



**UNITED STATES MARINE CORPS**

MARINE CORPS AIR STATION YUMA  
BOX 99100  
YUMA, ARIZONA 85369-9100

StaO P3710.4L  
3OPS

08 DEC 2006

STATION ORDER P3710.4L

From: Commanding Officer  
To: Distribution List

Subj: AIRFIELD OPERATIONS MANUAL, MARINE CORPS AIR STATION (MCAS)  
YUMA, ARIZONA (SHORT TITLE: AIRFIELD OPERATIONS MANUAL)

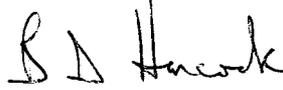
Ref: (a) OPNAVINST 3710.7  
(b) OPNAVINST 3760.1  
(c) FAA Handbook 7110.65  
(d) OPNAVINST 4790.2  
(e) NAVAIR 00-80R-20  
(f) OPNAVINST 3750.6  
(g) NAVAIR 00-80T-113  
(h) SECNAVINST 3770.1C  
(i) NAVAIR 00-80T-114

Encl: (1) LOCATOR SHEET

1. Purpose. In accordance with the references, this manual provides policies, procedures, and standards for effective management of airfield operations at Marine Corps Air Station (MCAS) Yuma, Arizona.
2. Cancellation. StaO P3710.4K.
3. Background. The instructions contained herein pertain to the operation of aircraft within MCAS Yuma's Class D Airspace and outlying fields, other special use of airspace controlled or monitored by MCAS Yuma's Air Traffic Control (ATC) and vehicles operating on or near Aircraft Operations Areas (AOA). These instructions do not supersede instructions issued by higher authority nor do they cover every possible situation for which pilots, aircrew, and ground support personnel must exercise sound judgment.
4. Summary of Revision. This manual has been reformatted and contains substantial changes and should be completely reviewed.
5. Action. Commanding Officers, officers in charge, and supervisors shall ensure that all personnel operating aircraft and vehicles aboard MCAS Yuma, or within operational areas described herein, are thoroughly familiar and comply with the rules, procedures, and regulations published in this Manual.
6. Recommendations. Recommendations concerning the contents of the Airfield Operations Manual are invited and should be forwarded via the chain of command to the Commanding Officer, MCAS Yuma.

StaO P3710.4L

7. Certification. Reviewed and approved this date.



B. D. HANCOCK

DISTRIBUTION: B  
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StaO P3710.4L Ch 1  
30PS

13 AUG 2009

STATION ORDER P3710.4L Ch 1

From: Commanding Officer  
To: Distribution List

Subj: AIRFIELD OPERATIONS MANUAL, MARINE CORPS AIR STATION (MCAS)  
YUMA, ARIZONA (SHORT TITLE: AIRFIELD OPERATIONS MANUAL)

1. Purpose. To make changes to the basic order.

2. Action

a. Change paragraph 5 to 5a; insert subparagraph 5b to read: b. This order will be reviewed annually no later than June 30<sup>th</sup> each year. Requests for changes shall be submitted to the Airfield Operations Officer for review and consideration.

b. Delete paragraph six of the basic order in its entirety and renumber remaining paragraphs accordingly.

c. Delete paragraph 3013.1a in its entirety and replace with the following: a. The presence of personnel and vehicles on runways, taxiways, parking ramp and the fire lane is strictly controlled at all times. These areas of the airfield are not designed for frequent vehicle movement and require extreme caution. Prior to operating on movement areas of the airfield, (runways, taxiways, and parking ramp) the vehicle operator/ personnel must establish and maintain two way radio contact with the Air Traffic Control Tower (Ground). The vehicle operator/ personnel must receive authorization to proceed on any movement area prior to entering the surface. Those personnel whose duties require the operation of a vehicle (to include GSE) shall be thoroughly familiar with this section of the Airfield Operations Manual regarding operational requirements of vehicles and vehicle operators on this airfield.

d. Delete paragraph 3013.1c(2) in its entirety and replace with the following: (2) All vehicles moving onto the aircraft movement area are required to establish and maintain two way radio contact with Yuma Ground Control. This includes all taxiways, aprons, etc. Any vehicle or personnel moving onto a movement area shall obtain clearance from the tower prior to moving onto the requested area. All instructions given from the tower shall be repeated back verbatim to ensure complete understanding, and shall be complied with fully.

e. Delete paragraph 3013.6 in its entirety and replace with the following: 6. Operating on Taxiways. Vehicles operating on taxiways shall make radio contact with Ground Control prior to operating on any taxiway. All vehicles shall obtain clearance from Tower/Ground Control prior to operating on or crossing any taxiway or runway. Vehicles will use the extreme right or left side, and will give way to all moving aircraft. When giving way to an aircraft, do not pull onto the shoulder or into the dust cover unless required by the size of the aircraft or for the purpose of safety. If required to exit onto the shoulder or dust cover, execute a tire and vehicle FOD check prior to re-entering the surface.

f. Add the following to Distribution paragraph: NAVFIG; COMVAVAIRSYSCOM (AIR 4223); COMNAVAIRSYSCOM, (Code 4.5.9.2); and ATC Community Website: <https://atc.navy.mil/default.aspx>.

3. Filing Instructions. File this change transmittal immediately following the signature page of the basic order.

  
M. A. WERTH

DISTRIBUTION: B, A (5)

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MARFORPAC (3)  
SPAWARSYSCEN  
LAGUNA AAF  
NAVY SFTY CTR (CODE-114)  
CG, 2<sup>nd</sup>, 3<sup>RD</sup> & 4<sup>th</sup> MAW



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BOX 99100  
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StaO P3710.4L Ch 2  
3OPS

27 APR 2010

STATION ORDER P3710.4L Ch 2

From: Commanding Officer  
To: Distribution List

Subj: AIRFIELD OPERATIONS MANUAL, MARINE CORPS AIR STATION (MCAS) YUMA,  
ARIZONA (SHORT TITLE: AIRFIELD OPERATIONS MANUAL)

1. Situation. To make changes to the basic Order.
2. Execution. Delete paragraph 4007.3 in its entirety and replace with the following: "3. The R-2301W extends north to Interstate 8 (I-8), from surface to FL800. The Foothills residential area south of I-8 lies beneath R-2301W. Operations in the R2301 targets' area (west of the Gila Mountains) present the potential for low altitude over flight of this residential area. To minimize over flight at low altitude, fixed wing aircraft, should to the maximum extent practicable, avoid over flight of this residential area."
3. Filing Instructions. File this change transmittal immediately following the signature page of the basic Order.

  
M. A. WERNE

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MARFORLANT (3)	NAVY SFTY CTR (CODE-114)
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LOCATOR SHEET

Subj: AIRFIELD OPERATIONS MANUAL

Location:

(Indicates the location(s) of the copy(ies) of this Manual.)

ENCLOSURE (1)

RECORD OF CHANGES

Log completed change action as indicated:

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change

AIRFIELD OPERATIONS MANUAL

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# AIRFIELD OPERATIONS MANUAL

## INTRODUCTION

0001. PURPOSE. To publish policies and procedures for managing airfield operations at MCAS Yuma.

0002. STATUS

1. The policies and procedures in this Manual apply to all units and personnel operating at MCAS Yuma or within its operational areas.
2. Requests for deviation from the instructions in this Manual must be submitted in writing to the Commanding Officer, MCAS Yuma via the appropriate chain of command for consideration.

0003. RESPONSIBILITY. The Station Operations Officer is the direct representative of the Commanding Officer, MCAS Yuma on all matters pertaining to the control and clearance of aircraft aboard this Station and within its operational areas. The Station Operations Officer is responsible for maintaining this manual and for issuing changes as necessary. Officers and personnel of the Operations Department shall ensure compliance with the regulations contained herein.

0004. ORGANIZATION AND COMMUNICATIONS

1. MCAS Yuma is a subordinate unit of Marine Corps Installations West (MCIWEST). Message plain language addresses are:
  - a. MCAS YUMA AZ//OPS//.
  - b. MCIWEST Miramar CA//G-3//.
2. The Operations Department includes the following sections.
  - a. Air Traffic Control (ATC).
  - b. Aircraft Rescue and Fire Fighters (ARFF).
  - c. Flight Clearance (Flt Clnc).
  - d. Recovery (REC).
  - e. Ground Electronic Maintenance Division (GEMD).

## AIRFIELD OPERATIONS MANUAL

- f. Meteorology and Oceanography (METOC).
  - g. Deployment Schedules Office (Fleet Liaison).
3. Business pertaining to Base Operations can be addressed by phone at the following DSN numbers. The commercial area code and prefix is (928) 269-XXXX.
- a. Station Operations Officer: 269-3558.
  - b. Station Operations Chief: 269-3559.
  - c. Assistant Operations Officer: 269-3327.
  - d. Flight Clearance: 269-2077/2326 (0630 - 2230).
  - e. Correspondence can be addressed to:

Commanding Officer, Marine Corps Air Station Yuma  
Attn: Station Operations Officer  
P.O. Box 99114  
Yuma, AZ 85369-9114

0005. GEOGRAPHICAL DESCRIPTION. MCAS Yuma (KNYL) is a joint-use, military/commercial airport located within the southern boundary of the city of Yuma, Arizona.

### 0006. AIR STATION HISTORY

The year was 1928. The place: 640 acres covered with cactus, brush and desert wildlife near Yuma, AZ. During that time Colonel Benjamin F. Fly persuaded the federal government to lease the land from Yuma County. Three weeks later, a 20-year lease with an option for an additional 20 years at \$1 per year, was signed. Fly Field became a reality.

Aviation was in its infancy and Fly Field became the center of attention in Yuma. During the summer of 1928, it was used as a stopover point for 25 planes in a New York to Los Angeles air race. Private aircraft used it sporadically until 1941 when the U.S. government, through the Civil Aeronautics Administration, authorized expenditure for permanent runways.

## AIRFIELD OPERATIONS MANUAL

When the United States entered World War II, an air base was erected with the astounding speed that characterized the war effort and by early 1943, Yuma Army Air Base began graduating pilots. The base became one of the busiest flying schools in the nation, training pilots of AT-6 single engine trainers, T-17 multi-engine trainers and B-17 Flying Fortresses.

At the end of the war, all flight activity ceased and the area was partially reclaimed by the desert. During the period of inactivity, the War Assets Administration, the U.S. Army Corps of Engineers and the Department of the Interior's Bureau of Land Reclamation controlled it successively.

On July 7 1951, the Air Force reactivated the base and the 4750th Air Base Squadron resumed training as part of the Western Air Defense Force. The Airfield was named Yuma Air Base, but was renamed Vincent Air Force Base in 1956 in memory of Brig. Gen. Clinton D. Vincent, a pioneer of bombing techniques, who died in 1955.

The facility was signed over to the Navy on January 1, 1959 and nine days later, Colonel L. K. Davis became the first Commanding Officer of the newly designated Marine Corps Auxiliary Air Station. On July 20, 1962, the designation was changed to Marine Corps Air Station. From 1969 until 1987, the Air Station served primarily as a training base for pilots assigned to Marine Corps Combat Readiness Training Group-10, flying the F-4 Phantom, A-4 Skyhawk and AV-8A Harrier.

Since then, the main runway has been extended to 13,300 feet (enough concrete for 37 miles of two-lane highway) and the Tactical Aircrew Combat Training System, has been added. The system is designed to provide realistic air-to-air combat training with electronically simulated weapons firing for all Navy and Marine squadrons.

In 1987, Marine Aircraft Group-13, with Marine Attack Squadrons 211, 214, 311, and 513 replaced MCCRTG-10 as the major tenant command aboard the Station. The move also brought Marine Wing Support Squadron-371 to Yuma, joining Marine Air Control Squadron-7 and the 2nd Light Anti-aircraft Missile Battalion.

Throughout the fall of 1990, virtually every Marine Corps fixed wing squadron that participated in Operations Desert Shield and Desert Storm underwent pre-deployment training on Yuma's ranges.

On September 1, 1994, subsequent to the deactivation of 2d LAAM Bn., 1st LAAM Bn was reactivated, consisting of H&S Battery and three firing batteries. 1st LAAM Bn merged with MACS-7 on July 11, 1997 resulting in the re-designation of MACS-7 as MACS-7 (reinforced). On June 26, 1998 MACS-7 was consolidated with MACS-1 to form MACS-1 (Rein) which was relocated from Camp Pendleton to MCAS Yuma.

## AIRFIELD OPERATIONS MANUAL

Today, MCAS Yuma is the busiest air station in the Department of the Navy. It is also one of the largest single contributors to the economy of Yuma County. Its primary mission is to support aerial weapons training for the Atlantic and Pacific Fleet Marine and Naval Forces, and to serve as a base of operations for Marine Aviation Weapons and Tactics Squadron-1, and Third MAW units, to include Marine Aircraft Group-13.

As the scheduling authority for the Bob Stump Training Range Complex, MCAS Yuma provides fleet squadrons access to 10,000 square miles of special-use airspace designated for military aviation training and almost 2,000 square miles of underlying land reserved as aerial bombing and gunnery ranges. Collectively, this complex is the largest tactical aviation training range utilized by the Marine Corps.

Each year, over 50 aviation units deploy here to train on Yuma's 2.8 million acre range complex. These deployments, ranging from a few days to weeks, bring 13,000 personnel and 1,000 aircraft to Yuma annually.

In addition, MCAS Yuma is the only joint-use air station in the Marine Corps. Through a patent (land grant) dated in 1956, commercial and general aviation aircraft are allowed to use all landing facilities at MCAS Yuma.

0007. ALLOWANCES. Requests for a copy of this manual or for inclusion to distribution should be made to the Commanding Officer, (Attn: Operations Officer), MCAS Yuma.

AIRFIELD OPERATIONS MANUAL

CHAPTER 1

GENERAL INFORMATION

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# AIRFIELD OPERATIONS MANUAL

## CHAPTER 1

### GENERAL

1000. GENERAL PRUDENTIAL RULES. The regulations prescribed herein govern the operation of all aircraft at MCAS Yuma, and within the MCAS Yuma Class D Airspace. All vehicular traffic on the runways and taxiways are also subject to these regulations. Pilots are expected to exercise good judgment in the operation of aircraft while adhering to the general prudential rules of flying. The pilot-in-command of any aircraft is responsible for the safe and orderly conduct of the flight and is expected to adhere to the provisions of the Naval Air Training and Operating Procedures Standardization (NATOPS) manual for the type/model/series of aircraft. Personnel having specific duties that require their presence on the airfield are expected to be familiar with and adhere to all applicable portions of these regulations.

### 1001. GEOGRAPHICAL INFORMATION

1. The geographical center of the airfield is 32° 39.4' north latitude, 114° 36.4' west longitude. Field elevation is 216' above Mean Sea Level (MSL) and the magnetic variation is 12.6 degrees east.
2. MCAS Yuma/Class D Airspace (Surface Area). MCAS Yuma is classified as Class D Airspace (Surface Area). The dimensions of the Class D Airspace are as follows: "That airspace within a 5.2 NM radius of MCAS Yuma (latitude 32°39'24"N, longitude 114°36'19"W) within 1.8 miles each side of the Bard VORTAC 168-radial, extending from the 5.2 mile radius of the surface area to the VORTAC, and within 1.8 miles on each side of the Yuma TACAN (latitude 32°38'48"N, longitude 114°36'45"W) 031-radial, extending from the 5.2 mile radius of the surface area to 6 nautical miles NE of the TACAN extending from the surface to 2,700'AGL. An exclusionary zone exists over Somerton airport from surface to 300'AGL." (Appendix A).
3. MCAS Yuma local time is Zulu minus seven (-7) hours all year. Arizona does not adjust for Daylight Savings Time.

### 1002. HOURS OF OPERATION

1. MCAS Yuma is open for military operations from 0730T to 2230T Monday thru Friday and 1000T to 1800T on the weekends, or as published NOTAMed. The control tower is operational during those hours unless NOTAMed otherwise. The meteorology and oceanographic service is open 24 hours a day, 365 days a year.

2. The Assistant Operations Officer must approve extended field hours or military closed field operations. Requests shall be submitted via letter or message in sufficient time to arrive no later than five (5) working days in advance.

3. Civil aircraft continue to operate when the airfield is closed, but Airport Advisory Service is not available to them. All aircraft utilize common traffic advisory frequency VHF 119.3.

#### CAUTION

MILITARY AIRCRAFT AUTHORIZED TO CONDUCT CLOSED FIELD OPERATIONS ARE CAUTIONED AND ADVISED THAT CIVIL AIRCRAFT CONTINUE TO OPERATE AT THE AIRFIELD USING CTAF. MILITARY AIRCRAFT SHOULD CONTACT YUMA APPROACH CONTROL FOR RADAR ADVISORIES CONCERNING AIRPORT CIVIL TRAFFIC AND MONITOR CTAF VHF (119.3) IF ABLE.

#### 1003. RUNWAY STRUCTURE

1. The runway structure consists of one set of parallel runways with two intersecting runways. See Appendix B, Air Station Diagram.

#### 2. Runway dimensions

<u>Runway</u>	<u>Surface</u>	<u>Length x Width</u>	<u>Overrun</u>
3R/21L	Asphalt	9,239' x 150'	3R-976'/21L-1000'
3L/21R	Concrete	13,299' x 200'	3L-650'/21R-1000'
8/26	Asphalt	6,145' x 150'	8-1000'/26-251'
17/35	Asphalt	5,710' x 150'	17-800'/35-262'

3. All runways have a concrete run-up area adjacent to the approach end.

4. The primary runways for military departures/arrivals are 3/21. Runway 3L/21R is the primary arrival/departure runway for heavy civil aircraft. Runways 8/26 and 17/35 are used primarily for helicopters, light military and civil aircraft.

5. Runways are marked in accordance with standard NAVAIR criteria. Lighted runway distance markers are located at 1,000' intervals on all runways.

