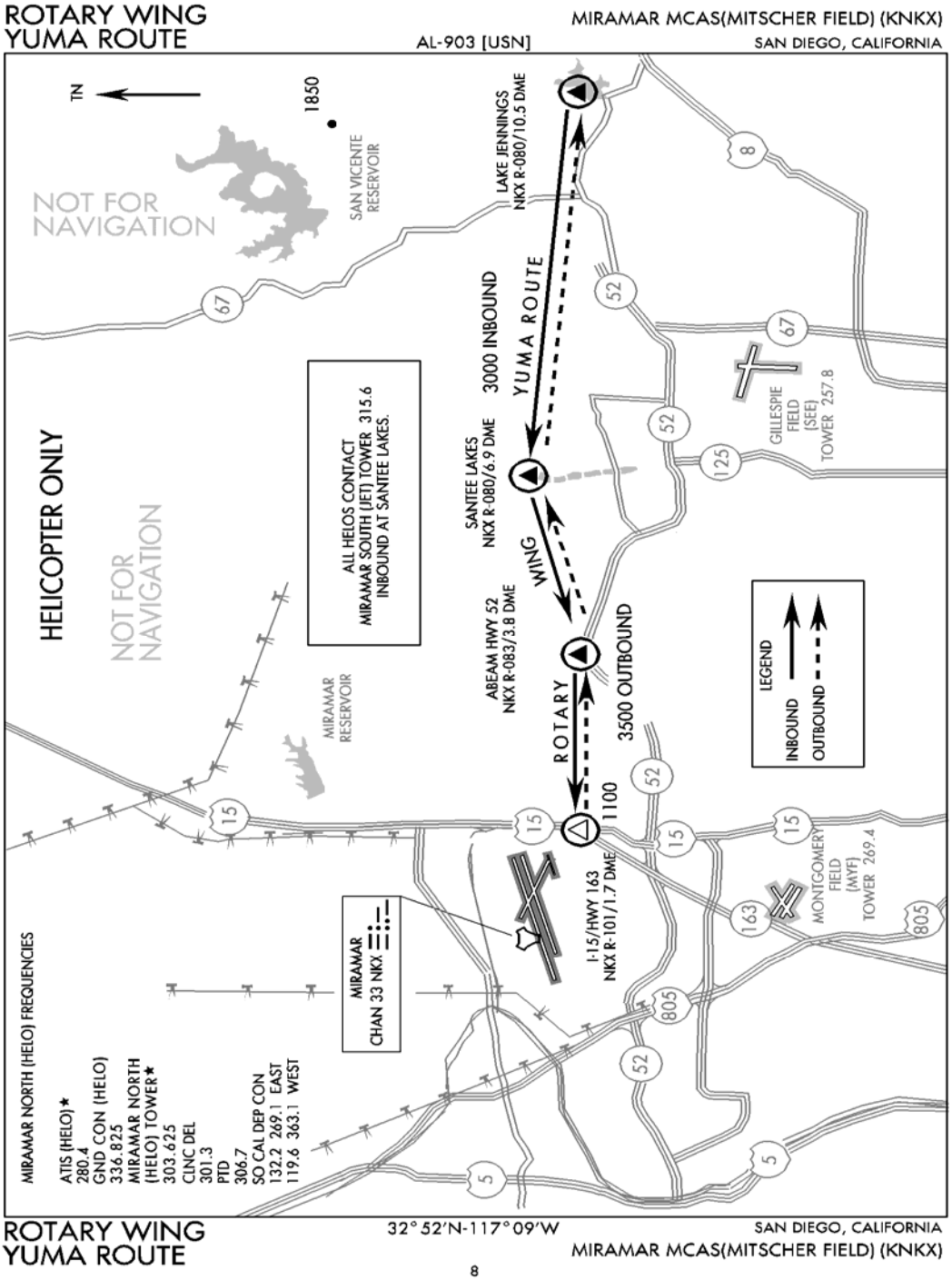
E. WEATHER MINIMA 2500' AGL – 3 reported.

F. SVFR Not authorized.

ROTARY WING **MCAS MIRAMAR (KNKX)**
INTERSTATE 15 ROUTE **SAN DIEGO, CALIFORNIA**

APPENDIX O-1

YUMA HELICOPTER VFR ROUTE PICTORIAL DIAGRAM



APPENDIX O-2

YUMA HELICOPTER VFR ROUTE PROCEDURES

ROTARY WING **MCAS MIRAMAR (KNKX)**
YUMA ROUTE **SAN DIEGO, CALIFORNIA**

HELICOPTER PROCEDURES

Consistent with weather, mission or destination, use of the over water arrivial/departure routes is expected.

A. ROUTE DESCRIPTION. The Yuma route is defined as the airspace from I-15/Hwy 163 intersection to Lake Jennings.

B. INBOUND
1. Overfly LAKE JENNINGS VFR descending to cross the western edge of Lake Jennings at 3000'.
2. Report over bridge portion of SANTEE LAKES at 3000' for clearance onto the route.
3. Report abeam HWY 52 with intentions.
4. Cross the I-15/HWY 163 intersection at 1100' or as assigned.
5. Aircraft inbound shall maintain VFR at the published route altitude.

C. OUTBOUND
1. Join route I-15/HWY 163 intersection at 1100' or as assigned.
2. Climb to 3000'.
3. Report crossing over bridge portion of SANTEE LAKES clear, climbing to 3500'.
4. Overfly LAKE JENNINGS at 3500'.
5. Weather permitting commence a VFR climb from 3500' at the western edge of Lake Jennings.

D. GENERAL
1. VFR Helicopters that cannot enter MCAS Miramar helicopter routes at the published altitudes for the route, must arrive and depart MCAS Miramar via IFR flight procedures.
2. Avoid overflight of communities in the vicinity of SANTEE LAKES for noise abatement. Do not fly to South side of Santte Lakes Bridge.

E. WEATHER MINIMA 2500' AGL – 3 reported.

F. SVFR Not authorized.

WARNING: Avoid Gillespie Airport airspace vertically. For traffic advisories, contact GILLESPIE TOWER on 257.8.