1004. RUNWAY LOAD BEARING STRENGTH. Current runway bearing strengths are listed in the DOD FLIP Enroute IFR Supplement and Appendix C. Prior permission from the CO, MCAS Yuma is required when the Aircraft Classification Number (ACN) of the aircraft exceeds the published Pavement Classification Number (PCN).

1005. TAXIWAYS. All taxiways are 75' wide with the exception of Taxiways A, A1, A2, K and L which are 50' wide, taxiways C and D which are 150' wide, and Taxiway "I" which is 40' wide. It should be noted that Taxiway "A" crosses runway 8/26 and the overrun for runway 3R. Taxiway "B" crosses runway 8/26 and enters the runway overrun for runway 3R (See Appendix D).

1006. AIRFIELD LIGHTING

1. Rotating Beacon. A standard "Lighted Land Airport" Rotating Beacon, single white, single green, is located approximately 2,400' south-southeast of the control tower.

2. Runways. All runways are equipped with variable high intensity lights. The runway lights on Runway 3L/21R are displaced 10 feet outboard from the runway. Lights on runways 17/35 and 8/26 may be activated for 15 minutes by keying transmitter 5 times within 5 seconds on VHF 119.3.

3. Taxiways. Blue lighting except Taxiways "G" and "K" bound all taxiways. Taxiway "C" is marked by a single row of blue lights on the outboard edge of the taxiway opposite the parking ramp and flush mounted lights on the inboard edge. Lights on Taxiways A, A1, A2, I, and L may be activated after hours by keying transmitter 5 times within 5 seconds on VHF 119.3. These lights will stay on for 15 minutes.

4. Medium Intensity Approach Lighting System (MALSR). This system has Runway Alignment Indicator Lights and is available for runway 21R.

5. Obstructions. Standard red obstruction lights mark obstructions on or near the airport.

1007. SERVICE FACILITIES

1. Operations Course Rules Brief. A Station Operations course rules brief is required for all deploying squadrons to MCAS Yuma. Briefs will be scheduled through the Air Traffic Control (ATC) Officer at least 5 working days in advance; DSN 269-2231/5798 or COMM (928) 269-2231/5798. All course rules briefs are provided by Air Traffic Control and are mandatory prior to operating at MCAS Yuma. If deploying within 90 days from a previous deployment, requirement for briefs will be at the discretion of the Operations Officer.

2. Support Requests. Due to the high level of operations and limited transient hangar and maintenance facilities at MCAS Yuma, the following advance coordination is required in order to avoid scheduling conflicts:

a. Requests for line space for 24 hours or less shall be scheduled by calling the Visiting Aircraft Line (VAL) at DSN 269-2760/2445 at least 24 hours in advance.

b. Requests for line space for more than 24 hours or for maintenance space shall be submitted in writing or by message (MCAS-YUMA AZ//OPS/FLN//) to arrive at Fleet Liaison at least 72 hours prior to the requested date. For feasibility, call DSN 269-3515/3039.

c. Requests for ranges/target times or airspace, shall be submitted in writing or by message (MCAS YUMA AZ //OPS/ATC//) in accordance with Station Order 3710.6H and Fleet Area Control and Surveillance Facility Defense Instruction (FACSFACDINST) 3120.1C. For feasibility, call DSN 269-2214/2215.

3. Fleet Services. Deploying units will coordinate directly with Deployment Scheduling (Fleet Liaison) for ramp/line spaces, workspaces, transportation, billeting, and messing. Deployment Schedules are located in Hangar 220, DSN 269-3515/3039.

4. Flight Planning. Complete facilities for flight planning are available at Airfield Operations, Building 153, DSN 269-2077/2326. Aviation units deploying to MCAS Yuma are responsible for providing their own navigational charts and publications. They will not be supplied by this command.

5. Meteorology and Oceanographic (METOC) Services. A complete forecasting and observing facility is available 24 hours a day and is located in Airfield Operations, Building 153 (extension 2265). Contact Yuma METRO 349.9. The Meteorology and Oceanographic (METOC) Service is an integral part of United States Marine Corps aviation activities. The mission of the METOC Service Branch is to provide twenty-four hour environmental support to all host and tenant activities. In fulfillment of its mission, the Weather Service will:

a. Provide advice and assistance on environmental matters to the Commanding Officer and other commands upon request.

b. Conduct a local observation program and ensure proper dissemination of information.

c. Prepare and disseminate local weather forecasts.

- d. Provide flight weather briefings for flights departing MCAS Yuma and Yuma Proving Grounds (YPG)/Laguna Army Air Field (LGF).
- e. Issue hazardous and destructive weather advisories and warnings for MCAS Yuma and the local area.
- f. Upon request (by government, government contracted agencies or military personnel), prepare climatological studies for areas of concern.
- g. Operate meteorological and related equipment, and conduct operator preventive maintenance.
- h. Conduct meteorological and oceanographic technical training for all personnel assigned to the METOC Section.
- i. Prepare and disseminate local astronomical and climatological data annually and as requested.
- j. Maintain an adequate supply of meteorological material.
- k. Maintain liaison with the Space and Warfare System detachment (SPAWAR), San Diego, California.

6. Precision Approach Path Indicator System (PAPI). PAPI's are located on runways 3R/21L and 3L/21R, 1000 feet from landing threshold.

7. Compass Rose. One compass rose is available on a non-scheduled basis located southwest of the control tower between Taxiway "E" and Taxiway "F". (See Appendix D).

8. Visual Wind Indicators. A free swinging wind "T" is located in the triangle formed by Runways 3/21, 8/26 and 17/35. Windsocks are located at the approach end of all runways.

1008. AIRCRAFT REFUELING AND DE-FUELING. Maytag Refueling Inc., under government contract, provides fuel services. Prior coordination is required. Call 269-2234 or 2210.

1. Refueling. Refueling priority is (1) SAR/MEDEVAC, (2) VIP code 7 or higher, (3) scheduled tenant and deployed aircraft and (4) PPR transient aircraft, (5) Non-PPR transient aircraft.

2. Aircraft maintenance, ordnance loading or unloading, or repair work is not allowed during refueling/de-fueling operations.

### 3. De-fueling

a. Requests for de-fueling shall be made directly to Maytag Refueling Inc. Routine de-fueling requests require at least 30 minutes prior notice to allow Maytag to adjust their work schedule.

b. De-fueling may be conducted on the flight line. The ARFF Division (269-2385) shall be notified to dispatch a firefighting vehicle on site for aircraft which do not use a sealed single point connection.

c. Emergency de-fueling where leaking fuel is creating an immediate danger to personnel or equipment or creating a hazardous condition may pre-empt scheduled and unscheduled refueling. The ARFF Division shall be notified to dispatch a fire-fighting vehicle to the site for emergency de-fueling.

### 4. AV-8B/MCAS Yuma Aviation Fuel Requirements During Interim Hot Pits:

Note: At this time, the only jet aircraft authorized to use the hot pit facility is the AV-8B. This is an interim facility only until a permanent all-aircraft facility is built.

#### a. Normal COLD FUEL:

(1) Cold Fuel is available 24 hours a day Sunday 1500(L) through Friday 2230(L) (or field closure) and on call Friday 2300(L) through Sunday 1500(L) on normal weekends.

#### b. Normal HOT FUEL utilizing interim pantograph support:

(1) Pantographs are available Monday through Friday 0800(L) through 2200(L) via flight scheduled events and times.

(2) Pantograph support will be manned 30 minutes prior to and up to 30 minutes after hot pit event scheduled land times. Deviations to scheduled hot pit events that fall outside the +/-30 manning window, must be coordinated (Squadron ODO) directly with MCAS Yuma Fuels as soon as possible, but no later than one hour prior to the scheduled event land time.

(3) All scheduled hot pit event cancellations must be communicated (Squadron ODO) directly to MCAS Yuma Fuels as soon as possible to prevent lost man-hours.

(4) Operations involving fewer than three aircraft scheduled in the same 20-minute period can expect single pantograph support. Operations involving three or more aircraft in the same 30-minute period can expect dual pantograph support.

c. Occasional deviation to normal COLD AND HOT REFUEL due to operational necessity:

(1) Due to operational necessity, MAG-13 may require Cold Refuel and Hot Refuel outside of the normal weekday and field hour support listed above, and therefore requires the ability to request temporary changes to the above in order to support late night or weekend operations (Wing Frags/CQ support/Night Systems training). A request notification routed through MAG-13 Operations a minimum of 24 hours prior is required to facilitate changes that fall outside of the normal weekday or field hours support.

(2) A very limited "same day add on" event capability will be provided, on a case-by-case basis, at MCAS Fuels discretion. Squadrons will limit to the absolute minimum required, any unscheduled hot fuel operations on the same day of execution. Same day requests must be routed through MAG-13 Operations to MCAS Yuma Fuels for approval. Squadrons requesting same day support must expect no less than a one-hour delay from request to manning, but may experience delays up to three hours during peak refueling periods. Units requesting same day support must also expect single pantograph manning only.

(3) MAG-13 units will limit the cases above to the absolute minimum required and understand that deviations are based on funding, asset availability, and OPTEMPO of MCAS Yuma refueling assets.

(4) During the semi-annual WTI Class the AV-8B pantographs will be closed. Immediately upon completion of WTI, the pantographs will be opened for AV-8B use again.

1009. RUNWAY ARRESTING GEAR. The runway arresting gear consists of four sets of bi-directional E-28 gear. Their locations are listed in the current edition of the IFR Supplement, and are depicted in Appendix D.

1. Maximum capability for all arresting gear by type aircraft is defined in individual aircraft NATOPS Manuals.
2. In order to minimize possible structural damage to AV-8 aircraft, the arresting gear on runway (3R/21L) will remain de-rigged unless required for special operations.
3. Arresting gear locations are marked by vertical signs depicting yellow circles and yellow circles 10ft in diameter painted horizontally across the runway. The signs are lighted for night operations.

1010. NAVIGATIONAL AIDS - ELECTRONIC

1. TACAN. Identification "NYL", Channel 84, is located on the airport, adjacent to the approach end of Runway 3R and operates continuously. TACAN checkpoints are located at taxiway "B" and taxiway "D".
2. VORTAC. Identification "BZA", VORTAC 116.8/Channel 115, is located 169°/6.7 NM to the airfield.
3. RADAR (ASR/PAR). Enroute radar service is available 24 hours a day. ASR/PAR approaches are available only during published airfield hours. For VFR arrival/departure service contact Yuma Approach on 281.0 or 125.55. Due to the high-density traffic at MCAS Yuma, all military fixed wing aircraft are required to use this service.
4. ILS Runway 21R. Localizer frequency is 108.3.

1011. NOISE ABATEMENT

1. One of the responsibilities of the Air Station is to achieve compatibility between operational requirement and the welfare of the local community. One way this is achieved is by minimizing public exposure to high noise levels and potential safety hazards associated with aircraft operations.
2. The close proximity of the city of Yuma to the Air Station makes residents vulnerable to the effects of aircraft operations. Therefore, the course rules published in Chapter 3 are designed to minimize noise and potential safety hazards while maximizing operational training and flight safety requirements on and in the vicinity of MCAS Yuma.
3. Only through the cooperative effort of unit commanders, aircrew, and ground support personnel can compatibility be achieved and, in doing so, safeguard the operational capabilities enjoyed at MCAS Yuma.

1012. NATIONAL WILDLIFE REFUGES

1. There are four wildlife refuges in the vicinity of MCAS Yuma: Cibola and Imperial National Wildlife Refuges north of Yuma bordering the Colorado River, the Kofa National Wildlife Refuge in and north of R-2308A and the Cabeza Prieta National Wildlife Refuge in the southeastern part of R-2301W.
2. A Fish and Wildlife Service regulation covering the flight of aircraft on and over wildlife areas states: "The unauthorized landing of aircraft on a wildlife refuge area is prohibited, except in the

event of an emergency." Reference (a) states, "When it is necessary to fly over known wild fowl habitations, an altitude of at least 1500' AGL shall be maintained, conditions permitting."

#### 1013. QUIET HOURS

1. Requests for quiet hours shall be submitted in writing to the Commanding Officer, MCAS Yuma (Attn: Assistant Operations Officer) or email to Operations Officer or Assistant Operations Officer not less than five working days in advance.
2. Requests for quiet hours shall include the unit, purpose, date and time required, and name and phone number of the unit point of contact.
3. Quiet hours are normally limited to 45 minutes to minimize the impact on flight operations.
4. The following aircraft limitations will be applied during published quiet hours:
  - a. All arrivals during quiet hours will be straight in, full stops only. Military departures, overhead or practice approaches will not be authorized during quiet hours.
  - b. Departing transient pilots proposing to turn-up within 15 minutes or less of quiet hours will be advised of quiet hours by VAL personnel.
  - c. Within 15 minutes of quiet hours, ground control will advise pilots to not turn main engines unless they will be able to takeoff prior to quiet hours.
  - d. Auxiliary power units or main engines will not be turned up within five minutes of quiet hours, to include maintenance ground turns, until quiet hours are secured.
  - e. Taxi or takeoff clearances will not be issued to any aircraft (except commercial carrier) during quiet hours.
5. The following administrative procedures will be initiated by Operations personnel:
  - a. Flight Clearance shall publish the appropriate Local NOTAM and notify tenant and deployed squadrons by telephone. On the day of the quiet hours they will post the published times in Flight Clearance and the flight planning room. Flight Clearance will advise aircrew when their proposed departure time is within one hour of, or directly conflicts with, the published quiet hours.

b. Flight Clearance will provide the quiet hour information to the Weather section.

c. The VAL will post the quiet hours information within the VAL area two hours prior to the published times.

d. ATC will include a brief notation of quiet hours on ATIS from two hours prior, through the end of the published times.

e. Weather Service will post quiet hour information on the station weather vision for tenant and visiting units at least 24 hours in advance.

#### 1014. VIP PROCEDURES

1. In order to ensure that visiting VIPs (Code 7 and above) receive timely service and appropriate courtesies, the Station Adjutant and tenant units shall:

a. Notify Airfield Operations (269-2077/3722/2326) not later than 24 hours prior to the arrival of all VIPs being hosted who will arrive and/or depart by aircraft.

b. Provide the grade, name, billet, estimated time of arrival/ departure, type aircraft; call sign, and any special requests to be made of Airfield Operations.

2. VIP transport aircraft inbound to MCAS Yuma shall contact Yuma Command Post on frequency 337.9 fifteen minutes prior to arrival with firm chock time and servicing requirements.

3. Include PPR in remarks section of DD 175.

1015. VIOLATIONS OF REGULATIONS. Violations of flight regulations and rules and regulations set forth by this manual shall be reported to the Assistant Operations Officer at 269-3327/3559. Flight violations will be investigated and processed in accordance with reference (a) and (b) and applicable FARs.

1016. FOD PREVENTION. The desert environment makes MCAS Yuma a FOD prone airfield. Extra vigilance is required to preclude aircraft FOD incidents. Pilots are requested to advise ground control of any observed FOD on runways and taxiways.

1017. WEATHER. The climate of Yuma is definitely a desert product. During the winter, November through March, the skies are abundant with sunshine. Frost is not uncommon in the valleys and is expected on higher elevations. The daylight hours in Yuma are longer than at any other place in the United States for which records have been kept. During December and January, the lower Colorado River Valley averages better than eight hours of sunshine a day. Afternoon temperatures reach 100° F from June through September and at least 105° F during July and August. The transitional periods, spring and fall, usually occur during March through April and October through November, and are short lived, usually two weeks or less. For more detail on local weather patterns, see Appendix E.

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CHAPTER 2

FLIGHT PLANNING

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# AIRFIELD OPERATIONS MANUAL

## CHAPTER 2

### FLIGHT PLANNING

#### 2000. GENERAL

1. Policy. Flights originating at MCAS Yuma shall be conducted in accordance with current OPNAV instructions, FAA directives, Flight Information Publications, and this manual.
2. Facilities. Flight planning and weather services are available at Airfield Operations, Building 153. Publications are not to be removed from the Flight Planning Room.

#### 2001. LOCAL FLYING AREA - DEFINITIONS

1. Local Flying Area. The local flying area is defined as that area bounded by a line commencing at a point on the U.S./Mexican border due west of MCAS Yuma, proceeding westward along the border to the Pacific coastline, then northwest along the coastline to NAS Lemoore, direct to Coaldale VORTAC, turning east to Milford VORTAC, direct Zuni VORTAC, then south to the U.S./Mexican border, and proceeding westward along the border to a point due west of MCAS Yuma. (See Appendix F)
2. Stereotype Routes. Stereotype routes are routinely used routes of flight identified by coded names and are designed to minimize flight plan handling and communications.
  - a. IFR Stereotype Routes. MCAS Yuma and Los Angeles ARTCC have established IFR stereotype routes. All MCAS Yuma IFR stereotype routes are conducted under instrument flight rules and are available to fixed wing aircraft of tenant and deployed units at MCAS Yuma. Route descriptions and specific instructions are contained in the current edition of StaO 3722.3. See paragraph 2002.2.c of this manual for filing instructions. Recommendations to change stereotype route should be submitted to the ATC Officer for review and processing.
  - b. VFR Helicopter Routes. 3d MAW and MCIWEST have established VFR stereotype routes. The stereotype routes are conducted under visual flight rules and are available to 3d MAW and MCIWEST helicopters only. See paragraph 2002.2.d of this order for route descriptions and filing instructions.
3. VFR Tower-to-Tower. West coast Navy and Marine Corps air facilities connected by direct facility-to-facility communications have an established Letter of Procedure for flight following of local VFR helicopter flights.

VFR helicopter tower-to-tower flights are authorized between NAS North Island, MCAS Miramar, OLF Imperial Beach, NAF El Centro, NWC China Lake, NALF San Clemente Is., MCAS Camp Pendleton, and MCAS Yuma. A copy of the Letter of Procedure is on file at Yuma Flight Clearance. See paragraph 2002.2.e of this Order for filing instructions.

## 2002. FLIGHT PLANNING

1. Approval Authority. Approving authority for flight is prescribed in reference (a) and other applicable instructions.

2. Flight Plan Filing. All flights originating at MCAS Yuma shall have an authorized flight plan on file with Yuma Flight Clearance, or a published flight schedule. Flight plans shall be prepared and submitted by the pilot in command as outlined in reference (a) and the Flight Information Planning (FLIP) publication, General Planning section. The pilot in command/flight leader is responsible for ensuring that the flight plan is filed at least 45 minutes prior to the estimated time of departure (ETD). The following types of flight plans may be used under the conditions specified.

a. DD-175 (Military Flight Plan). This form will be used for military flights originating from MCAS Yuma, except those posted on a daily flight schedule.

b. Daily Flight Schedules. Authorization for flight within the local flying area for tenant and deployed units may be documented by a published flight schedule. The following instructions apply:

(1) As a minimum, published flight schedules shall identify the unit and include event number; type aircraft, call sign; estimated time of departure (ETD); estimated time en-route (ETE) or estimated time of arrival (ETA), the names and flight functions of all flight personnel, designation of the pilot in command/mission commander and/or formation leader, chain of command for formation flights in event of an abort by designated flight leader; total mission requirement code(s); route of flight; mission/ordnance (number and type); fuel on board (hours and minutes); and must be signed by the commanding officer or his delegated authority.

(2) Units shall deliver ten copies of their daily flight schedule to Flight Clearance by 1530 the day prior to the intended flights. Schedules for weekends and holidays shall be delivered by 1530 of the last workday prior to the intended flights.

(3) Add-ons, cancellations, or changes shall be called to Flight Clearance at 269-2326/2077. Allow 45 minutes for routine local add-ons.

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(4) Flight plans listed on the flight schedule will be automatically cancelled if not activated within two hours after the ETD unless the pilot is in contact with Clearance Delivery or the squadron has notified Flight Clearance of a revised ETD.

(5) Squadrons are responsible for initiating action for overdue local flights listed on their flight schedule. Aircraft are considered overdue 30 minutes past their ETA/ETR. The squadron will immediately notify Flight Clearance of any past due aircraft.

c. IFR Stereotype Routes. StaO 3722.3G (LOA of 12 Aug 93 between MCAS Yuma and Los Angeles Center) establishes the following procedures:

(1) IFR stereo routes may be filed on a DD-175 or on the squadron daily flight schedule.

(2) If a flight schedule is used, it must show the following information:

(a) Time delays in Restricted Areas, ATCAAs and MOAs.

(b) ETD at NAF El Centro on the Foxtrot Route.

(c) Time delays on refueling tracks on Romeo Route.

(d) Point, altitude and time for ADIZ penetrations.

(e) ETD for return leg on the November Routes.

(3) The same radio call sign may be used for stereotype flight plans only once per day because of computer limitations.

(4) Additions or changes to squadron flight schedules which involve stereotype flight plans require two hours processing time and may be transmitted to MCAS Yuma Flight Clearance via telephone. (DSN 269-2325/2326)

(5) Delays on takeoff of 30 minutes or more from the proposed ETD must be transmitted to Flight Clearance or Yuma Clearance Delivery. The Flight Planning Section will automatically cancel departure times that have not been modified within 30 minutes after the ETD.

(6) Route Descriptions

(a) Yuma Alpha Routes 43a and 43b (R2510)

1. **Alpha 43a** Glamis or Cargo departure, Heeds Transition direct Imperial VORTAC, direct IPL 290015. Delay in R2510

Stereo Tag: NYLA43A

2. **Alpha 43b** From IPL 290015 direct IPL VORTAC thence IPL 15,0000 R-74 to intercept BLH R-175 to intercept 43 mile arc northwest NYL to NYL 340043 for HI TACAN RWY 21R or HI TACAN RWY 3L to MCAS Yuma.

Stereo Tag: NYL43B

(b) **Yuma Alpha Routes 44a, 44b, and 44c (R2512)**

1. **Alpha 44a** Glamis or Cargo departure to Cargo DME fix direct 14,000 BZA 280026 direct YUM 270030..R2512. Delay in R2512.

Stereo Tag: NYLA44A

2. **Alpha 44b** From BZA 270030 via BZA R-270 to intercept BLH 15,000 R-175 to intercept 43 mile arc northwest of NYL to NYL 340043 for HI-TACAN RWY 21R of HI-TACAN RWY 3L to MCAS Yuma.

Note: Contact Yuma Approach Control prior to departing R2512 for clearance via Alpha 44b.

Stereo Tag NYLA44B

3. **Alpha 44c** From BZA 290019, direct BZA, direct NYL for 7,000 enroute descent.

Note: Contact Yuma Approach Control prior to departing R2512 for clearance via Alpha44c route.

Stereo Tag NYL: NYLA44C

(c) **Yuma Alpha Routes 45a and 45b (R2501)**

1. **Alpha 45a** Glamis or Cargo departure, Blythe transition to FL 200 Blythe VORTAC, direct Twenty-nine Palms VORTAC directs TNP 305010. Delay in R2501

Stereo Tag: NYLA45A

2. **Alpha 45b** From TNP 305010 direct Twenty-nine Palms VORTAC FL 190 direct Blythe VORTAC direct NYL 340043 for HI-TACAN TWY 21R or HI-TACAN RWY 3L to MCAS Yuma.

Note: Contact Los Angeles Center prior to departing R2501 for clearance via ALPHA 45B route.

Stereo Tag: NYLA45B

(d) **Yuma Alpha Routes 46a and 46b (R2503)**

1. Alpha 46a Glamis or Cargo departure, Imperial transition to FL 220 Imperial VORTAC direct IPL 258027, direct Julian VORTAC direct JLI 275036. Delay in R2503.

Stereo Tag: NYLA46A

2. Alpha 46b From JLI 275036 direct Julian VORTAC direct IPL FL220 258027 direct Imperial VORTAC thence via IPL R-074 to intercept BLH R-175 to intercept 43 mile arc northwest of NYL to NYL 340043 for HI-TACAN Rwy 21R or HI-TACAN Rwy 3L to MCAS Yuma.

Note: Contact Los Angeles Center prior to departing R2503 for clearance via ALPHA 46B route.

Stereo Tag: NYLA46B

(e) **Alpha Yuma Routes 47a and 47b (R2507)**

1. Alpha 47a Glamis or Cargo departure to CARGO DME fix thence 14,000 via BLH R-175 to BLH 175015 thence via heading 265 degrees to BLH 235029. R2507. Delay in R2507N.

Stereo Tag: NYLA47A

2. Alpha 47b From BLH 235029 via heading 085 degrees to intercept 43 mile arc northwest of NYL to NYL 340043 for HI-TACAN Rwy 21R or HI-TACAN Rwy 3L to MCAS Yuma.

Note: Contact Yuma Approach Control prior to departing R2507N for clearance via Alpha47b route.

Stereo Tag: NYLA47B

(f) **Yuma Alpha Routes 48a, 48b, 48c (R2507s)**

1. Alpha 48a Glamis or Cargo departure to Cargo DME fix direct 14,000 BZA 310033 to R2507. Delay in R2507s

Stereo Tag: NYLA48A

2. Alpha 48b From BZA 310033 via heading 035 degrees to 15,000 intercept 43 mile arc northwest of NYL to NYL 340043 for HI-TACAN Rwy 3L to MCAS Yuma.

Note: Contact Yuma Approach Control prior to departing R2507 for clearance via Alpha 48b route.

Stereo Tag: NYLA48B

(g) **Yuma Alpha Routes 49a, 49b, and 49c (R2306)**

1. Alpha 49a Glamis or Cargo departure to CARGO DME fix, 14,000 thence via heading 055 degrees to BZA 010025..R2306. Delay in R2306A.

Stereo Tag: NYLA49A

2. Alpha 49b From BZA 010025 via heading 295 degrees to NYL 15,000 340043 for HI-TACAN Rwy 21R or HI-TACAN Rwy 21R or HI-TACAN Rwy 3L to MCAS Yuma.

Note: Contact Yuma Approach Control prior to departing R2306A for clearance via Alpha 49b route.

Stereo Tag: NYLA49B

3. Alpha 49c From BZA 350016, direct BZA, direct NYL for 7,000 enroute descent.

Note: Contact Yuma Approach Control prior to departing R2306A for clearance via Alpha 49c route

Stereo Tag: NYLA49C

(h) **Yuma Alpha Routes 50a and 50b (DOME)**

1. Alpha 50a Glamis or Cargo departure, Bard transition, to FL 180B800 Bard VORTAC direct BZA 150013.DOME. Delay in Dome ATCAA.

Stereo Tag: NYLA50A

2. Alpha 50b From BZA 150013 direct Bard VORTAC direct NYL FL 180 340043 for HI-TACAN Rwy 21R or HI-TACAN Rwy 3L to MCAS Yuma.

Note: Contact Yuma Approach Control prior to departing DOME ATCAA for clearance via Alpha50b route.

Stereo Tag: NYLA50B

(i) **Yuma Alpha Routes 51a, 51b and 51c (ABEL)**

1. Alpha 51a Glamis or Cargo departure to CARGO DME fix, 14,000 direct BZA 280027 ABEL. Delay in ABEL ATCAA/MOA.

Stereo Tag: NYLA51A

2. Alpha 51b From BZA 280027 via BZA R-280 to intercept BLH 15,000 R-175 to intercept the 43 mile arc northwest of NYL to NYL 340043 for HI-TACAN Rwy 21R or HI-TACAN Rwy 3L to MCAS Yuma.

Note: Contact Yuma Approach Control prior to departing ABEL ATCAA/MOA for clearance via Alpha 51b route.

Stereo Tag: NYLA21B

3. Alpha 51c From BZA 290019, direct BZA, direct NYL for 7,000 enroute descent.

Note: Contact Yuma Approach Control prior to departing ABEL MOA for clearance via ALPHA 51c route.

Stereo Tag: NYLA51C

(j) Yuma Alpha Routes 52a and 52b (QUAIL)

1. Alpha 52a Glamis or Cargo departure, Blythe Transitions to 14,000 Blythe VORTAC, direct BLH 030025. Delay in Quail ATCAA/MOA.

Stereo Tag: NYLA25A

2. Alpha 52b From BLH 030025 direct Blythe VORTAC direct NYL 15,000 340043 for HI-TACAN Rwy 21R or HI-TACAN Rwy 3L to MCAS Yuma.

Note: Contact Los Angeles Center prior to departing QUAIL ATCAA/MOA for clearance via ALPHA 52b route.

Stereo Tag: NYL52B

(k) Yuma Alpha Routes 53a and 53b (Turtle)

1. Alpha 53a Glamis or Cargo departure, Blythe transition to 14,000 Blythe VORTAC, direct Parker VORTAC, direct PKE 305025. Delay in Turtle ATCAA/MOA.

Stereo Tag: NYLA53A

2. Alpha 53b From PKE 305025 direct Parker VORTAC, direct 15,000 Blythe VORTAC, direct NYL 340043 for HI-TACAN Rwy 21R or HI-VORTAC Rwy 3L to MCAS Yuma.

Note: Contact Los Angeles Center prior to departing TURTLE ATCAA/MOA for clearance via ALPHA 53b route.

Stereo Tag: NYLA53B

(1) **Yuma Alpha Routes 54a and 54b (BRISTOL)**

1. Alpha 54a Glamis or Cargo departure, Blythe transition to FL220 Blythe VORTAC, directly Twenty-nine Palms VORTAC, direct TNP 028018. Delay in BRISTOL ATCAA/MOA.

Stereo Tag: NYLA54A

2. Alpha 54B From TNP 028018 direct Twenty-nine Palms VORTAC FL210 direct Blythe VORTAC direct NYL 340043 for HI-TACAN Rwy 21R or HI-TACAN RWY 3L to MCAS Yuma.

Note: Contact Los Angeles Center prior to departing BRISTOL ATCAA/MOA for clearance via Alpha 54b route.

Stereo Tag: NYLA54B

(m) **Yuma Alpha Route 55 (R2507/VR1267)**

1. Alpha 55 Glamis or Cargo departure, direct CARGO, direct 14,000 BZA 310033, and direct R2507N/S. Delay R2507N/S for refueling. Return VFR Via VR1267 to NYL.

Stereo Tag: NYLA55

(n) **Yuma India Route 44 (LUF)**

1. India 44 Contact Yuma Range prior to exiting R2308. FL190 R2308 direct GBN267049; direct GBN, VARECR (Valley recovery route) to LUF.

Stereo Tag: NYLI44

(o) **Yuma Foxtrot Routes 04A and 04B (NAF El Centro)**

1. Foxtrot 04A Glamis or Cargo departures, Heeds 14,000 transitions, direct Imperial VORTAC. Delay in NAF El Centro airport traffic area.

Stereo Tag: NYLF04A

2. Foxtrot 04B From Imperial VORTAC via IPL R-074 to 15,000 intercept the BLH R-175 to intercept the 43-mile arc Northwest of NYL to NYL 340043 for HI-TACAN Rwy 21R or HI-TACAN Rwy 3L to MCAS Yuma.

Note: after departure from El Centro airport maintain VFR and contact Los Angeles center for clearance via the Foxtrot 04B route.

Stereo-tag: NYLF04B

(p) Yuma Romeo Route 05 (Twenty-nine Palms Refueling Track)

1. Romeo 05 Glamis or Cargo departure, Blythe transition F1200 to Blythe VORTAC direct TNP047065 thence direct to entry point for AR649. Conduct refuels operations. F1210 Contact Los Angeles center as soon as practical after completion of refueling operations for clearance to resume the Yuma Romeo Route 05 via direct Blythe VORTAC, direct NYL 340043 for HI-TACAN Rwy 31 to MCAS Yuma.

Stereo-tag: NYLR05

(q) Yuma Romeo Route 06 (W291 Refueling Track)

1. F1310 Glamis or Cargo departure, Heeds transition to Heeds, direct Imperial VORTAC, direct Mission Bay VORTAC, direct OCN 217077. Conduct refueling operations in W291 for 1+00.

Stereo Tag: NYLR06

2. F1290 ADIZ penetration at OCN 217077, contact Los Angeles center prior to exiting W291 for clearance to resume the Yuma Romeo Route 06B via direct Mission Bay VORTAC, direct NYL 340043 for HI-TACAN Rwy 21R or HI-TACAN Rwy3L to MCAS Yuma.

(7) Pilots are responsible for obtaining weather and NOTAM briefings prior to each flight.

(8) Flight Clearance shall notify the destination airfield of the VFR stereo flight and provide flight information and the actual time of departure.

(9) The pilot in command shall ensure that the flight plan is closed out with the Tower/Flight Clearance at the final destination. These flights cannot be closed out with a FSS.

e. VFR Helicopter Facility-to-Facility Flights (Tower-to-Tower)

(1) A letter of procedure dated 1 April 1978 establishes procedures for flight following of local VFR Navy and Marine Corps helicopter flights conducted between NAS North Island, MCAS Miramar, NALF Imperial Beach, NAF El Centro, NWC China Lake, NALF San Clemente, MCAS Yuma, and MCAS Camp Pendleton.

(2) Filing Prerequisites

(a) Departure and destination airfields must be VMC and open for military flight operations for the duration of the flight.

(b) The same call-sign must be used throughout the flight.

(c) Pilots shall be familiar with the provisions of the Letter of Procedure, a copy of which is on file at Flight Clearance.

(d) When the complement of the crew or passengers changes from that of the previous leg of flight, pilots shall provide a corrected crew and passenger list that provides names, ranks, social security numbers, and home duty stations for each occupant. The corrected list will be filed with the operations duty officer, passenger terminal, squadron or unit duty officer of the station from which the takeoff will be made.

(3) Filing Procedures. Pilots shall file with Flight Clearance in person or on the Yuma Command Post frequency (337.9) prior to taxiing for departure. The following information is required.

- (a) Aircraft call sign.
- (b) Number and type of aircraft.
- (c) Destination.
- (d) Estimated time en-route.
- (e) Fuel on board (hours and minutes).
- (f) Souls on board.
- (g) Bureau number.
- (h) Remarks (e.g. codes)

(4) Pilots are responsible for obtaining weather and NOTAM briefings prior to departure.

(5) Round robin tower-to-tower flight plans are prohibited. Pilots desiring to fly a local sortie prior to proceeding to their next destination shall file a DD-175 flight plan with Flight Clearance.

(6) The pilot in command shall ensure that the coded flight plan is closed out with the tower/flight clearance at the final destination. Stereo flight plans cannot be closed out with a FSS.

2003. STANDARD INSTRUMENT DEPARTURES (SIDS). There are two non-radar and three radar SIDs for MCAS Yuma. They are "Cargo-six", "Glamis-six", "Argus-One", "Mohawk-One", and "Picacho-One". They are published in the FLIP SID, Western United States Booklet.

2004. CLOSING FLIGHT PLANS. Closing out a flight plan is solely the responsibility of the pilot in command. When the field is open, flight plans will be closed out with the Tower. When the field is closed, flight plans will be closed out with Prescott Flight Service Center on 122.2 or by phone at 1-800-231-3816.

2005. WEATHER MINIMUMS

1. The VFR minimum for MCAS Yuma is a ceiling not less than 1000' and visibility not less than three nautical miles.
2. When the ceiling and/or visibility fall below VFR minimums, all flight operations shall be conducted in accordance with IFR procedures (see paragraph 4004 and 4005 of this manual).
3. Radar minimums and instrument approach procedures are published in the current DOD FLIP High Altitude Approach Procedures (SW) booklet and FLIP Low Altitude Instrument Approach Procedures Vol-3.

2006. VFR STAMP POLICY. Local command authorization for a VFR stamp has been granted for an indefinite period. The stamp will be of a limited nature in that the weather forecaster will have the final option for its utilization. The Weather Service (METOC) Officer, ext. 3230, sets the restrictions for its use.