ROTARY WING **MCAS MIRAMAR (KNKX)**
YUMA ROUTE **SAN DIEGO, CALIFORNIA**

APPENDIX P-1

HELICOPTER ROUTE GPS WAYPOINTS AND LOST COMMUNICATION PROCEDURES

GPS WAYPOINTS and LOST COMMUNICATION PROCEDURES AL-903 [USN] MIRAMAR MCAS (KNKX) SAN DIEGO, CALIFORNIA

GPS WAYPOINTS

ROTARY WING FAIRWAYS ROUTE	LATITUDE	LONGITUDE
1. POINT BIRDIE (NKX R-272/6.7 DME)	N32°54.06′	W117°16.56′
2. Torrey Pines Golf Course (Club House) (NKX R-278/5.1 DME)	N32°54.26′	W117°14.73′
3. I-5/I-805 MERGE	N32°54.31′	W117°13.39′
4. I-805/RAILROAD TRACKS	N32°53.26′	W117°12.23′

ROTARY WING BEACH ROUTE		
1. POINT SHARK (NKX R-284/7.5 DME)	N32°55.65′	W117°16.83′
2. PARKING LOT (Southside of Los Penasquitos Lagoon)	N32°55.70′	W117°15.57′
3. POINT ARABE	N32°53.72′	W117°11.12′
4. MIRAMAR WAY/MIRAMAR ROAD	N32°52.78′	W117°09.56′

ROTARY WING INTERSTATE 15 ROUTE		
1. RED MOUNTAIN	N33°23.98′	W117°11.45′
2. East Mission Rd/I-15 Int.	N33°23.24′	W117°10.40′
3. I-15/Deersprings Rd Int. (POINT DEER)	N33°11.70′	W117°07.50′
4. LAKE HODGES	N33°03.60′	W117°04.18′
5. Abeam BLACK MOUNTAIN	N32°57.90′	W117°05.71′
6. MED IMPACT Building	N32°54.74′	W117°06.98′

ROTARY WING YUMA ROUTE		
1. LAKE JENNINGS (NKX R-077/13.4 DME)	N32°51.65′	W116°53.54′
2. SANTEE LAKES (NKX R-083/7.4 DME)	N32°51.00′	W117°00.37′
3. Abeam Hwy 52 (NKX R-082/4.8 DME)	N32°51.26′	W117°03.81′
4. I-15/Hwy 163	N32°51.40′	W117°03.90′

ALL LATITUDE/LONGITUDE IN DEGREES, MINUTES, HUNDREDTHS

LOST COMMUNICATION PROCEDURES

IMC (LOST COMM ORANGE)

1. SQUAWK 7600.
2. Intercept and fly the NKX TACAN 10 DME arc at 4000′ to the NKX R-064.
3. Fly the final portion of the TACAN RWY 24R approach.

VMC

1. SQUAWK 7600.
2. Recover via the INTERSTATE 15 ROUTE at or below 2500′.
3. Land Helo Pad 3.

GPS WAYPOINTS and LOST COMMUNICATION PROCEDURES 12 SAN DIEGO, CALIFORNIA MIRAMAR MCAS (KNKX)

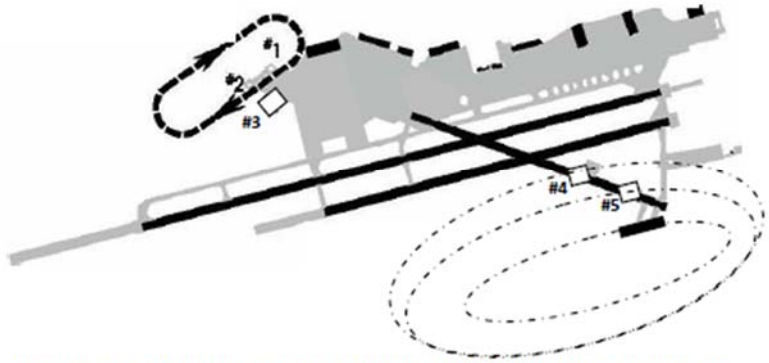
APPENDIX Q-1

HELICOPTER VFR TRAFFIC PATTERNS

ROTARY WING
VFR PATTERNS

MCAS MIRAMAR (KNKX)
SAN DIEGO, CALIFORNIA

HELO SPOT 1, 2 & 3 PATTERN: RIGHT TRAFFIC, ALTITUDE 1000' MSL, LENGTH 1200' UPWIND



HELO SPOT 4 & 5 PATTERN: LEFT TRAFFIC, ALTITUDE 1100' MSL, LENGTH 7000', WIDTH 4000'

LHD PATTERN: LEFT TRAFFIC, ALTITUDE 800' MSL, LENGTH 5000', WIDTH 3000'

HELICOPTER PROCEDURES

A. HELICOPTER PADS 1, 2 & 3 PATTERN
   1. Right traffic at 1000'.
      a. Right 100° break at 1500' from MIRAMAR WAY/MIRAMAR RD intersection.
      b. Turn right crosswind no later than abeam Runway 24R 2000' remaining board, approximately 1200' upwind from forward spots.
   2. Helipad 3 is for Hover Checks and Departures only. Over flight of hangars and parking areas are not authorized.

B. HELICOPTER PADS 4 & 5 PATTERN
   1. Left traffic at 1100' outside and above LHD traffic when in use.
      a. VFR daylight use only. (Currently these spot do not have lights.)
      b. When CALA is in use Helipad 4 will be used for Hover Checks and Departures only. Over flight of the CALA when active is prohibited.

C. HELICOPTER STRIP (LHD) PATTERN
   1. Left traffic at 800' inside and below Runway 24L/R Fixed Wing pattern at 1600'.
   2. LHD pattern at 800' and Fixed Wing CV FCLP pattern at 1100' and not compatible.