2007. MILITARY TRAINING ROUTES (MTR). MCAS Yuma is the controlling authority for VR-1266, VR-1267, VR-1267A and VR-1268. Flight operations will ensure an annual verification of obstructions is conducted and documented. Prior to scheduling a MTR contact Range Scheduling at DSN 269-2326 to schedule the R2507E, if required.

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**CHAPTER 3**

**COURSE RULES**

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# AIRFIELD OPERATIONS MANUAL

## CHAPTER 3

### COURSE RULES

#### 3000. GENERAL

1. Course Rules and Traffic Pattern Orientation. MCAS Yuma is a military/civilian joint-use airport. Two types of traffic patterns are approved and used simultaneously; the overhead 360 (break) pattern and standard quadrangle pattern. Traffic patterns and helicopter routes are depicted on Appendixes D, G, and H of this manual. The traffic pattern serving runway 3 is right traffic; the pattern serving runway 21 is left traffic; patterns for runway 8/26 and 17/35 are left or right traffic as assigned by the tower. The overhead 360 (break) patterns are normally restricted to tactical military high performance aircraft unless density of traffic is such that slower aircraft specifically requesting the overhead approach would not impede the safe and expeditious flow of traffic. There are no helicopter traffic patterns defined as such; however, course rules governing the flow of helicopters are defined in paragraph 3005. All aircraft operating in the MCAS Yuma Class D Airspace shall be under positive control during published operational hours (see paragraph 4000 of this manual for definition of positive control).
2. Responsibilities of the Pilot and the Control Tower. The pilot in command of an aircraft is directly responsible for the safe operation of his aircraft. The control tower is responsible for issuing clearances and such other information as necessary to ensure an orderly flow of aircraft in the terminal area. Clearances issued by the control tower are authority for the pilot to proceed only so far as known air traffic conditions and field conditions allow and do not permit the pilot to violate any provisions of military or federal regulations. When flying in VMC, it is the direct responsibility of the pilot to avoid other aircraft. Clearance and/or information issued by the tower are intended to aid pilots to this end. Unless the pilot has an emergency, a wave-off by the control tower is MANDATORY. Under no circumstances will discussions not related to the control of air traffic be conducted on air traffic control frequencies.
3. Avoidance of Certain Properties and Installations
  - a. Aircraft flying within the Yuma Class D Airspace (Surface Area) shall not over fly the city of Yuma, the town of Winterhaven, Kofa and Cibola High Schools, Rolle Elementary School, Crane Jr. High School, Air Station Buildings, Station Housing, or the Station Magazine Area, unless in compliance with ATC instructions or as necessary for traffic avoidance. Pilots will maintain a minimum of 300' AGL when required to operate over public roads during the landing

or departure phase of flight if aircraft performance for takeoff or landing permits. Aircraft shall not be flown over or within one (1) mile behind the target butts of the MCAS Yuma Rifle Range (NYL 135R007) below an altitude of 1200' MSL. Other properties such as Arizona Western College and the town of Somerton should also be avoided. See paragraph 1012 of this manual for avoidance of wildlife refuge areas.

b. Aircraft making touch and go landings on Runway 3L are authorized to over fly the Station Magazine Area above 700' MSL. ATC instructions may at times require an aircraft to over fly certain parts of the above areas. When there is a conflict between the above procedures and ATC instructions, ATC instructions take priority.

4. Unusual/Aerobatic Maneuvers within the Yuma Class D Airspace. Pilots shall not request, and ATC personnel will not authorize clearance to perform unusual/aerobatic maneuvers within the Yuma Class D Airspace if such maneuvers are not essential to the performance of the flight. Unusual maneuvers include unnecessary high speed low passes, unscheduled flybys, high-performance takeoffs, climbs at very steep angles (except specifically approved air show demonstration practices (see paragraph 3007 of this Chapter), and practice instrument approaches to altitudes below specified minima (unless a full stop or touch and go landing is to be made).

5. Control of Formation Flights. Formation flights are considered as a single aircraft. Instructions for the control of formation flight are issued to the formation leader. In accordance with references (a) and (c) the formation leader is responsible for the safe and orderly conduct of the formation, and for the separation, including runway separation, of each element of the formation. Control instructions shall be issued to individual elements of a formation when requested by the formation leader or when necessary for safety.

### 3001. RUNWAY INFORMATION

#### 1. Aircraft Categories

a. Category I - "small" weight class (12,500 lbs or less) single engine, propeller-driven aircraft, and all helicopters.

b. Category II - "small" weight class (12,500 lbs or less) twin engine, propeller-driven aircraft.

c. Category III - all other aircraft.

#### 2. Runway Assignments

a. Runways 3L and 3R are designated as the calm wind runways for military aircraft. Runway 8 is the calm wind runway for General Aviation and Air Carrier aircraft.

b. The calm wind runway will be assigned whenever the wind velocity is five knots or less, unless use of another runway is operationally advantageous or is requested by the pilot or formation leader.

c. The runway most nearly aligned with the wind will be assigned when the wind velocity and direction exceed a five (5) knot tailwind component for the calm wind runways for sustained periods, unless use of another runway is operationally advantageous or is requested by the pilot or formation leader.

d. While runways 17/35 or 8/26 are not normally assigned to military turbojet or large turboprop aircraft unless requested by the pilot-in-command, any aircraft may takeoff runway 17/35 and 08/26. After departure, maintain runway heading and climb as assigned by ATC.

e. Unless otherwise approved by the MCAS Yuma Operations/Assistant Operations Officer, fixed wing aircraft carrying ordnance shall be assigned runway 3/21. Helicopters with ordnance may be assigned runway 8 for departures only.

NOTE: AIRCRAFT MAY NOT DEPART FROM RUNWAYS 26 or 35 WITH ORDNANCE.

3. Standard Separation Criteria. Arrival and departure runway separation minima are in accordance with Sections 9 and 10, Chapter 3, of reference (c).

4. Reduced Same Runway Separation

a. Authority. As provided by OPNAVINST 3710.7 and authorized by MCIWEST, reduced same runway separation minima provide decreased operational and/or training delays and relieve airport congestion.

b. Procedures

(1) Reduced same runway separation minima are used only in VFR weather conditions, and are applied only between Navy/Marine aircraft. OPNAVINST 3710.7 authorizes reduced runway separation for aircraft of other military services when such conditions are agreed to in writing by the cognizant operational commander of the other service unit and the Marine Corps shore facility commander. Reduced runway separation waivers are available from the Air Traffic Control Facility (extension 2231).

(2) Reduced same runway separation minima are applied only between aircraft of similar performance characteristics or when the preceding aircraft has a higher performance than the following aircraft.

(3) Reduced same runway separation minima may be used between sunrise and sunset, and between sunset and sunrise, ONLY if visual contact with the aircraft and reference points can be readily maintained.

(4) Reduced same runway separation minima are:

(a) Sunrise to Sunset: 4,000'.

(b) Sunset to Sunrise: 6,000'.

c. Separation Minima

(1) Separation minima between departures and between the combination of arrivals and departures are standard and in accordance with the FAA Handbook, 7110.65.

(2) Separation minimum between arriving Category III aircraft is 4,000 feet measured when the following aircraft crosses the landing threshold.

(3) Separation minima for AV-8 aircraft are addressed in paragraph 3017 of this Manual.

5. Wake Turbulence Separation

a. In addition to standard runway separation minima, aircraft operating in the traffic pattern with heavy jet aircraft may become subject to wake turbulence separation.

b. Wake turbulence separation minima are in accordance with Chapter 3, of reference (c). The following separation minima for use only with VFR aircraft are included for clarification:

(1) Departures following a landing heavy jet - no minima established for aircraft operating on the same or parallel runways.

(2) Departures following a preceding departing heavy jet - two minutes when departing from the same runway or when departing from an intersection on the same runway or a parallel runway separated by less than 2,500 feet.

(3) Arrivals following a preceding, arriving or departing heavy jet; no minima established for aircraft operating on the same or parallel runways.

NOTE: \* BECAUSE WAKE TURBULENCE IS UNPREDICTABLE, AN AIR TRAFFIC CONTROLLER IS NOT RESPONSIBLE FOR ANTICIPATING ITS EXISTENCE OR EFFECT.

\*\* THE DISTANCE BETWEEN THE RUNWAY CENTERLINES OF RUNWAY 21L/3R AND RUNWAY 21R/3L IS 700 FEET.

6. Land and Hold Short Operations (LAHSO). LAHSO is not authorized at MCAS Yuma.

### 3002. TAXI PROCEDURES

#### 1. Taxi Instructions

a. Aircraft shall not taxi from ramp parking without the approval of Yuma Ground Control. When ready for taxi, pilots or formation leaders shall state their position on the airport to Yuma Ground Control with their request. Permission to marshal on a taxiway adjacent to the ramp parking area will be approved by Yuma Ground Control contingent upon traffic conditions. When marshaling is approved, the location and aircraft position selected by the pilot shall be such that it does not close the taxiway to other aircraft. Aircraft are not authorized to marshal on "C" taxiway, which lies south of "D" taxiway to the southernmost portion of the VMA-513 parking ramp. These restrictions are for FOD prevention.

b. To reduce radio frequency congestion, Yuma Ground Control will not normally assign specific taxi routes. Taxi routes will be assigned when necessary due to unusual traffic conditions, upon pilot request, and to all transient aircraft unfamiliar with the airport.

c. Pilots or formation leaders of aircraft intending to depart MCAS Yuma on an IFR flight plan shall inform Yuma Ground Control on initial contact that they intend to operate under IFR and shall state they have received ATIS information. Pilots will normally receive their IFR Clearance on the Clearance Delivery frequency.

d. Pilots or formation leaders of aircraft carrying ordnance shall inform Yuma Ground Control on initial contact that the aircraft requires arming. When in an authorized arming area, the position of the aircraft shall be such that other aircraft will have sufficient space to taxi behind the aircraft to the runway in use.

2. Runway Crossing. When taxiing, pilots or formation leaders of military aircraft shall not cross any runway that intersects their taxi route unless specific instructions to cross that runway have been received from Yuma Tower or Ground Control. Initial taxi instructions shall contain hold short instructions and DO NOT constitute

authorization to cross any runway which intersects the aircraft's taxi route. All "Hold Short" instructions shall be acknowledged verbatim, and shall be complied with.

3. Taxi Priority. Aircraft established on a taxiway shall be afforded priority over those aircraft entering the taxiway.

4. Safety Precautions

a. Pilots of taxiing aircraft shall use a minimum power setting in the vicinity of the ramp taxiway and parking areas and shall maintain a safe taxi speed at all times.

b. Pilots of taxiing aircraft shall not pass other aircraft taxiing in the same direction unless approval has been granted by Yuma Tower or Ground Control. Staggered taxiing by aircraft within the same formation is at the discretion of the formation leader.

c. Inbound taxiing aircraft will not change frequencies and contact Ground Control until instructed to do so by the tower. Aircraft taxiing for departure will contact tower in the Hold Short Area when ready for departure.

d. Due to the mix of different types of aircraft and parking configurations in the Visiting Aircraft Line, extreme caution shall be exercised while entering and exiting the Visiting Aircraft Line. If any questions arise as to aircraft wing or rotor clearance, the aircraft should be shut down and towed to its parking spot.

NOTE: WHEN TAXIING AT NIGHT, PILOTS WILL TAKE PARTICULAR NOTICE THAT TAXIWAY "B" ENTERS RUNWAY 21L BEHIND THE THRESHOLD LIGHTS.

5. Emergency Procedures. During an emergency, Yuma Tower and/or Yuma Ground shall instruct all taxiing aircraft to "hold position, emergency in progress". This will provide a safe environment for emergency vehicles to respond appropriately without interference. Regardless of their position on the airport, all aircraft SHALL hold their position, give way to all emergency vehicles, and exercise radio discipline for the duration of the emergency. Aircraft will not resume taxiing until instructed to do so by Yuma Tower or Yuma Ground.

3003. FIXED WING DEPARTURE PROCEDURES

1. Departure Runways. Departures are not normally conducted on Runways 17/35 or 8/26 for Category III military aircraft unless requested by the aircrew.

## 2. Engine Run-up

a. Pilots or formation leaders of military turbojet and large turboprop aircraft shall not conduct engine run-ups except when in takeoff position on the runway in use.

b. When a delay for engine run-up on the runway will exceed 20 seconds, the pilot or formation leader shall request approval from Yuma Tower to taxi into position and hold for engine run-up. When in position on the runway the pilot or formation leader shall continue holding in position until specifically cleared for takeoff or instructed to taxi off the runway.

c. When the delay on the runway in use will be less than 20 seconds, the pilot or formation leader may request takeoff clearance.

## 3. Formation Departures

a. Formation departures are defined as those in which no time interval exists between elements of the formation beginning takeoff roll.

b. Formation departures are restricted to Runways 3L, 3R, 21L and 21R and, with the exception of AV-8s departing in single file or staggered formations, shall not exceed two aircraft.

## 4. Course Rules - VFR

a. After receiving takeoff clearance from Yuma Tower, pilots shall visually check the departure runway and any intersecting runways for landing and departing aircraft.

b. After departing Runway 3, the pilot or formation leader shall climb straight ahead to 700' MSL until reaching a point 3NM (4 DME from NYL TACAN) from the northeastern field boundary. After departing Runway 21, the pilot or formation leader shall climb straight ahead and maintain 700' MSL until passing the southwestern field boundary. Requests for aircraft to climb above 700' MSL while in the Class D surface area will not be approved by Tower until clear of all conflicting traffic patterns.

c. Pilot or formation leader requests for a right turn after departing Runway 3 prior to 3NM may be approved by Yuma Tower contingent upon traffic conditions.

d. Pilots or formation leaders shall monitor Yuma Tower frequencies until they are clear of the lateral limits of the Class D Airspace.

5. Course Rules - IFR

a. Pilots or formation leaders in receipt of an IFR Departure Clearance shall inform Yuma Tower of their intent to depart under IFR when requesting to taxi onto the runway in use for engine run-up or takeoff.

b. After receiving takeoff clearance from Yuma Tower, pilots shall visually check the departure runway and any intersecting runway for landing or departing aircraft.

c. Pilots or formation leaders that have been instructed to contact Yuma Departure Control prior to beginning takeoff roll shall ensure that they monitor the UHF Guard Frequency and establish two-way radio communications with departure control prior to beginning take-off roll.

d. Pilots or formation leaders shall comply with the IFR departure instructions received. Additionally, they shall also comply with any instructions issued by Yuma Tower to provide separation from VFR aircraft in conflicting or overlapping traffic patterns within the airport traffic area.

3004. FIXED WING VFR ARRIVAL PROCEDURES

1. Arrival Information. VFR pilots or formation leaders of military turbojet or turboprop aircraft shall attempt to receive ATIS information on 273.2 or 118.8 prior to contacting Yuma Approach and notify the controller on initial contact that ATIS information has been received. If circumstances preclude obtaining information, the broadcast "Yuma Landing" may be used on Tower frequency.

NOTE: PILOTS SHOULD EXERCISE INCREASED VIGILANCE WITHIN THE CLASS D AIRSPACE.

2. Runway Assignment

a. Runway 3L/21R is designated as the primary landing runway for military turbojet and turboprop aircraft. Runway 3R/21L may be assigned for a more efficient flow of air traffic.

b. Unless specifically approved by the MCAS Yuma Airfield Operations Officer, all arriving aircraft carrying ordnance SHALL be assigned Runways 3L/3R or 21L/21R.

c. When Runways 17/35 or 8/26 are assigned to military aircraft, pilots can expect to be sequenced with General Aviation and Air Carrier aircraft.

Occasionally, due to unusual traffic or wind conditions, General Aviation and Air Carrier aircraft may be assigned Runways 21L/3R or 21R/3L.

d. Touch and go landings are not authorized on Runways 8/26 or 17/35 for Category III military aircraft.

e. All military jet and large turbo-prop aircraft executing a VOR, VOR-DME, or TACAN approach to Runway 17, shall execute a circling maneuver at the final approach fix (BARD VORTAC) to land on either 3L/3R or 21L/21R. Approach control will issue the landing direction (Runway 3/21) with the approach clearance. However, the actual landing runway (3L/3r or 21L21r) will be assigned by the Tower.

3. Commonly Used Visual Check Points. The following geographical points are readily visible from the air and are used extensively at MCAS Yuma (see Appendix I).

<u>APPROXIMATE GEOGRAPHICAL POINT</u>	<u>POSITION (FROM NYL)</u>	<u>DESCRIPTION</u>
Pilot's Knob	9 NM WNW	Lone 874' MSL mountain south of Interstate 8.
Blue/Green Tanks	2.5 NM NW	Two wide blue/green water Tanks on a hill adjacent to 16th St.
Telegraph Pass	14 NM ENE	Where Interstate 8 passes through break in Gila Mountain Range.
CAUTION: TELEGRAPH PASS IS LOCATED WITHIN R2301, AIRCRAFT SHOULD BE NORTH OF THIS POINT.		
College	5 NM NE	Arizona Western College, midway between Highway 95 and Interstate 8.
Somerton	7 NM SW	Small town.
BARD VORTAC	6 NM WNW	Small white circular building.
ROLLE FIELD	10 NM SSW	Triangular airstrip used extensively by local General Aviation aircraft.
Tan water tank/Golf	2 NM W	Lone 341' tank on the Course Approach corridor to Rwy 8 adjacent to the Desert Hills Golf Course.