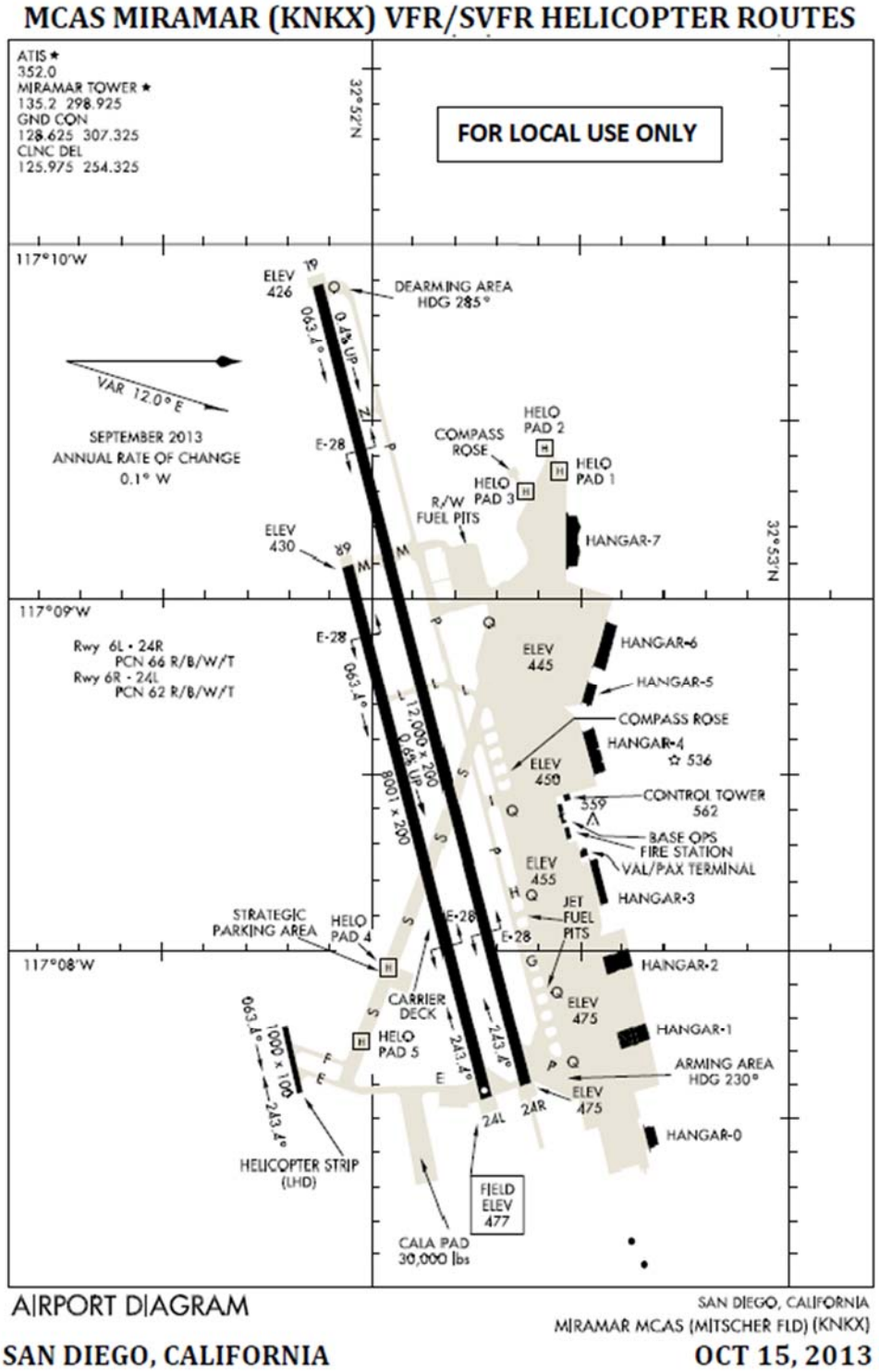
ROTARY WING
VFR PATTERNS

10

MCAS MIRAMAR (KNKX)
SAN DIEGO, CALIFORNIA

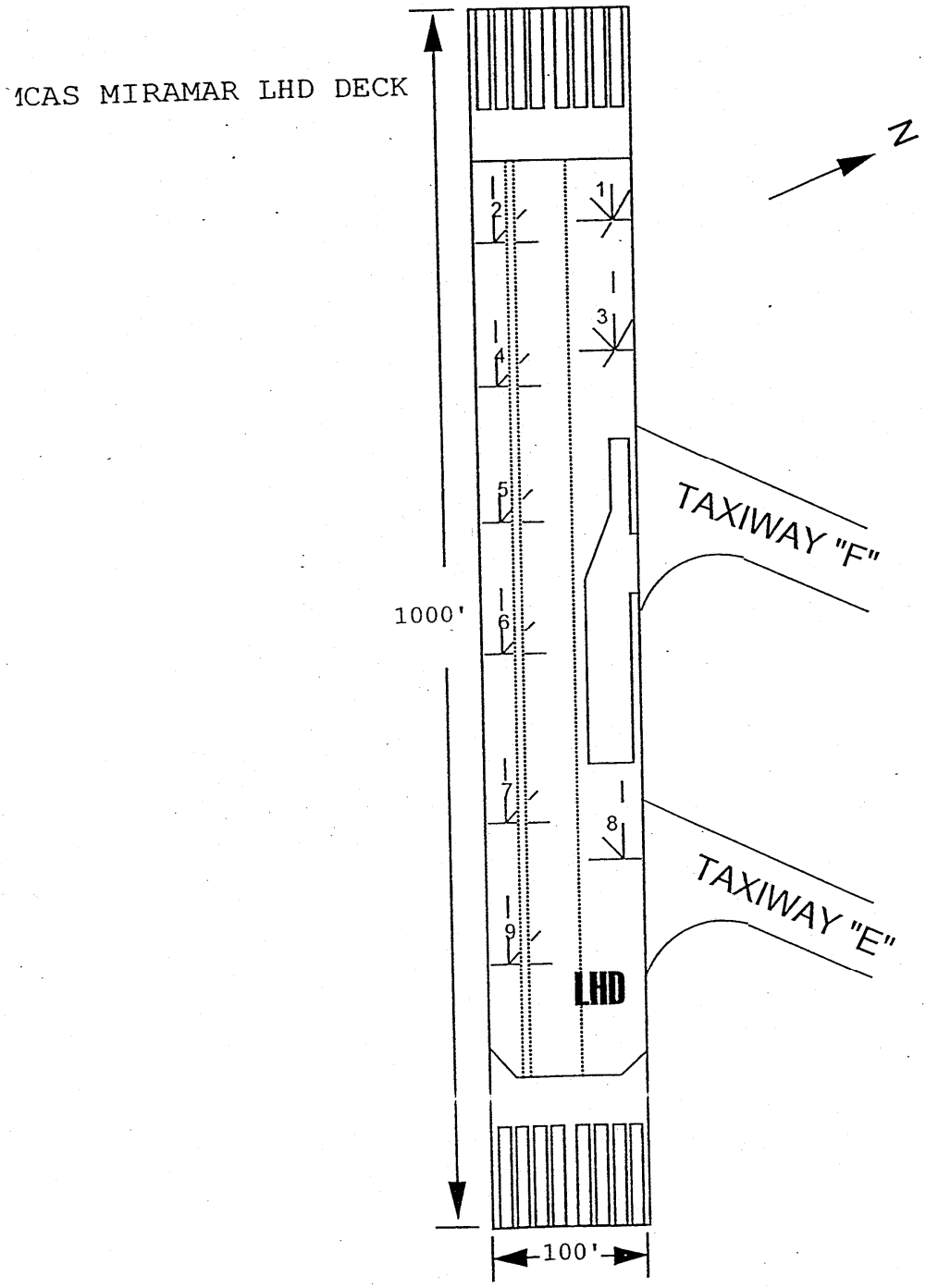
APPENDIX R-1

AIRFIELD DIAGRAM WITH HELO SPOTS 1 THROUGH 5



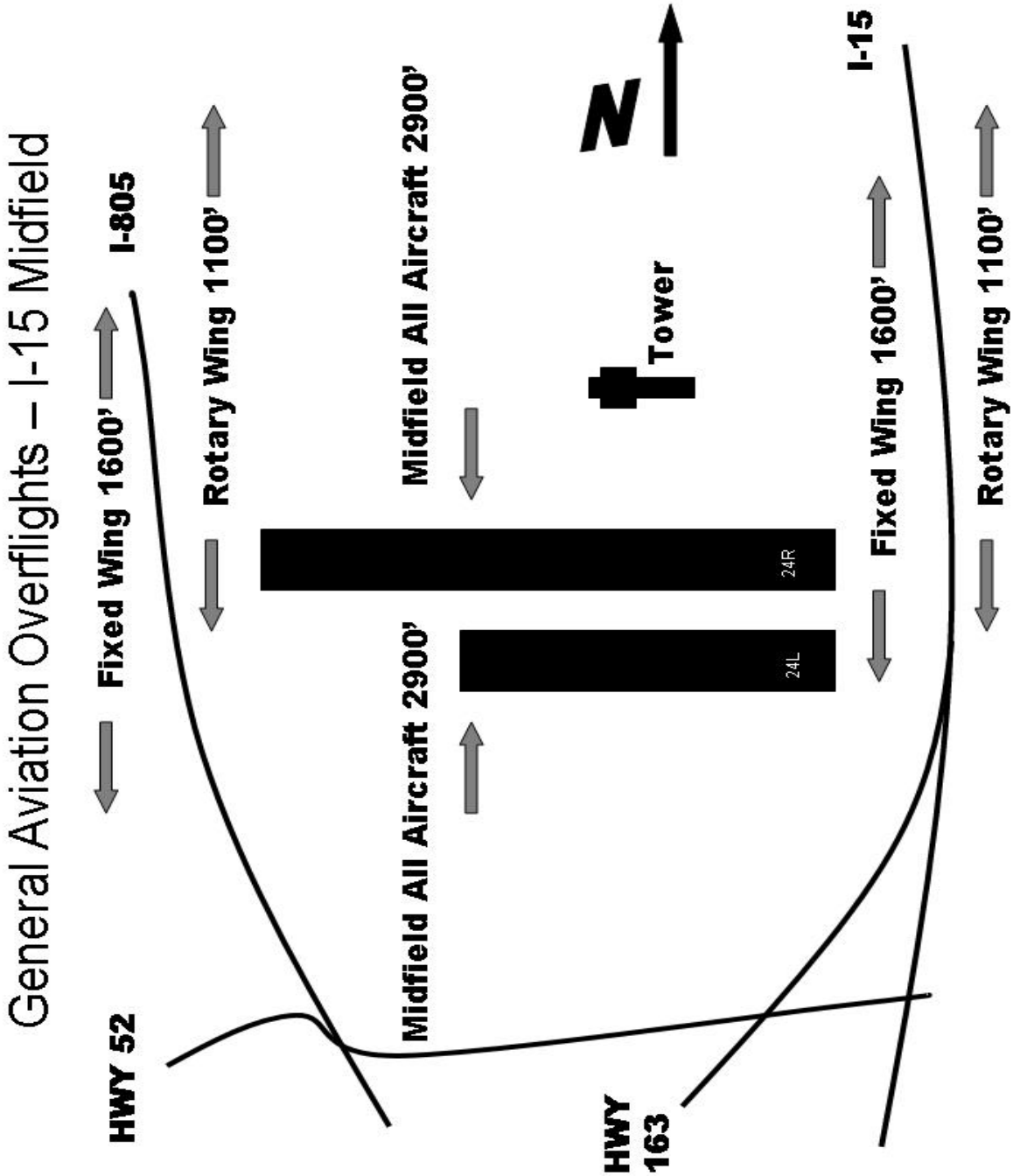
APPENDIX S-1

LHD DECK



APPENDIX T-1

GENERAL AVIATION OVERFLIGHT ROUTES OF I-15, I-805 AND MIDFIELD



APPENDIX U-1

MANDATORY NOISE ABATEMENT PROCEDURES FORM

MCAS MIRAMAR MANDATORY NOISE ABATEMENT PROCEDURES

Departure Runway 24R/L: Commensurate with aircraft operational capability, commence a climbing right turn after passing the NKX TACAN, then via assigned SID. Turn shall not be commenced early nor delayed. The TACAN is located abeam Runway 24R, 8,500' from the approach end of runway 24R. Secure afterburner(s) prior to commencing right turn. Except for emergency situations, use of afterburners below 10,000 feet MSL is prohibited. Departure will be as a section or via individual flight plans to join enroute. Each aircraft in the flight will fly the SID as published.

I have read, understand, and will comply with the MCAS Miramar's Noise Abatement Procedures. I have reviewed the appropriate Standard Instrument Departure (SID) or have requested radar vectors.