Interstate	3 NM NE	Interstate 8 near exit 3.
Southwest Initial	NYL R-210/6	Slightly east of the town of Somerton.
Northeast Initial	NYL R-030/6	Abeam the confluence of the Gila and Colorado Rivers.
Point Tango	NYL R-060/6	Where Interstate 8 crosses the "B" canal 1 mile south of Arizona Western College.
Picacho Peak	19 NM NNW	1930' Mountain

4. Course Rules - Overhead 360 (Break) Pattern for Runways 3L, 3R. (See Appendix G)

a. Initial. Pilots or formation leaders shall report and enter the Southwest Initial on a track that diverges by thirty degrees or less from the Runway 3L heading. Initial altitude is 4,000' MSL. After crossing the initial, a descent to the break attitude of 2,200' MSL may be commenced. Descent to pattern altitude of 1,700' MSL may be commenced in the break or on downwind.

b. Break. The point of break will be assigned by Yuma Tower. Break points are "At the Numbers," "Prior to Mid-field," and "Northeast field Boundary". When the pilot or formation leader reports the initial and, because of traffic conditions, Yuma Tower is unable to assign a breakpoint, instructions to "report the Numbers" will be issued. Instructions to "Report Numbers" is NOT an authorization to break. Pilots or formation leaders shall proceed and report over the approach end of Runway 3L. At this time a point of break will be assigned and sequence instructions issued. If, due to traffic conditions, Yuma Tower is unable to assign a break point, the pilot or formation leader shall depart the Class D surface area on a track of 030 degrees and report the Southwest Initial for reentry.

c. Traffic Pattern. All aircraft shall make RIGHT traffic after breaking and shall not descend below 1,700' MSL until after crossing the extended runway centerline of Runway 35, unless landing on Runway 35. When landing on Runway 3L or 3R the specific landing runway will normally be assigned prior to the aircraft or formation approaching the 180.

d. Pattern Conflicts. Pilots or formation leaders shall be observant of General Aviation and Air Carrier aircraft operating at 1,200' MSL entering the standard quadrangle patterns for Runway 17/35 AND/OR 8/26. The right base for 3L/R overlaps the left base for Runway 35.

e. Pattern Restrictions. Regardless of the break point assigned, pilots and/or formation leaders shall control the flight path of their aircraft so that Air Station buildings and base housing areas are not overflowed.

5. Course Rules - Overhead 360 (Break) Pattern for Runways 21R, 21L.  
(See Appendix H)

a. Initial. Pilots or formation leaders shall report and enter the Northeast Initial on a track that diverges by thirty degrees or less from the heading of runway 21R. Initial altitude is 4,000' MSL. After crossing the initial, a descent to the break altitude of 2,200' MSL may be commenced. Descent to pattern altitude of 1,700' MSL may be commenced in the break or on downwind.

b. Break. The point of break will be assigned by Yuma Tower. Break points are "Past Midfield" and "Southwest field Boundary". When the pilot or formation leader reports the initial and, because of traffic conditions, Yuma Tower is unable to assign a break point, instructions to report the "Numbers" will be issued. Instructions to "Report Numbers" is NOT an authorization to break. Pilots or formation leaders shall proceed and report over the approach end of Runway 21R. At this time a break point will be assigned and sequence instructions issued. If, due to traffic conditions, Yuma Tower is unable to assign a break point, the pilot or formation leader shall depart the Class D Airspace on a track of 210 degrees and report the Northeast initial for reentry.

c. Traffic Pattern. Aircraft shall make LEFT traffic after breaking and shall not descend below 1,700' MSL until past the extended runway centerline of Runway 26 unless landing on Runway 26. When landing on Runway 21R or 21L the specific landing runway will normally be assigned prior to the aircraft or formation approaching the 180. The left base for Runway 21L/R overlaps the right base for Runway 26.

d. Pattern Restrictions. Regardless of the break point assigned, pilots and/or formation leaders shall control the flight path of their aircraft so that Air Station buildings and base housing areas are not overflowed.

NOTE: PILOTS OR FORMATION LEADERS SHALL BE OBSERVANT OF GENERAL AVIATION AND COMMERCIAL AIR CARRIER AIRCRAFT OPERATING AT 1,200' MSL ENTERING THE STANDARD QUADRANGLE PATTERN FOR RUNWAY 17/35 AND/OR RUNWAY 8/26.

6. Course Rules - Straight-in Runways 21L, 21R, 3L or 3R. (See Appendices C & D)

a. General. A straight-in approach to the assigned runway will be approved upon pilot or formation leader request. If a straight-in approach is not requested, instructions for an overhead 360 pattern will be issued. If the aircraft has hung ordnance and/or requires disarming, A STRAIGHT-IN APPROACH IS MANDATORY.

NOTE: SEE PARAGRAPH 3008.5 OF THIS MANUAL FOR FURTHER HUNG ORDNANCE PROCEDURES.

b. Initial. Pilots or formation leaders shall report the appropriate initial for the runway in use on a track that diverges by ten degrees or less from the runway heading (21R/3L). Initial altitude is 3,000' MSL.

7. Course Rules - Standard Quadrangle Pattern for all Runways.

a. General. The standard quadrangle pattern is normally assigned to conventional military, General Aviation, and Air Carrier aircraft only. Pilots of military turbojet and turboprop aircraft will be assigned the standard quadrangle pattern upon request or when completing the circle to land maneuver from an instrument approach.

b. Initial Contact. Pilots shall report their position to Yuma Tower prior to entering the Class D Airspace. On initial contact, Yuma Tower will issue instructions for the aircraft to enter the appropriate leg of the standard quadrangle pattern for the assigned runway.

c. Traffic Pattern Altitude. Pilots shall enter the Class D Airspace AT the appropriate traffic pattern altitude. The traffic pattern altitude for military turbojet, turboprop and high performance conventional aircraft is 1,700' MSL. Other military aircraft traffic pattern altitude is 1,200' MSL.

d. Traffic Patterns. Yuma Tower will normally assign right traffic to Runways 8, 17, and 35 and left traffic to Runway 26. However, the control tower will assign traffic patterns to general aviation aircraft using 17/35 or 8/26, as required, for de-confliction of military and civilian traffic.

NOTE: PILOTS OF MILITARY TURBOJET AND TURBOPROP AIRCRAFT ENTERING THE TRAFFIC PATTERN FOR RUNWAY 21L, 21R, 3L OR 3R SHALL BE OBSERVANT OF OTHER MILITARY TURBOJET AND TURBOPROP AIRCRAFT ENTERING FROM THE OVERHEAD 360 PATTERN AND FOR CONVENTIONAL MILITARY, GENERAL AVIATION AND AIR CARRIER AIRCRAFT OPERATIONS IN OVERLAPPING CONFLICTING PATTERNS FOR ALL OTHER RUNWAYS AT 1200' MSL.

e. Pattern Restrictions

(1) Runways 21L or 21R: Pilots of military turbojet and turboprop aircraft shall maintain 1,700' MSL until passing the extended runway centerlines of Runways 26 and 35.

(2) Runways 3R or 3L: Pilots of military turbojet and turboprop aircraft shall maintain 1,700' MSL until passing the extended runway centerline of Runway 35.

8. Formation Flights. Formation flights will be controlled as a single aircraft; this includes landing clearance. If it becomes necessary to issue control instructions to individual aircraft of a formation, Yuma Tower will use the call sign of the formation leader followed by the present observed position of the aircraft within the formation; i.e., BLACKSHEEP 01 AND FLIGHT CLEARED TO LAND, - BLACKSHEEP 01 DASH FOUR GO AROUND; FOUL DECK.

9. Priorities

a. All aircraft operating in or entering the Class D Airspace will be sequenced on a "First Come, First Served" basis.

b. Full stop aircraft shall be afforded priority over aircraft requesting a Stop and Go, Touch and Go, Low Approach or Option Approach.

10. Closed Traffic. Requests for Closed Traffic following a Stop and Go, Touch and Go, Low Approach or Option Approach will be approved by Tower contingent upon existing traffic conditions.

11. Safety Procedures. Unless required by specific aircraft NATOPS for safe operation, do not exceed 250 knots when within the Class D Airspace.

NOTE: Compliance with the 1,700' MSL traffic pattern altitudes for military turbojet and turboprop aircraft is mandatory and necessary to provide separation from General Aviation and Air Carrier aircraft operating at 1,200' MSL in overlapping or conflicting pattern.

3005. VFR HELICOPTER PROCEDURES

1. General. Helicopters are bound by all course rules in this chapter that are relevant to helicopter operations. Helicopters within the Class D Airspace shall not cross runways or runway extended centerlines without clearance from Yuma Tower. The requirement to avoid over-flying the city of Yuma, Yuma Regional Medical Center and schools is re-emphasized. Additionally, helicopter aircrews are reminded to maintain a minimum altitude of 700' MSL while operating in the Class D airspace except in approved patterns.

2. Air Taxiing. Except for aircraft not equipped with wheel assemblies, air taxiing is prohibited except over runways. Aircraft not equipped with wheel assemblies will air taxi over designated aircraft movement areas only and at a safe operating speed.

3. Normal Landing/Departure Areas. Except during emergencies or actual SAR missions, helicopters shall operate to and from the approach end of runways. At no time will helicopters be authorized to overfly men, equipment, or aircraft when departing or landing at Yuma. SAR helicopters on actual missions will be cleared via the most expeditious route.

4. Rough Area Landings. Rough area landings for Air Station SAR pilots are authorized in the Laguna Mountain Area (Section 1, T. 8S R.22W, GSRM) for the purpose of training SAR crews and maintaining proficiency in Search and Rescue techniques. See paragraph 1012 of this manual for operations within wildlife refuges.

5. Departures

a. Pilots will contact Yuma Ground Control for taxi instructions prior to moving from their parking area. After receiving takeoff clearance from Yuma Tower, pilots will climb to and maintain 700' MSL and follow one of the required routes as depicted in Appendix D of this manual. Once clear of the Class D Airspace (or prior to, with tower approval) pilots may climb to their cruising altitude in accordance with the applicable FAR or OPNAVINST.

NOTE: HELICOPTERS WILL NOT DEPART OVER THE DUST COVERS.

b. Departure Runway 8. After takeoff, climb and maintain 700' MSL within one nautical mile from the end of Runway 8 and proceed to Point Tango. Do not overfly Lemon Tree Trailer Park, one nautical mile from the departure end of Runway 8. From Point Tango:

(1) Eastbound--Climb and maintain 1500' MSL and directly overfly Interstate 8 (I-8) to Telegraph Pass.

(2) Southbound--Maintain 700' MSL.

(3) North or Westbound--Maintain 700' MSL, avoid over-flying residential areas and schools, and report the Sandpits (NYL 015/6.5) clear.

c. Departure Runway 26. After takeoff, climb and maintain 700' MSL prior to reaching 3/4 nautical miles from the end of Runway 26. Overfly parking lots, and 32nd Street (four lane road, north of and parallel to Runway 26 extended centerline) until abeam the blue water

tower, then proceed to Pilot's Knob. Avoid over-flying the hospital, Cibola and Kofa High Schools, homes and trailer parks west of the air station.

## 6. Arrivals

a. Pilots or formation leaders shall report their positions to Yuma Tower prior to entering the Class D Airspace.

b. Upon entering the Class D Airspace, pilots shall descend to 700' MSL prior to five miles and follow one of the required arrival routes as depicted in Appendix D of this manual.

c. Arrivals Runway 8. From Pilot's Knob, proceed towards the blue water tower, maintaining 700' MSL. Avoid over-flying the hospital, Cibola and Kofa High Schools. Abeam the blue water tower, overfly 32nd Street (four lane road north of, and parallel to the Runway 8 extended centerline) and parking lots maintaining 700' MSL until 3/4 nautical miles from the end of Runway 8. Avoid over-flying homes and trailer parks west of the air station.

d. Arrivals Runway 26. From Telegraph Pass, directly overfly Interstate 8 (I-8) at 1500' MSL to Point Tango, a point where Interstate 8 crosses the B Canal one mile south of Arizona Western College at the NYL R-060/6. From Point Tango, descend to 700' MSL until one nautical mile from end of Runway 26. Do not overfly Lemon Tree Trailer Park, one nautical mile from the approach end of Runway 26.

e. Helicopters shall be observant of General Aviation and Air Carrier aircraft operating to and from Runway 8/26 and 17/35 at and below 1,200' MSL. When assigned these runways, helicopters can expect to be sequenced with General Aviation and Air Carrier aircraft. To the maximum extent feasible, helicopters should avoid the arrival and departure corridors for Runways 3L/R and 21R/L, unless landing or departing on those runways.

7. Helicopter maintenance turns/hover checks shall be conducted on runway 8/26 adjacent to taxiways "A" or "B", in the "B" Arm/Disarm area, or with prior coordination, on a not to interfere basis, in the CALA. Hover checks should be conducted so as not to interfere with normal traffic. Extreme care should be taken to ensure that rotor wash does not create FOD hazards for other aircraft.

8. FOD Prevention. Helicopters are cautioned to keep their rotor wash away from intake areas of jet/turbojet aircraft. If rotor wash blows debris on any taxiway/runway, a sweeper should be called (ext 2145) to clear the FOD. Helicopters are restricted from using:

- a. Taxiway "C" in front of MAG-13 lines.
- b. Taxiway "F" from "C" to "M" taxiway.
- c. Taxiway "E".

NOTE: Exceptions will be made by the Operations/Assistant Operations Officer.

3006. TOUCH AND GO LANDINGS. Touch and Go landings will be approved when traffic permits. Aircraft completing a touch and go landing or low approach will maintain 700' until turning crosswind, at which time a climb to pattern altitude will be approved. Touch and go landings or low approaches are not permitted on Runway 8/26 or 17/35 for military turbojet aircraft. Runway 8/26 may be authorized for helicopters. This does not preclude the requirement for the Tower to issue alternate instructions as deemed necessary commensurate with safety. All aircraft are encouraged to touch down prior to or after the arresting gear to avoid possible damage to the aircraft, arresting gear or runway. To avoid low altitude and high power settings in the vicinity of the Sunset Trailer Park (approximately one mile east of the intersection of Hwy 80 and 3E), touch and go traffic to Runway 3 will continue upwind until beyond the north field boundary.

3007. FIELD CARRIER LANDING PRACTICE (FCLP)

1. TYPE-I (Tower Pattern/Runway 3R/21L):

a. 24 hours advance notice, OPSO approval only, Visual Meteorological Conditions (VMC) only. A face-to-face Tower Watch Supervisor/Radar Watch Supervisor/Landing Safety Officer (TWS/RWS/LSO) meeting is required prior to FCLP's.

b. The preferred runway is 3R/21L with right/left pattern at 1700' MSL. Preferred hours between 0730-0930L. The Tower Watch Supervisor (TWS) has final authority to continue or secure FCLP's. Three (3) aircraft maximum.

c. Aircraft will depart the runway in use and may re-enter via the standard overhead pattern. On downwind led, or as soon as possible, the aircraft will change to paddles (LSO) frequency. Carrier breaks are not authorized and will not be approved.

d. To maximum extent possible use frequency 361.2 (Tower secondary UHF frequency) shall be assigned to Paddles. The back-up frequency is preferably 286.0 (coordinate with radar for an SFA).

For the FCLP pattern, the Local Controller shall only monitor the Paddles frequency and make an effort to avoid transmitting on this frequency unless it is for specific control instructions to FCLP aircraft.

e. Tower may retain control of the pattern at any time. No non-participating aircraft may utilize Runway 3R/21L during Type I FCLP's.

2. TYPE-II (AV-8 ECHO Taxiway FCLP's):

a. Three working days advance notice, OPSO approval only, conducted only when the duty runway is 3 and during VMC.

b. Pattern altitude is 600' AGL/800' MSL.

c. During these operations, the entire taxiway is designated as an "Active" runway and is considered "HOT". Vehicles must have positive clearance to cross the taxiway during Type II operations.

d. Control of the pattern may be released to Paddles.

e. Maximum of two (2) FCLP aircraft at once in the pattern. Non-participating aircraft are not allowed.

f. All FCLP aircraft are to turn downwind prior to "H" taxiway.

3. TYPE-III (MAG-13/Yuma Radar Approach Control FCLP's/Runway 3L/21R):

a. MAG-13 shall inform MCAS Yuma Operations/ATC at least 3 days in advance of FCLP operations.

b. MAG-13 shall request through Base Operations for the issuance of a Notice to Airman (NOTAM) at least 72 hours in advance of FCLP operations.

c. Weather shall be VMC. If weather conditions deteriorate to visibility of less than 3 miles, or a ceiling of less than 1000 feet, FCLP's shall be terminated.

d. FCLP aircraft shall maintain VFR at all times.

e. MCAS Yuma Approach Control assumes responsibility for separation of FCLP aircraft from all other aircraft from "RADAR CONTACT" until FCLP aircraft reports the "BALL". Normal minimum separation (3-miles laterally or 1000-feet vertically) shall be applied between all aircraft. MCAS Yuma Approach Control will provide FCLP aircraft with a Ground Controller Approach (GCA) approach until the FCLP aircraft reports the "BALL". The MAG-13 LSO assumes responsibility for separation of FCLP aircraft from the report of the "BALL" until clear of the "LANDING ZONE".

f. The FCLP "LANDING ZONE" is defined as the landing runway, from threshold to 1500 feet down the runway from threshold.

g. Each FCLP aircraft shall be assigned a single control frequency for FCLP operations. All MCAS Yuma Approach, Tower, and MAG-13 Landing Signal Officer (LSO) control instructions shall be broadcast on this frequency. Additionally, the MAG-13 LSO and FCLP aircraft shall monitor 361.2 as an administrative backup frequency.

h. The maximum number of FCLP aircraft permitted in the FCLP/MCAS Yuma Approach control pattern is four (4). MCAS Yuma Tower personnel or the MAG-13 LSO due to reduced visibility or other safety requirements as needed may reduce this number.

i. The MCAS Yuma Tower Supervisor has final authority for continuing or stopping FCLP's

j. "WAVE-OFF" by the MAG-13 LSO shall consist of FCLP aircraft climbing to 700 feet MSL and paralleling west of the runway(3L). The call by the MAG-13 LSO to cancel MCAS Yuma Tower takeoff clearance will be "SUSPEND, SUSPEND, SUSPEND". The MAG-13 LSO shall "SUSPEND" departing FCLP aircraft prior to "WAVE OFF" any FCLP aircraft.

k. MCAS Yuma Tower "GO-AROUNDS" are mandatory. Identified FCLP aircraft shall comply immediately with additional instructions to follow.

l. All practice approaches to Runway 3L/21R shall be suspended during FCLP operations. When non-participating aircraft require an approach to the FCLP runway 3L, MCAS Yuma Tower shall coordinate with, and take control of the "LANDING ZONE" from the MAG-13 LSO after ensuring that all FCLP aircraft are clear of the "LANDING ZONE".

m. To facilitate optimum coordination between MCAS Yuma ATC and the MAG-13 LSO, a minimum of a phone briefing should occur between ATC supervisory personnel and the LSO prior to conducting FCLP approaches.

n. Approach end arresting gear will be de-rigged on runway 3L and rigged on runway 3R.

o. With the implementation of the PAPIs, if an OLS is required the using squadron must coordinate with station recovery and MWSS-371.