Printed Name:	Rank/Service:	Signature:
Date:	Unit:	Home Station:
Aircraft Type:	Callsign:	DSN Number:

APPENDIX V-1

NOISE COMPLAINT FORM

NOISE COMPLAINT REPORT
MCAS Miramar 5725/1 Rev 1/09

☐ Asst OPSO ☐ ODO ☐ CP&L ☐ Public Affairs
Received By (Print)

CALLER & DESCRIPTION OF EVENT

LAST NAME	FIRST NAME	DAY PHONE
Address (Street)	Community	Zip

Date of Event	Time	# of Aircraft	Heading

☐ Jet ☐ Helicopter ☐ Loud ☐ Fly Over ☐ Off Course ☐ Flying Low ☐ Sonic Boom ☐ Engine Run-ups ☐ Fuel Dump ☐ Other

Comments:

Caller's attitude ☐ Polite ☐ Irritated ☐ Angry ☐ Profane

Did caller request follow-up? ☐ Yes ☐ No

PROBABLE CAUSE AND ACTION TAKEN (ODO)

# OF A/C				
	☐ F/A-18 ☐ CH-53 ☐ CH46 ☐ C-130 ☐ Other (in comments)	☐ USMC ☐ USN ☐ USAF ☐ ARMY ☐ Other (in comments)	Squadron	Call Sign

☐ Beach ☐ I – 15 ☐ Fairways ☐ Julian ☐ Sea wolf ☐ Departure ☐ FCLP ☐ Overhead Break ☐ GCA Box ☐ LHD ☐ Emergency ☐ Other

Comments:

☐ Yuma ☐ Arrival ☐ Engine Run-ups

Did aircraft properly observe noise abatement procedures? ☐ Yes ☐ No ☐ Unknown

ACTION TAKEN BY CP&L

Date: Reviewer:

Comments:

APPENDIX W-1

AIRFIELD WEIGHT BEARING CAPACITIES
(INCLUDING FLIP CHART PCN DATA)

AIRFIELD WEIGHT BEARING CAPACITIES / FLIP CHART PCN DATA

AIR OPS NAME	PCN FLIP	F-14		P-3		C-130		C-141		C-5A	
		PCN	LOAD	PCN	LOAD	PCN	LOAD	PCN	LOAD	PCN	LOAD
RUNWAY 24R-6L	53/R/B	40	72,600	50	143,000	29	151,000	53	345,000	29	769,000
RUNWAY 24L-6R	82/R/B	58	72,600	77	143,000	44	175,000	82	345,000	48	837,000
RUNWAY 28-10	72/R/B	51	72,600	65	143,000	37	175,000	72	345,000	39	837,000
TAXIWAY E	75/R/B	50	72,600	65	143,000	37	175,000	75	345,000	41	837,000
TAXIWAY F	19/R/B[1]	*19*	*H53 69,750*		N/A		N/A		N/A		N/A
TAXIWAY G	53/R/B	53	72,600	58	143,000	33	175,000	66	345,000	41	804,000
TAXIWAY H	53/R/B	53	72,600	58	143,000	33	175,000	66	345,000	41	804,000
TAXIWAY I	53/R/B	53	72,600	58	143,000	33	175,000	66	345,000	41	804,000
TAXIWAY J	52/R/C	39	72,600	52	143,000	32	155,000	65	345,000	41	794,000
TAXIWAY K	52/R/C	39	72,600	52	143,000	32	155,000	65	345,000	41	794,000
TAXIWAY L	52/R/C & 52/F/A	39	72,600	52	143,000	32	155,000	65	345,000	41	794,000
TAXIWAY M	78/R/B	63	72,600	78	143,000	56	175,000	82	345,000	44	837,000
TAXIWAY N	69/R/B	57	72,600	69	143,000	37	175,000	69	345,000	37	837,000
TAXIWAY O	58/R/B	44	72,600	55	143,000	31	164,000	58	345,000	32	804,000
TAXIWAY P	58/R/B	44	72,600	55	143,000	31	164,000	58	345,000	32	804,000
TAXIWAY Q	53/R/B	53	72,600	58	143,000	33	175,000	66	345,000	41	804,000
TAXIWAY R	52/R/C	39	72,600	52	143,000	32	155,000	65	345,000	41	794,000
CALA	75/R/B[1]	50	72,600	65	143,000	37	175,000	75	345,000	41	837,000
COMPASS ROSE	52/R/C[1]	39	72,600	52	143,000	32	155,000	65	345,000	41	794,000
IN-LINE FUEL PIT 1	66/R/B	114	72,600	131	143,000	69	175,000	118	345,000	80	837,000
IN-LINE FUEL PIT 2	62/R/B	62	72,600		N/A		N/A		N/A		N/A
IN-LINE FUEL PIT 3	47/R/B	47	72,600		N/A		N/A		N/A		N/A
IN-LINE FUEL PIT 4	33/R/B	33	72,200		N/A		N/A		N/A		N/A
IN-LINE FUEL PIT 5	43/R/B	43	72,600		N/A		N/A		N/A		N/A
IN-LINE FUEL PIT 6	38/R/B	38	72,600		N/A		N/A		N/A		N/A
IN-LINE FUEL PIT 7	33/R/B	33	72,600		N/A		N/A		N/A		N/A
IN-LINE FUEL PIT 8	28/R/B	28	62,500		N/A		N/A		N/A		N/A
HANGAR 1 RAMP	69/R/B	46	72,600	60	143,000	34	175,000	69	345,000	37	837,000
HANGAR 2 RAMP	58/R/B	58	72,600	61	143,000	34	175,000	68	345,000	37	837,000
HANGAR 3 RAMP	50/R/B	40	72,600	50	143,000	28	151,000	53	340,000	29	739,000
HANGAR 4 RAMP	56/R/B	39	72,600	56	143,000	32	168,000	60	345,000	35	837,000
HANGAR 5 RAMP	49/R/B	39	72,600	49	143,000	29	155,000	54	345,000	31	789,000
HANGAR 6 RAMP	46/R/B	36	72,600	46	143,000	27	145,000	50	327,000	30	761,000
OCTAGON FUEL PITS	70/R/C	40	72,600	54	143,000	33	161,000	70	345,000	41	806,000
HELICOPTER PADS (1-6)	19/R/B[1]	*19*	*H53 69,750*		N/A		N/A		N/A		N/A
LHD DECK	19/R/B[1]	*19*	*H53 69,750*		N/A		N/A		N/A		N/A
STRATEGIC LIFT PARKING	72/R/B[1]	51	72,600	65	143,000	37	175,000	72	345,000	39	837,000
TRANSIENT LINE	50/R/B	40	72,600	50	143,000	28	151,000	53	340,000	29	739,000

1. NO CURRENT TEST DATA WAS AVAILABLE FOR THIS NEWER SECTION, AND IT WAS ASSUMED THAT ITS VALUES WERE EQUAL TO OR BETTER THAN THE ADJACENT OR SIMILAR OLDER SECTION. THE VALUES USED WERE FROM AN ADJACENT OR SIMILAR SECTION.

APPENDIX X-1

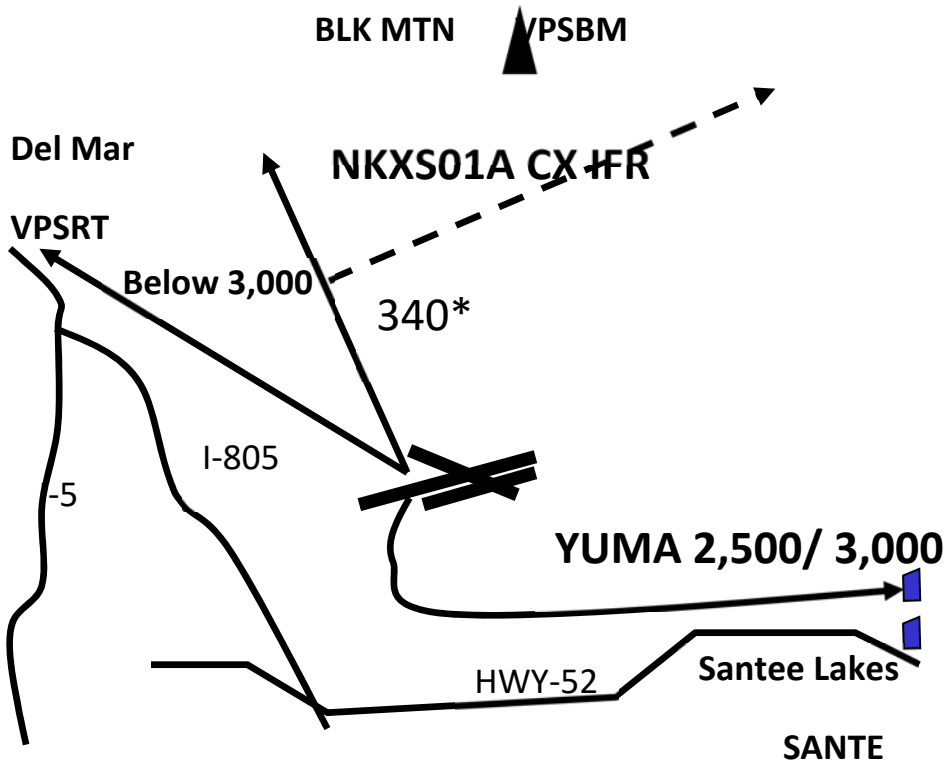
T-34 DEPARTURE PROCEDURES

MCAS MIRAMAR T-34

DEPARTURE PROCEDURES

Del Mar Departure- below 3,000 feet, north of the I-5/ I-805 merge.