#### 3008. ORDNANCE AND WEAPONS PROCEDURES

1. Local aircraft ordnance and weapons procedures are covered in Station Orders 8020.1D, P8020.3G, 8020.4A, and 8023.1M. Personnel involved in ordnance operations shall be familiar with and comply with all published procedures.

## 2. Loading/Down Loading/Refueling

a. All high explosive ordnance Class 1.1 or 1.2 must be loaded in the CALA. Class 1.1 ordnance consists of mass destruction weapons such as Mark 80 series high explosive bombs and rockets/missiles fitted with high explosive warheads. Class 1.2 ordnance consists of weapons that explode with fragments such as anti-personnel weapons.

b. Class 1.3 (mass fire) and 1.4 (moderate fire) explosive weapons such as inert bombs with signal cartridges, captive carry, air to air/air to ground missiles with inert warheads, chaff, decoy flares, inert rocket warheads, parachute flares, TP ammunition and BDU Practice bombs with electric fuses are not required to be loaded in the CALA.

c. Helicopters loading explosive Class 1.1, 1.2 or forward firing ordnance must be loaded in the CALA.

d. All unexpended high explosive ordnance must be downloaded at the CALA.

e. Cold refueling of aircraft with ordnance on board is permitted in authorized areas. Loading/downloading of ordnance and refueling will not be done simultaneously. Aircraft with hung ordnance will not be fueled.

f. Once loaded, aircraft maintenance will be limited to preflight/post flight inspections.

g. No ordnance, including practice bombs, shall be left hanging on an aircraft overnight.

h. Aircraft shall be downloaded at the end of unit operations and all explosive munitions returned to Station Weapons. All cartridge actuated devices and spotting charges will be secured in the Ready Service Lockers.

NOTE: NO EXPLOSIVES OR PYROTECHNICS, EXCEPT THOSE IN EMERGENCY EQUIPMENT, SHALL BE STORED IN OR ON AN AIRCRAFT WHILE THAT AIRCRAFT IS IN THE HANGAR FOR REPAIRS OR CHECKS.

3. Arming and Disarming Areas. (See Appendix B). Qualified personnel will accomplish in the areas designated and arming and disarming of aircraft only. Aircraft will be disarmed prior to storing parachute braking devices. Pilots shall ensure that unit safety instructions are followed as well as those published by MCAS Yuma and higher authority. Pilots should position their aircraft so that other aircraft will have sufficient room to taxi behind them.

a. Arming Areas

- (1) 21L - use arming area West of Taxiway "B" heading 210° magnetic.
- (2) 21R - aircraft turn up area on the Southwest side of Taxiway "D" heading 210° magnetic.
- (3) 3L - aircraft turn up area on the Southwest side of Taxiway "E" heading 210° magnetic.
- (4) 3R - aircraft turn up area on the Southwest side of the "Throat" taxiway heading 210° magnetic.
- (5) Taxiway S - heading 210 magnetic (helos only)

b. Disarming Areas

- (1) 21L - South end of Runway 21L on the last turn off heading 210° magnetic.
- (2) 21R - South end of Runway 21R on the last turn off heading 210° magnetic.
- (3) 3L - North end of Runway 3L on Taxiway "D", as depicted on Appendix B, heading 210° magnetic.
- (4) 3R - The disarming areas on Taxiway "B" or "D" may be used, depending on unit requirements and aircraft exiting point.
- (5) Taxiway S - heading 210 magnetic (helos only)

4. Ordnance Divert Aircraft. MCAS Yuma does not have ordnance personnel available to handle downloading/disarming of unexpended or hung ordnance. Downloading/disarming of unexpended or hung ordnance of divert aircraft will be accomplished by MALS-13 Ordnance. Notify MAG-13 Operations Duty Officer (269-2321/2124) and the MALS-13 Ordnance Division (269-2702/2705/2719) of downloading/de-arming requirements.

5. Hung Ordnance. Hung ordnance is considered to be any practice or live ordnance that has failed to release or fire. UNEXPENDED ordnance is any practice or live ordnance in which no attempt to release or fire has occurred. Internal or pod mounted guns, once armed, are to be treated as hung or unexpended ordnance.

6. Live Ordnance and Drop Tank Jettison Area

a. Location. 1,000 meter bladed circle on 130 radial 13 DME off Channel 84.

b. For instructions contact Cactus West, 358.6, in the event Cactus West is unmanned, contact Yuma Range Control 274.0 for instructions. Following Range Control clearance, a low pass shall be made over the drop area to ensure the area is clear for drop. If clear, the drop tank/unarmed ordnance will be dropped on the next pass. DO NOT drop ordnance on Yodaville, the Urban CAS Target Complex located southwest of Cactus West.

7. Special Weapons Area (Hot Gun Pit). Aircraft gun jams/malfunctions shall be cleared in the Special Weapons Area located on Taxiway "G". Aircraft will be pointed towards the sandbagged abutment. If Special Weapons operations are in progress, the arm/dearm areas will be used adjacent to the runways. Aircraft may be taxied or towed to the Special Weapons Area for loading or unloading.

3009. HIGH POWER TURN UP AREA (See Appendix B)

1. Scheduling and Hours of Operations. The hours of operation are 0730-2200 daily. The area is released to MAG-13 for use between 0730-1800 daily. Between 1800 and 2200 the area will be used on a first come first served basis. Aircraft enroute to or returning from the area shall not cross Runway 35 without clearance from the tower. A radio-equipped vehicle will escort all aircraft being towed to the high power turn up area across Runway 35. Fifteen minutes advanced notice is required for a Crash Crew or VAL escort vehicle.

2. Aircraft Utilization. The high power turn up area closest to Runway 17/35 was designed primarily to meet the requirements of the AV-8 aircraft. Although standard type tie downs were built into the pad, this pad is restricted to AV-8's under normal circumstances. Permission to use this pad by other type aircraft must be obtained from the Operations/Assistant Operations Officer (ext 3558/3327).

3. Precautionary Measures. The using activity will comply with their unit's maintenance /safety instructions, those originating from higher authority, and the instructions posted at the high power turn up area.

4. Hush House. The Hush House is located in building 128 and is available 24 hours a day. Call 269-2912 to schedule the Hush House.

3010. HAZARDOUS CARGO/COMBAT AIRCRAFT LOADING AREA (CALA)

## 1. Notification

a. The Tower will advise Flight Clearance of all inbound flights carrying hazardous cargo.

b. Flight Clearance. Flight Clearance shall notify Station Ordnance, Explosive Safety, EOD, CFR, Station Environmental and the Station Disaster Control Officer as soon as they are informed of the impending arrival of hazardous cargo.

NOTE: ALL AIRCRAFT LOADING OR UNLOADING HAZARDOUS CARGO WILL BE PARKED AT THE CALA.

c. If the hazardous cargo is marked for YPG, Flight Clearance will advise Ammunition Control, YPG 328-6754/6755 as soon as possible. CFR equipment will standby until YPG personnel unload and assume custody of the cargo.

3011. HOT BRAKES PROCEDURES/PARKING AREAS. Hot brakes parking areas are established adjacent to the roll out end of all runways. Pilots suspecting hot brakes shall advise the Tower and request clearance to the nearest hot brakes parking area. The Tower will immediately declare an emergency. The aircraft will remain in the hot brakes area until a "thumbs up" from Crash Crew personnel has been received. Aircraft shall be parked in such a manner that the axis of the wheels point away from adjacent runways and taxiways. Station CFR has the capability of providing brake cooling fans, if required.

3012. RESTRICTED AREAS. Numerous restricted areas are located in proximity to MCAS Yuma; to include R-2301, R-2307, R-2507, R-2510, R-2512, R-2306, and R-2308. Pilots must be cognizant of these areas and avoid penetration unless cleared by the proper authority. (MCAS Yuma Tower has NO authority to clear aircraft into any Restricted Area). For a complete description of these areas, see flight planning document Section AP-1A, Special Use Airspace. The Notices to Airmen Section of the current Airmen's Guide should be checked for information on areas of extensive jet activity and Yuma Proving Ground controlled firing areas. MCAS Yuma StaO 3710.6 contains pertinent information applicable to Restricted Areas managed by MCAS Yuma. Additional information is available through Range Scheduling (269-2215). Appendix J depicts Restricted Areas in the vicinity of MCAS Yuma.

## 3013. PERSONNEL AND VEHICLES ON THE AIRFIELD

### 1. Authority to Operate

a. The presence of personnel and vehicles on runways, taxiways, parking ramp and the fire lane is strictly controlled at all times. These areas of the airfield are not designed for frequent vehicle movement and require extreme caution. When operating on movement areas of the airfield, (runways, taxiways, parking ramp) the vehicle must be in radio contact with the Air Traffic Control Tower (Ground) at all times. Those personnel whose duties require the operation of a vehicle (to include GSE) shall be thoroughly familiar with this section of the Airfield Operations Manual regarding operational requirements of vehicles and vehicle operators on this airfield.

b. Licenses

(1) All personnel required to operate a vehicle (to include GSE) on the airfield (to include the Fire Lane) SHALL attend the Airfield Driver's License Course. Personnel will be required to show a valid State driver's license at the beginning of the course. Station/Tenant unit personnel will be issued a license valid for one year and shall attend a refresher course annually. Station/Tenant units are responsible for ensuring that their personnel attend a yearly refresher course. Anyone found driving with an expired license would lose their airfield driving privileges.

(2) Deployed squadron personnel (essential driver's only) will have an expiration date of one month past the scheduled end of deployment. Contractor's license will expire at the job completion date or at the contract termination date whichever comes first. Contractors with a contract termination date exceeding one year shall attend a refresher course annually. This license shall be kept on their person whenever they are operating a vehicle on the Flight Line.

(3) In order for personnel to obtain an Airfield Driver's License they must have a letter from their command stating why the license is needed. Refer to Fig 3-1. Airfield Driver's License course can be scheduled by contacting Base Operations at 269-2077/2326. At least 48 hours prior notice is required for scheduling a class. Only those personnel that are required to drive on the airfield should be sent to Base Operations for licenses.

c. Vehicles. All vehicles are required to have an airfield pass, except emergence vehicles i.e. ARFF, Fire Department, PMO, operations vehicles, VAL, fuel trucks, paddles vehicles, support vehicles (GSE) and Taylor Dunn utility vehicles. Passes are issued at base operations and will only be issued to drivers that have completed the airfield driver's course. Passes shall be displayed in the front windshield at all times. Units requiring vehicle access on the airfield must have a letter from the command. Refer to Fig 3-1. Base Operations will issue vehicle passes only.

(1) All vehicles authorized on the aircraft movement areas shall display a checkered flag or have a rotating beacon. Flags may be checked out from Fleet Liaison for deployed squadron vehicles, or Flight Clearance for Public Works, Maintenance, Civilian Contractors and official MCAS vehicles. Tenant units should maintain a flag for arming/disarming vehicles used by their command. Tenant AV-8 squadron paddles vehicles may request access to runways/taxiways as required to monitor VSTOL maneuvers as long as they maintain two-way communications with ground/tower.

(2) All vehicles moving onto the aircraft movement area are required to have radio contact with Yuma Ground Control. This includes all taxiways, aprons, etc. Any vehicle moving onto a runway will obtain clearance from the tower prior to moving onto the runway, all instruction given from the tower shall be repeated back verbatim to ensure complete understanding, and shall be complied with fully.

(3) It is the unit's responsibility to control the number of vehicles on the airfield. Request passes only for those vehicles essential to mission accomplishment.

## 2. Vehicle Access Gates

a. All vehicles will access the airfield via any of the vehicles gates except the ARFF Gate. The ARFF gate will not be used without prior permission from the Operations/Assistant Operations Officer. The ARFF gate is for emergency vehicles only. The MCAS CO, MAG-13 CO, and MAWTS-1 CO are exempt and may use the ARFF gate.

b. For security purposes, only one vehicle will go in/out of a gate per gate opening. All vehicles are required to pull approximately ten feet past the gate and wait for the gate to close completely prior to proceeding.

NOTE: THIS IS ONLY FOR PERSONNEL/VEHICLES NEEDING ACCESS TO THE FLIGHT LINE. ALL PERSONNEL REQUIRING ACCESS TO THE FLIGHT LINE VIA A TURNSTYLE SHOULD REPORT TO PMO.

3. Maximum Speed Limits. The maximum speed limits for vehicles on the airfield are:

<u>LOCATION</u>	<u>SPEED LIMIT (MPH)</u>
Fire Lane	10
Parking Ramp	10
Taxiway "C"	15
Runways & Taxiways	35

Other airport surfaces, to include shoulders and dust covers, 15 MPH. (VEHICLES WILL AVOID SHOULDERS AND DUST COVERS EXCEPT FOR ACTUAL EMERGENCIES).

NOTE: \* ABOVE ARE DAYLIGHT SPEEDS; DECREASE SPEED BY 5 MPH DURING HOURS OF DARKNESS.

\*\* THE MAXIMUM SPEED LIMIT IN FRONT OF ARFF AND ALL AIRCRAFT HANGARS IS 5 MPH.

4. Vehicle Light Signals. Vehicle light signals are not authorized.

5. Vehicle Lights. Vehicles on the airfield will be driven with headlights on low beam during the hours of darkness. However, drivers shall use extreme caution to avoid blinding pilots of aircraft in the traffic pattern with their headlights. If necessary, vehicle operators will stop in a clear area and use parking lights until aircraft have passed.

6. Operating on Taxiways. Vehicles operating on taxiways shall make radio contact with Ground Control prior to operating on any taxiway. Vehicles will use the extreme right or left side, and will give way to all moving aircraft. All vehicles shall obtain clearance from Tower/Ground Control prior to operating on or crossing all runways.

7. Operating on Runways. Vehicles operating on runways shall make radio contact with Ground Control and obtain clearance from the tower prior to operating on any runway. All instruction given from the tower shall be repeated back verbatim and complied with fully. Clearance shall be obtained from Tower/Ground Control prior to crossing any other runways. All vehicles shall contact Tower/Ground Control and report clear once they are off of the runway.

8. FOD Prevention. To preclude FOD migration on the aircraft movement area, all vehicles will conduct a FOD tire check prior to entering the aircraft movement area or when leaving and re-entering a hard surface area in the aircraft movement area. Any vehicle that runs over a runway or taxiway light shall report it to Base Operations. Failure to do so will result in loss of airfield driving privileges.

9. Vehicle Call Signs. In order to facilitate control of vehicles on the airport movement area, a vehicle numbering system has been established. All vehicles with access to the airport movement area will display either a permanent or magnetically attached number. Radio call signs will be assigned by the Operations Officer. Radio call signs have been assigned as shown below:

<u>SECTION</u>	<u>CALL SIGN</u>	<u>BLOCK</u>
OPERATIONS	OPS	1, 2, 4-7
AIRCRAFT RESCUE/ FIREFIGHTING	RESCUE	20, 22-25, 27-29
SWEEPER 39	SWEEPER	30-34, 36-
STATION P-19's	RESCUE	40-49
CFR TANKER	TANKER	50-52
RECOVERY	RECOVER	60-69
PUBLIC WORKS	DIABLO	80-89
EOD	EOD	90 AND 91
PMO	SMOKEY	302-310
YUMA INTERNATIONAL AIRPORT	YC	1-3

ANY ADDITIONAL NUMBERS REQUIRED WILL BE ASSIGNED BY THE OPERATIONS DEPARTMENT.

NOTE: THE NUMBERS 3, 8, 17, 21, 26, AND 35 WILL NOT BE ASSIGNED TO MILITARY VEHICLES IN ORDER TO AVOID CONFUSION WITH RUNWAY DESIGNATIONS.

10. RESPONSIBILITY. Failure to obey the above rules and regulations will result in the loss of driving privileges on the airfield.

#### 3014. AIRFIELD INSPECTIONS

1. An inspection of all aircraft movement areas to include runways, taxiways and aprons shall be done on a daily basis. The inspection should include such things as damage to any surface, any construction areas, and identification of any aircraft parked on or next to runways or taxiways.

2. Each night an inspection of all airfield lighting shall be conducted and reported to Base Services Division. If there is a failure or irregular operation of a significant section of lights a NOTAM shall be issued.

3. All hazards that are identified will be to all airport users via, NOTAM (if applicable), ATIS and the Daily Airfield Status Report.

3015. RADIATION HAZARDS TO ORDNANCE. Electro-explosive devices in present day airborne ordnance are susceptible to ignition by radio frequency energy during loading, unloading, arming and disarming operations. NAVORD OP 3565 should be referred to and complied with prior to and during all ordnance operations to minimize Radio Frequency Radiation Hazards to electro-explosive devices. Refer to the current edition of StaO 3440.2 for further guidance.