Yuma Departure- left downwind 2,500 to 3,000 feet until Santee Lakes. N32*51' W117*00.37'.



APPENDIX X-2

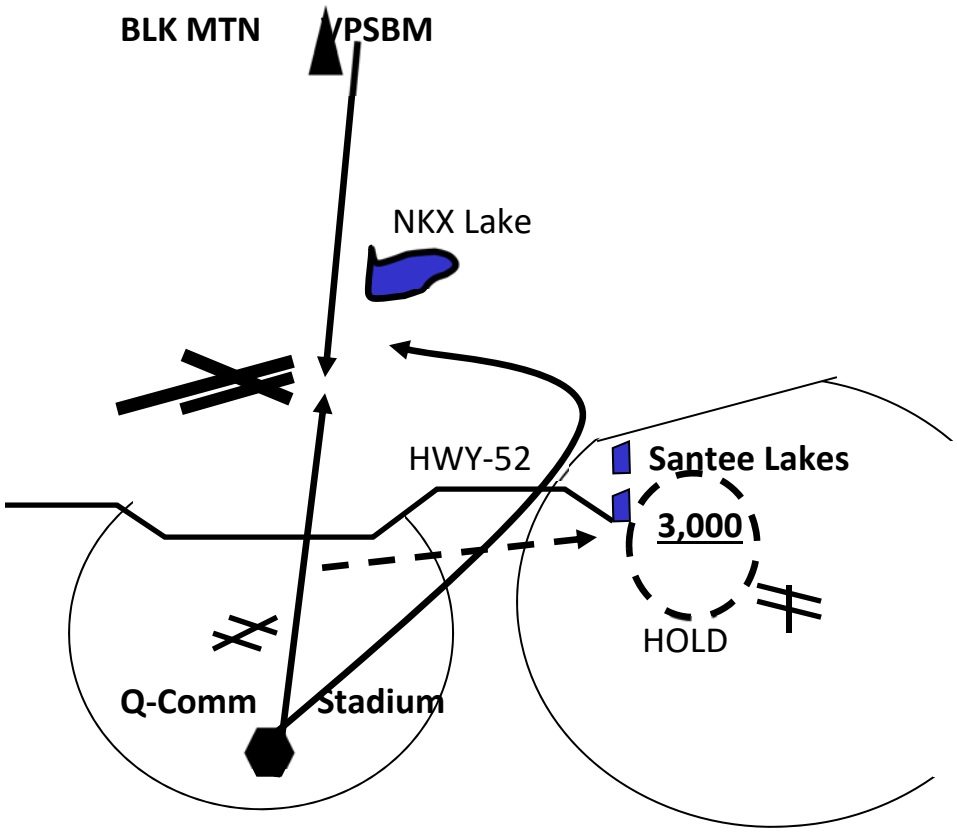
T-34 ARRIVAL PROCEDURES

MCAS MIRAMAR T-34

ARRIVAL PROCEDURES

Black MTN- Below 3,000.feet hold at NKX Lake @ 2,100 feet if required. OVR HD @ 2,100 feet.

Qualcomm Stadium- At 3,000 feet. Do NOT cross HWY-52 w/o Bravo clearance. Hold at Santee Lakes if required 2,500/3,000 feet.



APPENDIX Y-1

CLOSED FIELD OPERATIONS PHONE NUMBERS

UNICOM (Closed Field Operations **ONLY** Monitored by Weather/METRO – No services)	Freq: 135.2
Metro/Weather office (For Weather/METRO Services) Phone	Freq: 342.4 (858) 307-1533/4028
ARFF	(858) 307-6935/4646
ATCMD	(858) 307-1986/4854
PMO	(858) 307-4068
Fuels Dispatch	(858) 307-1393
ODO	(858) 307-4277/4279
Airfield OPSO	(858) 307-1925
Assistant Airfield OPSO	(858) 307-4419
Visiting Aircraft Line (VAL)	(858) 307-4283/ 4284/9197
Flight Planning	(858) 307-1532/4981
SOCAL TRACON (emergencies/ILS or TACAN outages only)	(858) 537-5900
SOCAL TRACON (To report cancel IFR)	1-800-448-3724

APPENDIX Y-2

AIRFIELD PHONE DIRECTORY

AIRFIELD OPERATIONS	**EXTENSION**
STATION OPERATIONS OFFICER	4275
DEPUTY OPERATIONS OFFICER	1528
AIRFIELD OPERATIONS OFFICER	1925
ATCO DIVISION	7719
AIR OPS CHIEF	1723
OPERATIONS DUTY OFFICER	4227/4279
AIRFIELD OPERATIONS	1282
FLIGHT PLANNING	4981/1532
FAX	1284/4261
AIR TRAFFIC CONTROL (ATC)	**EXTENSION**
OIC	4273
SNCOIC	4257
TRAINING SUPERVISOR	4260
ADMIN	4254
TRAINING OPS CHIEF	4260
AIRFIELD RESCUE & FIRE FIGHTING (ARFF)	**EXTENSION**
OIC	6494
SNCOIC	1648
ADMIN	4646
DISPATCH	6395/6912
SECTION LEADER	6909
CRASH CHIEF	6497
AIRFIELD RECOVERY (REC)	**EXTENSION**
SNCOIC	6146
Maintenance Crew	6179
ADMIN	4755
FUEL DIVISION DISPATCH	**EXTENSION**
FUELS MANAGER	6638
SNCOIC	8433
BULK STORAGE SUPERVISOR	1397
FUEL DELIVERY SUPERVISOR	1391
FUELS DISPATCH	1393
FUELS ACCOUNTING	1396
IN-LINE EAST FUEL PITS	1389
IN-LINE WEST FUEL PITS	(858) 997-8361
CRYOGENICS (LOX) PLANT	1388

VISITING AIRCRAFT LINE (VAL)	**EXTENSION**
DISPATCH/ADMIN	4285/4284
PASSENGER (PAX) TERMINAL	4283
BILLETING	4233/4235
ENTERPRISE CAR RENTAL (ON BASE)	(858) 348-8252
METOC SERVICES (WEATHER/WX)	**EXTENSION**
OIC	9188
SNCOIC	4030
METOC OBSERVER/FORECASTER	4028/1533/1542
ADMIN	4032/4029
FAX	4031
EXPLOSIVE ORDNANCE DISPOSAL	**EXTENSION**
SNCOIC	7697
OIC	7696
EMERGENCY	7699
DUTY CELLULAR	(858) 864-4201
EXPLOSIVE SAFETY OFFICE	8868
ENVIRONMENTAL MANAGEMENT DEPARTMENT	**EXTENSION**
ADMIN	1108
AEMO	1134
EMO	1361
HERO PROGRAM MANAGER	4847/4850
MALS-11 ORDNANCE	**EXTENSION**
ADMIN	1846
OIC	1711
SNCOIC	1713
MALS-11 AVIONICS DIVISION	**EXTENSION**
ADMIN	4080
AVIONICS CHIEF	6698
ASST. AVIONICS CHIEF	6403
AVIONICS TRAINING CHIEF	7280
OIC	4941
AOIC	4076
MALS-11 TEST CELL	1265
MALS-16 AVIONICS DIVISION	**EXTENSION**
ADMIN	1162
SNCOIC	7690
OIC	7689

PROVOST MARSHAL'S OFFICE (PMO)	**EXTENSION**
DESK SGT/OPS CHIEF	4068/4073/4059
OPS OFFICER	1283
DEPUTY PROVOST MARSHAL	4070
STATION PROVOST MARSHAL	6601
STATION AVIATION ORDINANCE DIVISION	1796/1797
STATION DIRECTOR OF SAFETY/MANAGER	**EXTENSION**
DUTY CELLULAR	 (858) 864-3470
STATION AVIATION SAFETY OFFICER	8912
MANAGER	1361/1360
STATION COMMAND DUTY OFFICER	1141
FAA ATREP	1637
FAA FSDO, SAN DIEGO	(858) 502-9882

APPENDIX Z-1

CLOSED FIELD OPERATIONS CHECKLISTS

Instrument Flight Rules (IFR)
Closed Field Operations Checklist

RESTRICTIONS:

Runway 24R/6L is the only authorized runway for conducting IFR closed field arrivals and departures for rotary wing and single fixed wing aircraft. Use of Runway 24L/6R is authorized for F/A-18 section arrivals and departures only, unless Runway 24R/6L is closed.

SOCAL TRACON will authorize only one military call sign to be airborne in Miramar's Class Bravo airspace during closed field hours. Upon arrival, aircrew must call "on deck, canceling IFR" before TRACON can handle the next aircraft.

Aircrews desiring to conduct IFR CFOs shall:

____ Possess a CFO Number issued by Airfield Operations during normal airfield hours per procedures established in this Order.

____ Obtain a complete route and terminal weather brief prior to departure. The weather shall be forecast to be VMC at Miramar for CFOs.

____ File IFR flight plan with the appropriate air operations facility or Flight Service Station a minimum of 30 minutes prior to planned departure. This can also be accomplished by calling (800)992-7433, or (800)WX-BRIEF.

Aircrews desiring to conduct IFR departures shall:

____ Contact SOCAL TRACON at 1-800-448-3724, Extension 5, to request clearance 30 minutes prior to taxi.

____ Aircrew or squadron ODO notify the Station ODO (VHF 135.2, Comm (858)307-4277/4279 or DSN 307-4277/4279) at least 15 minutes prior to proposed departure time. (NOTE: The Station ODO will contact ARFF to ensure they are positioned as required by OPNAV, and other airfield operational requirements are facilitated). Upon contact, provide the ODO with the following information:

1. Proposed departure time.

2. Number and type of aircraft.

3. Departure procedure.

4. Expected time enroute.

5. Number of souls on board.

____ Utilize Miramar Tower (VHF 135.2) as Unicom to make all taxi calls in the blind.

____ Contact SOCAL TRACON on assigned departure frequency at the hold short line of Runway 24R/6L (or 24L/6R if closed), to request and obtain IFR clearance.

____ Contact SOCAL TRACON upon receipt of clearance, “ready for takeoff, request IFR release.” Expect a “release valid at time, void if not off by” time.

____ Activate Pilot Controlled Lighting if required by keying aircraft transmitter on VHF 135.2/UHF 298.925 a specified number of times (clicks) in five (5) seconds. This will set airfield lights to selected intensity, illuminate lights for 24R and selected taxiways and PAPIs for Runway 24R, and turn the “Red” Beacon off and “Green” Beacon on.

Low	----------	3 Clicks
Med	----------	5 Clicks
High	----------	6 Clicks

____ Contact ODO on VHF 135.2 to manually activate airfield lighting if the Pilot Controlled Lighting System is inoperable.

____ Utilize Miramar Tower (VHF 135.2) as Unicom when taxiing onto Runway 24R/6L. Once on the runway, take and maintain a minimum of 1,000 feet of separation between departing aircraft. Tactical fixed wing aircraft may use both runways to gain adequate separation.

____ Contact SOCAL TRACON on assigned departure frequency with reason and intentions if not airborne by “void” time.

____ Contact SOCAL TRACON on assigned departure frequency once airborne for further IFR services.

Aircrews desiring to conduct IFR arrivals shall:

____ Aircrew or squadron ODO notify the Station ODO (VHF 135.2, Comm (858)307-4277/4279 or DSN 307-4277/4279) at least 15 minutes prior to landing and provide estimated time of arrival. (NOTE: Station ODO will contact ARFF to ensure they are positioned as required by OPNAV, and other airfield operational requirements are facilitated.)

____ Request a visual, TACAN or ILS approach if weather at Miramar is between VMC and SOCAL TRACON’s Minimum Vectoring Altitude (3,100’/3).

____ Request climb-out instructions from SOCAL TRACON prior to frequency change to Unicom (VHF 135.2) in case a go-around is required during a visual approach.

____ Request SOCAL TRACON approve the frequency change to Unicom (VHF 135.2) as soon as possible.

____ Activate Pilot Controlled Lighting if required by keying aircraft transmitter on VHF 135.2/UHF 298.925 a specified number of times (clicks) in five (5) seconds. This will set airfield lights to selected intensity, illuminate lights for 24R and selected taxiways and PAPIs for Runway 24R, and turn the “Red” Beacon off and “Green” Beacon on.