3016. LOCAL OBSTRUCTIONS. A local hazard map is located in the Flight Planning Room. Obstructions existing within close proximity to the runways are:

1. Old Control Tower, 342' MSL, located at field.
2. Airbase water tank, 351' MSL, located 1/2 NM east of the Control Tower.
3. Airport beacon, 336' MSL, located 3/8 NM (2,400') southeast of the Control Tower.
4. Checkered tanks, 338' MSL, located 2 1/2 NM NNE on the approach course to Runways 21L/21R.
5. FAA transceiver site, 298' MSL, located 1,500' north of midpoint of Runway 8/26.
6. ASR-11 Antenna site, 320' MSL, located 3/8 NM (2,400') southeast of the Control Tower.
7. Tan water tank, 354' MSL, (394' MSL large flag displayed during holidays) located 2 NM west on the approach course to Runway 8.
8. DF Antenna, 230' MSL, located 1/4 NM north of Runway 26 threshold.
9. FM Radio Tower, 479' MSL, located 2 NM east (NYL CH 84/2.7 DME) of MCAS Yuma/Yuma International Airport.
10. New control tower, 381' MSL, Located 1/2 NM west of airfield.

3017. JATO OPERATIONS. JATO operations are permitted, with the Operations/Assistant Operations Officer concurrence. Empty bottles may be released in the published ordnance jettison area, (1,000 meter bladed circle on 130 Radial 13 DME off Channel 84), as noted in this Manual.

3018. AV-8 REDUCED RUNWAY SEPARATION. Reduced runway separation is approved for AV-8 aircraft as indicated below.

1. AV-8 landing behind Category I or II is clear of runway. Landing behind a CAT III aircraft (Navy/Marine) is 4000'.
2. AV-8s executing a conventional approach followed by an AV-8 executing the same type of approach - 4,000'. Between sunset and sunrise 6000'.
3. Between sunrise and sunset, an AV-8 executing a slow, rolling vertical, or vertical approach followed by an AV-8 executing the same or lesser performance approach - 1,000'. Between sunset and sunrise 4000'.

3019. MAXIMUM PERFORMANCE CLIMBS. Maximum performance climbs are not authorized within the MCAS Yuma Class D Airspace. Unrestricted climbs may be requested by pilot and approved by ATC.

3020. CLOSED FIELD OPERATIONS

1. Closed field operations are limited to helicopters and C-12 aircraft unless otherwise approved by the Commanding Officer, MCAS Yuma. Operations are limited to sections of two helicopters for each departure or recovery. Requests shall be submitted in writing or by message to (MCAS YUMA AZ//OPS//) include the unit, number and type of aircraft, dates requested, launch and recovery times, point of contact and phone number, and special requirements or remarks to arrive at Airfield Operations at least 48 hours in advance. Ordnance operations are not approved when the field is closed.
2. Transient helicopters approved for a closed field landing are required to obtain a PPR # and parking instructions from Yuma VAL, DSN 269-2445/2760.

NOTE: PILOTS ARE CAUTIONED THAT DURING CLOSED FIELD OPERATIONS VHF-ONLY EQUIPPED CIVILIAN AIRCRAFT AND NON-RADIO CROP DUSTERS OPERATE IN CLOSE PROXIMITY TO MCAS YUMA ALL NIGHT. PILOTS ARE STRONGLY ENCOURAGED/RECOMMENDED TO CONTACT YUMA APPROACH CONTROL (281.0/125.55) FOR RADAR FLIGHT FOLLOWING AND/OR ADVISORIES. MONITOR CTAF 119.3

3. Helicopter Closed Field Recovery Procedures. Prior to reaching 5 DME on NYL TACAN Channel 84, fly at 700' MSL, avoiding populated areas. Turn on beacons, navigation and landing lights. Contact MCAS Yuma approach on 281.0 or 119.3 and give position. Pilots shall broadcast in the blind on VHF 119.3 stating the helicopter's position and intentions. Approach will advise helicopters of any known traffic. Approach will turn on runway lights for 3R/21L and appropriate taxi lights. Helicopters will circle the airport as appropriate to set up for a straight-in approach to runway 3R/21L remaining well clear of the extended centerline approach corridors for the lighted civilian runway 17/35 or 8/26. Maintain centerline for FOD avoidance and

touchdown on runway 3R/21L at taxiway Delta intersection in front of the tower. Taxi on taxiway centerline. Transient aircraft shall deploy an aircrew member at the throat of Delta taxiway with lighted wands to direct parking at VAL. Report possible FOD on runway/taxiway to Approach. Ground control frequency will not be used. Deployed units utilize assigned spaces and personnel for parking. Fuel may be requested during closed field hours (extension 2210/2234).

4. Closed Field Launch Procedures. Execute take-off from Delta 3R/21L intersection with left or right turn at southern field boundary. Maintain runway centerline for FOD avoidance. Remain clear of civilian approach corridors. Pilots in command shall ensure a flight schedule or flight plan is on file in Flight Clearance.

5. Closed field operations are not authorized if the weather is IFR or forecast to go IFR during the scheduled period.

3021. DEPARTURES AND RECOVERIES WITH NIGHT VISION DEVICES (NVD)

1. Departures and recoveries to and from the Class D Airspace during airfield operating hours are authorized for aircraft utilizing NVD's.

2. Because the airfield is used by VHF-only equipped private and commercial aircraft, extreme caution must be exercised during NVD operations in and near the Class D Airspace. To allow NVD operations within the Class D Airspace, while providing de-confliction from other aircraft and situational awareness to tower and ATC, aircraft using NVD's will adhere to the following procedures:

a. Departures and recoveries with NVD's are limited to flights of no more than four aircraft.

b. Pilot/flight leader will advise ground/tower on initial contact that departing/recovering flight is a NVD flight.

c. Aircraft/flight will be assigned a separate squawk to enable tower to provide closer flight following.

d. Exterior lighting for flights within the Class D Airspace will comply with OPNAVINST 3710.7 series, describing lighting configuration for formation and NVD flights. Minimum exterior lighting for flights within the Class D Airspace will consist of lead aircraft with landing light on, all aircraft with position lights set to steady dim, and anti-collision light off except the last aircraft, who will have position lights on steady bright and anti-collision light on.

e. Taxiing with NVDs is authorized at the pilot's discretion. When taxiing to and from the runway, all aircraft in the flight shall have their position lights on steady dim and the last aircraft shall have its anti-collision light on.

- f. Lighting configuration will be performed at the hold short line.
- g. In the case of aircraft requiring arming/de-arming, aircraft will configure lighting in the arming/disarming area.
- h. Traffic permitting; the Control Tower will secure runway lights to facilitate NVD training.

### 3022. SUPERSONIC FLIGHT

1. Supersonic flight operations shall be conducted in R-2301(W). Supersonic flights in the established corridor shall be limited to that portion of R-2301W from the 100 degree radial from the MCAS Yuma (NYL) TACAN (channel 84), south to the Mexican border (between 20 and 52 nautical miles), from the surface to FL800. Supersonic "bugouts" shall be executed with the nose of the aircraft pointed inside the supersonic area to the south on a heading between 110 degrees and 260 degrees magnetic. "Bugouts" in the vicinity of Raven Butte (Chocolate Drop) will be above 16,000 feet MSL crossing the Gila Mountains.
2. The supersonic corridor is depicted in Appendix K. Diagrams shall be posted in all tenant units' ready rooms, Flight Planning Room, and VAL.
3. In accordance with reference (a), all supersonic flights shall be logged as to time, date, location, speed, and altitude and maintained by ATC for 24 months.

### 3023. PROCEDURES FOR CHECKING WHEELS DOWN AND LOCKED

1. Responsibility. It is the pilot's responsibility to check for wheels down and locked and report this information to the control tower when starting the turn to base leg. On radar approaches, the radar controller will request an acknowledgment of landing gear checks.
2. Wave-offs. Wave-offs for no gear/apparent unsafe gear or Tower utilizing tower primary, secondary, or guard frequencies will give unintentional hook down. Additionally, when radio communications fail, tower will activate wave-off lights on the runway and direct a red light at the aircraft.
3. Visual Check for Unsafe Gear. In the event of an unsafe gear indication, a pilot may request a low pass for a visual check by control tower personnel.

AIRFIELD OPERATIONS MANUAL

From:

To: Flight Clearance Chief, Marine Corps Air Station Yuma, Az  
85369

Subj: REQUEST AUTHORIZATION FOR PERSONNEL/VEHICLE TO OPERATE  
ON THE AIRFIELD

1. Request authorization to operate a vehicle on the airfield. The following information is provided:

- a. NAME            RANK            SSN            PHONE #    (FOR EACH DRIVER)
- b. TYPE VEHICLE            VEHICLE LICENSE #            STATE    (FOR EACH VEHICLE)
- c. REASON VEHICLE ACCESS IS REQUIRED.    (FOR EACH PERSON/VEHICLE)
- d. WHERE ON THE AIRFIELD DOES DRIVER/VEHICLE NEED ACCESS IE. FIRE LANE, AIRCRAFT PARKING RAMP, TAXIWAYS, RUNWAYS, AND PERIMETER ROAD. (EACH PERSON/VEHICLE)
- e. HOW LONG ACCESS IS REQUIRED.    (EACH PERSON/VEHICLE)

I. M. MARINE

AIRFIELD OPERATIONS MANUAL

CHAPTER 4

AIR TRAFFIC CONTROL

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# AIRFIELD OPERATIONS MANUAL

## CHAPTER 4

### AIR TRAFFIC CONTROL

4000. POSITIVE AIR TRAFFIC CONTROL. Positive Air Traffic Control (ATC) requires that all aircraft obtain specific ATC clearance prior to maneuvering on an Airport Movement Area, or within the Class D Airspace. Positive ATC shall be exercised by MCAS Yuma Tower over all civil and military aircraft during published operating hours. No aircraft will operate on the Yuma Airport Movement Area or within Class D Airspace without two-way radio communications unless prior coordination has been accomplished. The Yuma Class D Airspace is defined as that airspace up to, and including 2,500' above ground level within a horizontal radius of 5.2 nautical miles.

4001. AIR TRAFFIC CONTROL PERSONNEL. All personnel exercising air traffic control functions will be qualified in accordance with NAVAIR 00-80T-114.

4002. FREQUENCIES. MCAS Yuma frequencies are listed in current Flight Information Publications.

4003. APPROACH CONTROL. MCAS Yuma Approach Control has authority over all aircraft, civil or military, operating on an IFR air traffic control clearance within that airspace permanently delegated to MCAS Yuma.

#### 4004. INSTRUMENT DEPARTURE PROCEDURES

1. When radar service is available, the preferred departure routes are: Argus-One Departure for westbound aircraft, Picacho-One Departure for northbound aircraft, and the Mohawk-One Departure for eastbound aircraft.
2. When radar service is not available, the preferred departure route is the Cargo-Six Departure with appropriate transition.
3. Aircraft carrying explosive ordnance, should file for the Glamis Departure whether radar service is available or not. However, delays may be encountered when radar service is not available.

4005. INSTRUMENT APPROACH PROCEDURES

1. IFR aircraft inbound to MCAS Yuma can expect an enroute descent unless a high altitude approach has been requested.
2. IFR aircraft inbound to MCAS Yuma can expect radar service to landing. When available, a PAR/ASR approach shall be the preferred arrival procedure. Non-radar procedures will normally be approved upon pilot request.
3. When radar service is not available, the TACAN or HI-TACAN runway 21R/3L approach will be the preferred arrival route. The Hi/Low VOR, VOR/DME runway 17 approaches will normally be authorized only for those military aircraft that are not TACAN equipped, or when the TACAN is out of service.
4. VFR aircraft requesting a practice approach should contact MCAS Yuma Approach Control on the appropriate frequency as published in the current DOD FLIP enroute Supplement. Aircraft not on an IFR Flight Plan shall maintain VFR until instructed otherwise by MCAS Yuma Approach Control. When radar service is available, standard separation minimums will be provided to all aircraft practicing instrument approaches, except vertical separation, which may be reduced to 500' between VFR aircraft practicing an instrument approach and other VFR or IFR aircraft.
5. Due to the large volume of VFR General Aviation and Air Carrier aircraft operating within the approach traffic area, pilots are reminded to exercise increased vigilance when in visual meteorological conditions, even though they are on an IFR clearance and under radar control.

4006. EMERGENCY PROCEDURES

1. Emergency Information. Any pilot confronted with an emergency situation shall pass to the control tower or approach control all pertinent information concerning the emergency. The Control Tower shall activate the crash net and pass on all pertinent information.
2. Radio Failure - VFR Terminal (Comply with instructions contained in the FLIP IFR Supplement)
  - a. Pilots should determine the landing runway by observing traffic flow, or by observing the Wind "T"/Wind Socks and assuming the landing runway is into the wind. Pilots may over fly the field at 3000' MSL or above to make this determination in VMC conditions.
  - b. High performance aircraft will enter a normal overhead 360 (break) pattern, rocking wings approaching the break. Be observant for tower light signals on downwind, turning base and on final.

c. Aircraft other than high performance will intercept the downwind leg of a normal quadrangle pattern, rocking wings at intervals and be observant of tower light signals on downwind, turning base and on final.

d. Where landing clearance is not received on final, maintain 700' MSL and go around. If no light signal is received, re-enter downwind after passing the airport boundary. If an emergency exists, be observant of traffic both on landing and crossing runways and land your aircraft.

e. Helicopters will hold at 700' MSL one mile north of the airport over the rail yards to remain clear of extended centerlines of runways 17 and 21R/L. After receiving a steady green light from the control tower, enter a right downwind runway 26, and land the aircraft. If an emergency exists, be observant for other traffic, land on the numbers of Rwy 17, and await CFR Section Leader/personnel release for taxi to your line.

f. During the hours of darkness, pilots should attract tower attention by blinking landing/taxi lights.

3. Overdue aircraft. A VFR aircraft is considered overdue when communications cannot be established and it fails to arrive 30 minutes after its ETA.

a. Flight Clearance will monitor all DD-175 and tower flights inbound to MCAS Yuma.

b. The responsibility for monitoring local flights appearing on daily flight schedules rests with the individual unit. In any event, Flight Clearance is to be notified immediately when an aircraft becomes overdue.

4. In-flight Medical Emergencies. Pilots should notify ATC as soon as possible. If practical, patient information should be passed describing: condition of patient, any medications taken, and respiration and pulse rate. The crash phone will be activated for all in-flight medical emergencies. Civilian patients will normally be cared for by civilian medical authorities at the discretion of the senior medical authority or the senior CFR member responding to the emergency.

#### 4007. MANDATORY AVOIDANCE AREAS

1. All aircraft shall avoid over-flight of Mexican Airspace.
2. Base Housing.

3. All fixed-wing aircraft shall remain at or above 3500 feet MSL over the Foothills and Mesa del Sol Developments East of the air station.

4. All aircraft will avoid over-flying the City of Yuma, all schools and the hospital.

5. Rotary-wing aircraft shall remain well clear of the Foothills and Mesa Del Sol Developments and shall over fly the freeway (Interstate 8) when transiting to/from the East at 1500 feet MSL in this area. If within the Moving Sands Cactus/West Target, rotary-wing aircraft shall remain South of the line 32-37-30N/114-28-30W to 32-37-30N/114-20-00W (Geographical Reference: County 14th Street/dirt road oriented East-West North of the P-111 Cannon Air Defense Complex) to avoid over-flying the Foothills residential area.

6. The following airspace within the lateral limits of R-2301 West is excluded from use by all military aircraft below 3000 feet MSL: That airspace North of a line beginning at 32-40-45N/114-18-29W to 32-42-30N/113-45-00W to 32-44-15N/113-41-05W. (Geographical Reference: That area designated as two nautical miles South of Interstate 8 between the Gila Mountains and Mohawk Mountains. Avoid populated areas, built up areas and farms).

4008. USE OF MODE 3A/C/IFF AND RADAR FLIGHT FOLLOWING. All aircraft operating in the vicinity of MCAS Yuma, to include Restricted Areas and MOAs, shall squawk the appropriate code at all times unless instructed otherwise by ATC. This, in combination with prudent use of VFR Radar Advisories from MCAS Yuma Approach, will reduce the high potential for mid-air collisions.

**AIRFIELD OPERATIONS MANUAL**

**CHAPTER 5**

**TRANSIENT AIRCRAFT**

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# AIRFIELD OPERATIONS MANUAL

## CHAPTER 5

### TRANSIENT AIRCRAFT

5000. GENERAL. The Assistant Operations Officer is charged with ensuring that visiting pilots and crewmembers receive available and courteous service during their visit to MCAS Yuma. Transient aircrew is responsible for ensuring all coordination for support is accomplished prior to arriving at MCAS Yuma. Requests for line space for 24 hours or less shall be made to the VAL at DSN 951-2445/2760 at least 24 hours in advance. The VAL is located in Building 151 at the base of the tower.

#### 5001. TRANSIENT SERVICES

##### 1. Prior Permission Required (PPR)

a. PPR's. PPR's are required for each arrival of all transient military and authorized civil aircraft requesting parking and servicing. See paragraph 3020 for closed field operations requirements.

b. PPR Cancellation. All PPR's issued by MCAS Yuma VAL are issued on a two (2) hour window concept (space available one hour prior to and one hour after the requested PPR time). This ensures that an aircrew that is ahead of schedule has a parking space; this also allows for extra time on deck if departure times cannot be met due to a delay. Any aircraft arriving outside the two hour window will be treated as Non-PPR aircraft due to the automatic cancellation of the PPR. PPR's may be updated enroute by calling Yuma Command on UHF 337.9.

c. Non-PPR Aircraft. Non-PPR aircraft coming to VAL will be last priority for servicing. All non-emergency aircraft arriving without PPR's will be reported to the Operations Officer via the VAL Supervisor.

d. Local Transient Flights. Local missions will not be flown from the VAL without prior approval from the Operations Officer, via the VAL Supervisor. The VAL has minimum personnel on weekends and holidays and is unable to support local missions during these times.

e. Large Aircraft. Any aircraft larger than KC-130's are limited to one (1) overnight (RON), due to limited parking space. Any units requesting to RON for more than one (1) overnight stay will be directed to Deployment Scheduling: DSN 269-3515.

f. Cargo Aircraft. Cargo aircraft requiring upload/download assistance should coordinate through Air Freight DSN 269-3654/2729 at least 24 hours in advance.