Low	----------	3 Clicks
Med	----------	5 Clicks

High ---------- 6 Clicks

____ Contact ODO to manually activate airfield lighting if the Pilot Controlled Lighting System is inoperable.

____ Prior to landing, obtain a minimum of 1,000 feet of separation between arriving aircraft. Tactical fixed wing aircraft may use both runways to gain adequate separation.

____ Once released from SOCAL TRACON, utilize MCAS Miramar Tower (VHF 135.2) as Unicom to broadcast position and landing intentions. Fixed wing aircraft switch no later than 7 NM, and rotary wing aircraft switch no later than 3 NM.

____ After landing, advise SOCAL TRACON “on deck, canceling IFR.”

____ If unable to land, execute published missed approach and contact SOCAL TRACON (VHF 132.2/UHF 269.1) for further instructions.

____ Utilize Miramar Tower (VHF 135.2) as Unicom to make all taxi calls in the blind.

____ Call SOCAL TRACON at (858)537-5946 within 5 minutes of landing to cancel IFR if unable to do so previously. (This is required in order to avoid undue delay to other aircraft.)

Visual Flight Rules (VFR)
Closed Field Operations Checklist

RESTRICTIONS:

Runway 24R/6L is the authorized location for conducting closed field arrivals and departures for rotary wing and single fixed wing aircraft, unless departing from one of the spots after hover checks.

Use of Runway 24L/6R is only authorized for F/A-18 section arrivals and departures, or if Runway 24R/6L is closed.

Hover checks shall be conducted at helo spot 3 (primary) or 2 (alternate), and may be done concurrently with closed field takeoffs and landings after first advising SOCAL TRACON. Aircrew shall utilize tower (VHF 135.2) as Unicom, and shall make all taxi, commencement, and completion calls in the blind. Advise SOCAL TRACON when complete. Hover checks shall cease if ARFF is required to respond to an emergency situation.

SOCAL TRACON will only authorize one military call sign (single or section) to be airborne in Miramar’s Class Bravo airspace during CFOs. Upon arrival, aircrew must call “landing assured” before TRACON can handle the next aircraft.

Rotary Wing aircraft shall utilize established course rules, but are authorized to deviate from prescribed procedures and altitudes when directed by SOCAL TRACON.

Special VFR operations are not authorized and shall not be conducted to MCAS Miramar when the airfield is closed.

Aircrews desiring to conduct VFR CFOs shall:

____ Possess a CFO Number issued by Airfield Operations during normal airfield hours per procedures established in this Order.

____ Obtain a complete route and terminal weather brief prior to departure. The weather shall be forecast to be VMC for the duration of closed field operations.

Aircrews desiring to conduct VFR departures shall:

____ Contact SOCAL TRACON at 1-800-448-3724, Extension 5, not sooner than 30 minutes prior to taxi to request Class B clearance instructions (but not airspace release).

____ Aircrew or squadron ODO notify the Station ODO (VHF 135.2, Comm (858)307-4277/4279 or DSN 307-4277/4279) at least 15 minutes prior to proposed departure time. (NOTE: Station ODO will contact ARFF to ensure they are positioned as required by OPNAV, and other airfield operational requirements are facilitated.) Upon contact, provide the ODO with the following information:

1. Proposed departure time.

2. Number and type of aircraft.

3. Departure procedure.

4. Expected time enroute.

5. Number of souls on board.

____ Utilize Miramar Tower (VHF 135.2) as Unicom to make all taxi calls in the blind.

____ Contact SOCAL TRACON on assigned departure frequency at the hold short to request and obtain VFR Class B airspace release.

____ Advise TRACON, “ready for takeoff, request VFR release.” Expect a “release valid at” time and “void if not off by” time.

____ Activate Pilot Controlled Lighting if required by keying aircraft transmitter on VHF 135.2/UHF 298.925 a specified number of times (clicks) in five (5) seconds. This will set airfield lights to selected intensity, illuminate lights for 24R and selected taxiways and PAPIs for Runway 24R, and turn the “Red” Beacon off and “Green” Beacon on.

Low	----------	3 Clicks
Med	----------	5 Clicks
High	----------	6 Clicks

____ Contact the ODO on VHF 135.2 to manually activate airfield lighting if the Pilot Controlled Lighting System is inoperable.

____ Transmit “in the blind” on Miramar Tower (VHF 135.2) when taking and departing Runway 24R/6L. Once on the runway, take and maintain a minimum of 1,000 feet of separation between departing aircraft.

Tactical fixed wing aircraft may use both runways to gain adequate separation.

____ Contact SOCAL TRACON with reason and intentions, if not airborne by “void” time.”

____ Depart and contact SOCAL TRACON on assigned departure frequency for Class B VFR services.

____ Fly IAW existing departure procedures or as directed.

Aircrews desiring to conduct VFR arrivals shall:

____ Aircrew or squadron ODO notify the Station ODO (VHF 135.2, Comm (858)307-4277/4279 or DSN 3077-4277/4279) at least 15 minutes prior to landing to provide estimated time of arrival, number of souls on board, and divert plan, as required by DoD directive. (NOTE: ODO will contact ARFF to ensure the runway is clear of maintenance operations, ARFF is positioned as required by OPNAV, and other airfield operational requirements are facilitated.)

____ Contact SOCAL Approach (UHF 269.1/VHF 132.2 if arriving from the north or east, or UHF 363.1/VHF 119.6 if arriving from the west) to request Class B clearance to land at Miramar and advise of lost communication divert plan, as required by DoD directive (however, this is not required by the FAA).

____ Helicopters and tiltrotor aircraft utilize the appropriate routes set forth in existing course rules for rotary wing aircraft flying VFR. The following routes are authorized: Fairways, Beach, Yuma, or I-15. (NOTE: Deviation from the course rules as depicted is not authorized.)

____ Request SOCAL TRACON approve the frequency change to Unicom (VHF 135.2) as soon as possible.

____ Activate Pilot Controlled Lighting if required by keying aircraft transmitter on VHF 135.2/UHF 298.925 a specified number of times (clicks) in five (5) seconds. This will set airfield lights to selected intensity, illuminate lights for 24R and selected taxiways and PAPIs for Runway 24R, and turn the “Red” Beacon off and “Green” Beacon on.

Low	----------	3 Clicks
Med	----------	5 Clicks
High	----------	6 Clicks

____ Prior to landing, take and maintain a minimum of 1,000 feet of separation between arriving aircraft.

____ Utilize MCAS Miramar tower frequency (VHF 135.2) as Unicom and broadcast position and landing intentions, once released by TRACON.

____ Contact SOCAL TRACON on arrival frequency for further Class B instructions if unable to land.

____ After landing, advise SOCAL TRACON on arrival frequency when “on deck.”

_____ Utilize Miramar Tower (VHF 135.2) as Unicom to make all taxi calls in the blind.