## 2. Aircraft Servicing

a. Servicing. Limited to fuel, oil, and oxygen. All pilots are required to fill out a Service Request card in the VAL office for prompt services. PPR aircraft will have service priority over non-PPR aircraft. All pilots are directed to check-out with the VAL office to ensure they have their fuel cards and chits prior to departure.

b. Ordnance. All ordnance divert aircraft should contact the Yuma Tower as soon as possible and request down-load personnel from their own command. VAL has no ordnance download capabilities. Ordnance divert aircraft will NOT be parked on the VAL; expect to park on the CALA.

c. Maintenance. VAL personnel will not perform maintenance on any visiting aircraft, but will assist aircrews in contacting maintenance personnel and provide available support equipment for servicing only.

3. Flight Planning. Flight Clearance is located in Building 153 and is manned from 0630-2230 Monday through Friday, 1000-1800 on weekends. Airborne messages can be passed to them on Command frequency 337.9. A Flight Planning room with a full range of FLIPs is also located in Building 153.

4. Meteorology and Oceanographic (METOC) Services. The Weather section is located in Building 153 and is manned 24 hours a day. They can be contacted at DSN 269-2265/2266. Pilot-to-Metro service is available on frequency 349.9.

5. Refueling. See paragraph 1008.

6. Course Rules Brief. (See paragraph 1007).

5002. BILLETING. Quarters are normally available for transient officers, male enlisted personnel and civilians on official business. There are limited government quarters for female enlisted personnel. Call DSN 269-3578/3094 to make billeting reservations.

## 5003. MESSING

1. There are adequate messing facilities aboard the Air Station for both officers and enlisted personnel. Officers may utilize the Enlisted Dining Facility.

2. There is a Consolidated Club on base with an Officers Club, SNCO Club and Infinities (Enlisted club). All three Clubs open at 1530. Food is available from 1800-2200 in both the Officer and SNCO clubs. There is an all hands lunch available from 1100-1300.

3. Three commercial outlets are available at Building 691, next to the PX complex. Burger King is open from 0500-0100, Godfather's Pizza is open from 1030-2400 and Subway is open from 0900-2200. The After Burner is located in the Airfield Operations Building 153. It is open Monday-Friday from 0800-1400 and Saturdays from 1000-1800. These times may change without notice.
4. Flight clothing is permitted in all facilities.
5. Flight rations can be obtained by contacting the Yuma Dining Facility between 0730-1630 daily at DSN 269-2149. Requests must be made 72 hours in advance.

#### 5004. TRANSPORTATION

1. On-base Transportation. Due to the close proximity of all major services to Air Operations, MCAS Yuma does not provide any on-base transportation service. Billeting, messing, and exchange services are all within a fifteen minute walk of Base Operations.
2. Off-base Transportation. MCAS Yuma has limited off-base transportation service.
3. Local units sponsoring transient aircraft are responsible for arranging transportation for the aircrew.

#### 5005. CLEARANCE OF PASSENGERS

1. General. The Passenger Terminal is located in Building 151. Flight and passenger travel information is available by calling extension 2729 between 1000-1600, Sunday through Saturday. Personnel departing MCAS Yuma on a scheduled flight must manifest no later than one hour prior to the scheduled departure time. Passengers must possess a valid military or civilian government employee identification card.
2. Appearance/Conduct. Military personnel boarding any military flight must be in a clean, proper uniform and grooming must conform with respective service regulations. Retired and civilian personnel, when authorized, must travel in appropriate civilian clothing.

#### 5006. PROCESSING ORDERS

1. Orders which require endorsement shall be presented to the Station Personnel Officer (or Officer of the Day during non-working hours) at Building 980.

2. Memorandum endorsement for arrival and departure times or availability of government air transportation may be processed by the Air Freight Section.

5007. CUSTOMS

1. During normal working hours a 30 minute notice is required for customs service. Flight Clearance personnel will notify Customs personnel.

2. After normal working hours, expect a delay.

5008. CIVILIAN AIRCRAFT. Operators of civilian aircraft must obtain a PPR number prior to being authorized to park on the MCAS Yuma side of the airport. Civilian aircraft will not normally be allowed to park on the military ramp.

5009. TEMPORARY STORAGE OF CLASSIFIED MATERIALS AND WEAPONS

1. Classified Materials. Couriers requesting to store classified material or registered publications must make prior arrangements with the MCAS Yuma Classified Material Control Center (CMCC) at DSN 269-2351/2252.

2. Weapons. Requests for weapons storage must be made in advance with the MCAS Yuma S-4 Officer at AV 269-2722/6160.

AIRCRAFT RESCUE AND FIREFIGHTING

CHAPTER 6

AIRCRAFT RESCUE AND FIRE FIGHTING

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# AIRFIELD OPERATIONS MANUAL

## CHAPTER 6

### AIRCRAFT RESCUE AND FIREFIGHTING

6000. AIRCRAFT RESCUE AND FIRE FIGHTING. The current edition of MCAS Yuma StaO P11135.1 covers Aircraft Rescue and Firefighting procedures applicable to this station.

#### 1. Procedures

a. The ARFF Officer is responsible to the Assistant Operations Officer for the operational readiness of the Division.

b. Firefighting and rescue shall be under the control of the senior qualified member of the Station Crash Crew present on the scene. Once an emergency is declared, particularly "stand by" situations, all aircraft in the vicinity of, or on, taxiways shall remain clear of all emergency equipment. Additionally, any aircraft from which an initial emergency status was declared, shall also be under the control of the senior qualified member of the Station Crash Crew until such aircraft has been declared safe or the pilot states that no further assistance is required. Aircraft that declare an emergency will be escorted back to their line by a ARFF vehicle.

c. Only essential personnel are authorized immediate access to the scene of a crash. Security and medical personnel will be immediately available for access to the airfield when summoned by Crash/Rescue. Unit Commanding Officers of aircraft involved, their Aircraft Mishap Board (AMB) and certain other authorized personnel will be allowed access to the crash site at the earliest possible time consistent with safety. The MCAS Yuma Station Operations Officer will provide command and control of an accident site for the first 24 hours (post incident) or until the responsible unit coordinates the transfer of control via Station Operations Officer.

#### 2. Equipment

a. A minimum of one light water dispensing crash truck is in position on the runway complex whenever military and/or civilian air carrier flight operations are being conducted during normal airfield operating hours. Additional firefighting vehicles and a heavy capacity crane is on stand-by alert at the Crash Barn. CFR personnel and equipment are capable of responding to any aircraft emergency within a 100 mile radius. In some instances mutual aid fire departments will be used to assist in fire and rescue operations.

b. Two HH-1N Search and Rescue (SAR) helicopters (primary and standby) are maintained on a ten minute ALERT status, during weekdays from 0730-1700, when the airfield is conducting military flight operations. From 1700-0730, on weekends, holidays and when the

airfield is not conducting military flight operations, SAR will maintain a thirty-minute STANDBY status. SAR helicopters are capable of responding to both on and off station emergencies within a 100 NM radius of MCAS Yuma.

### 3. Minimum Response

a. MCAS Yuma is a Category Four (4) Airfield. The minimum response required for this air station is 7,000 gallons of water and 2,500 gallons per minute pumping capability.

b. If at any time minimum response requirements cannot be maintained by the runway alert and/or standby alert vehicles, flight operations shall be curtailed or reduced to a gross weight category of aircraft for which the extinguishing agents available meet minimum response requirements.

### 4. Crash Alarm System

a. The Control Tower will normally have first knowledge of an aircraft crash or emergency and will activate the Station alarm circuit.

b. Pilots reporting crashes shall contact the Tower on guard frequency. If contact cannot be established, attempt voice relay through another aircraft.

c. Crashes observed by other than tower personnel or pilots airborne should be reported immediately by telephone to Flight Clearance at (928)269-2077/2326 or the fire service dispatcher at 269-2385/2285 or 911.

6001. SEARCH AND RESCUE. The current edition of MCAS Yuma StaO P3130.3 covers search and rescue procedures applicable to this station.

### 6002. SALVAGE

#### 1. Procedures

a. Squadrons or detachments either deployed or tenant to MCAS Yuma having an aircraft requiring salvage, will assume the responsibility for all salvage operations.

b. This Station will provide necessary support such as trucks heavy equipment, operators, etc., through Station S-4 upon request from the unit salvage officer.

c. Aircraft of units not deployed/stationed at MCAS Yuma may be salvaged by this station upon request of cognizant reporting custodian.

d. The MCAS Yuma Range Management Officer will designate land routes to and from salvage sites that are located within ranges operated by MCAS Yuma, coordinate routes to sites off range, and will verify that appropriate clean-up has been completed. Salvage cleanup is not complete without the Range Management Officer's verification and units can be held criminally liable if cleanup does not meet state and federal environmental standards.

2. For additional information see current edition of reference (d) and (e).

3. MCAS Yuma may relieve a unit of responsibility for the salvage of its aircraft if the crash is located in a position which creates a hazard to aircraft operations at MCAS Yuma.

#### 6003. INVESTIGATION AND SECURITY RESPONSIBILITIES/PROCEDURES

1. In accordance with the current edition of reference (f), responsibility for the investigation and security of crash aircraft rests with the aircraft reporting custodian. The current edition of StaO P3750.2 addresses pre-mishap and mishap responsibilities for MCAS Yuma agencies and reporting custodians.

2. The aircraft reporting custodian should immediately prepare to dispatch guards, preliminary investigation team and other personnel as desired to the crash scene. No personnel shall enter MCAS Yuma's range areas without escort from MCAS Yuma's Range Management Office.

6004. PUBLIC AFFAIRS RELEASES. Release of information relative to aircraft or aircrews will be governed by the provisions of the current edition of StaO P5720.2. Inquiries will be referred to the Station Public Affairs Officer at (928)269-2275.

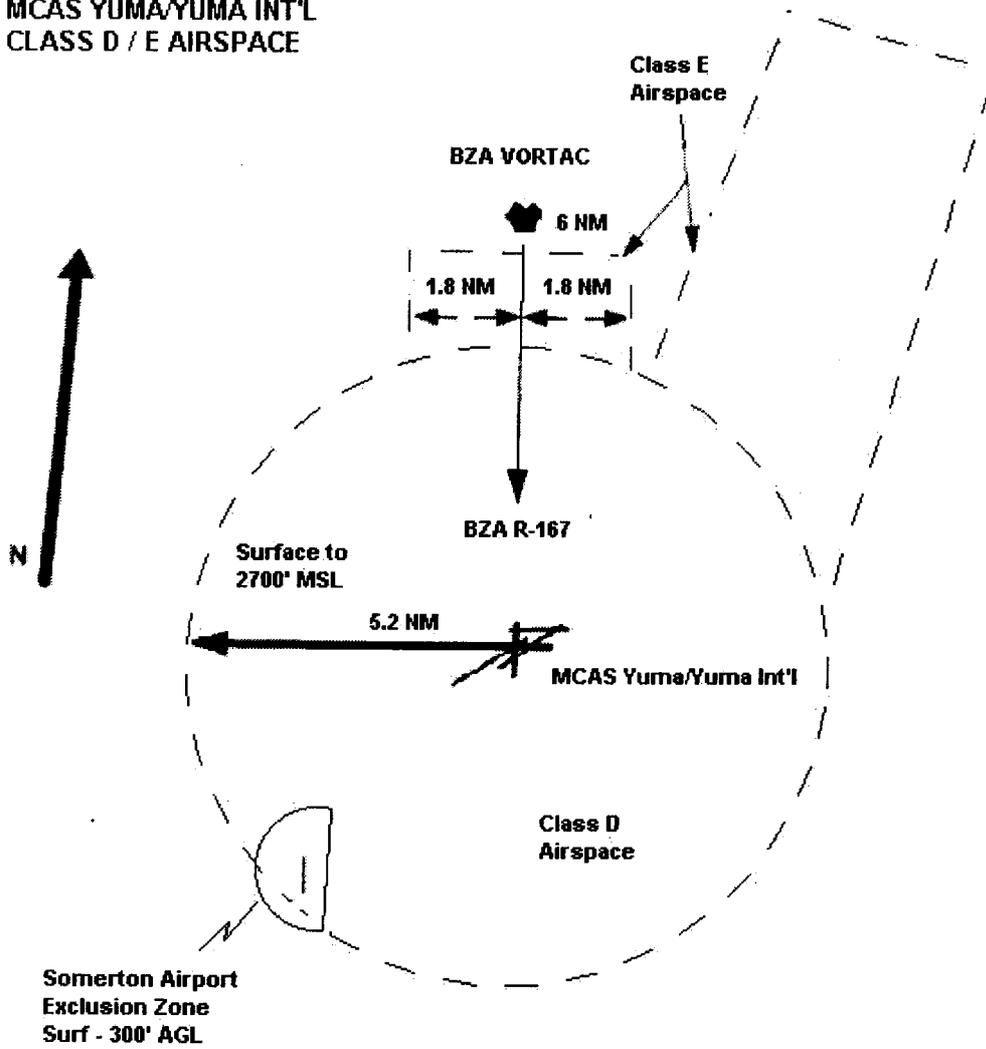
6005. WEATHER REPORTS AFTER INCIDENTS. MCAS Weather Service will draft an aircraft incident report on any incident at MCAS Yuma or surrounding areas. A report for any non-military incident occurring further than 25 NM from MCAS Yuma will only be done on approval of the Operations Officer on request from the proper authority. These reports can be picked up from the Flight Clearance desk.

AIRFIELD OPERATIONS MANUAL

APPENDIX A

YUMA CLASS D AIRSPACE

MCAS YUMA/YUMA INT'L  
CLASS D / E AIRSPACE

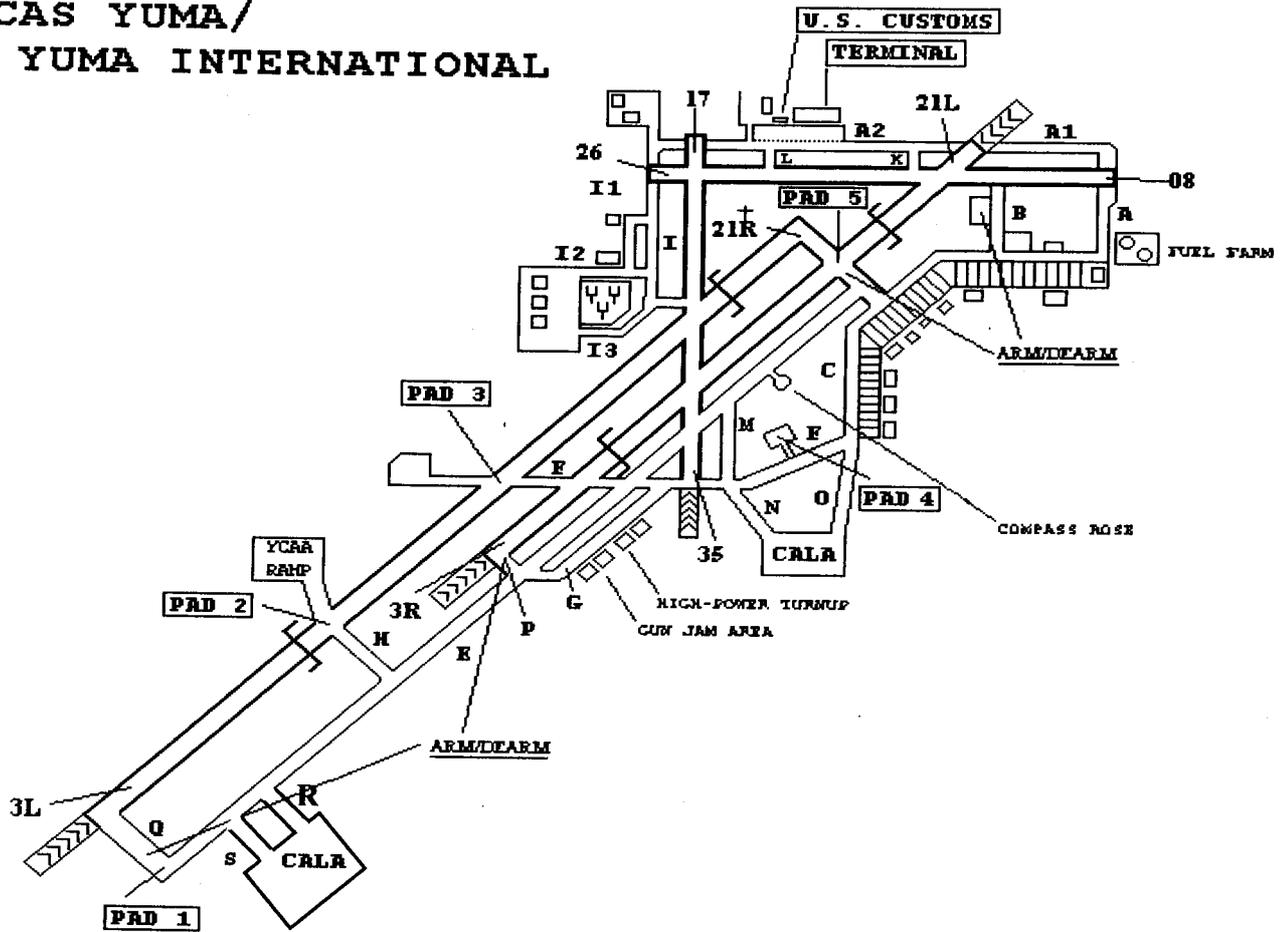


AIRFIELD OPERATIONS MANUAL

APPENDIX B

AIR STATION DIAGRAM

MCAS YUMA/  
YUMA INTERNATIONAL



AIRFIELD OPERATIONS MANUAL

APPENDIX C

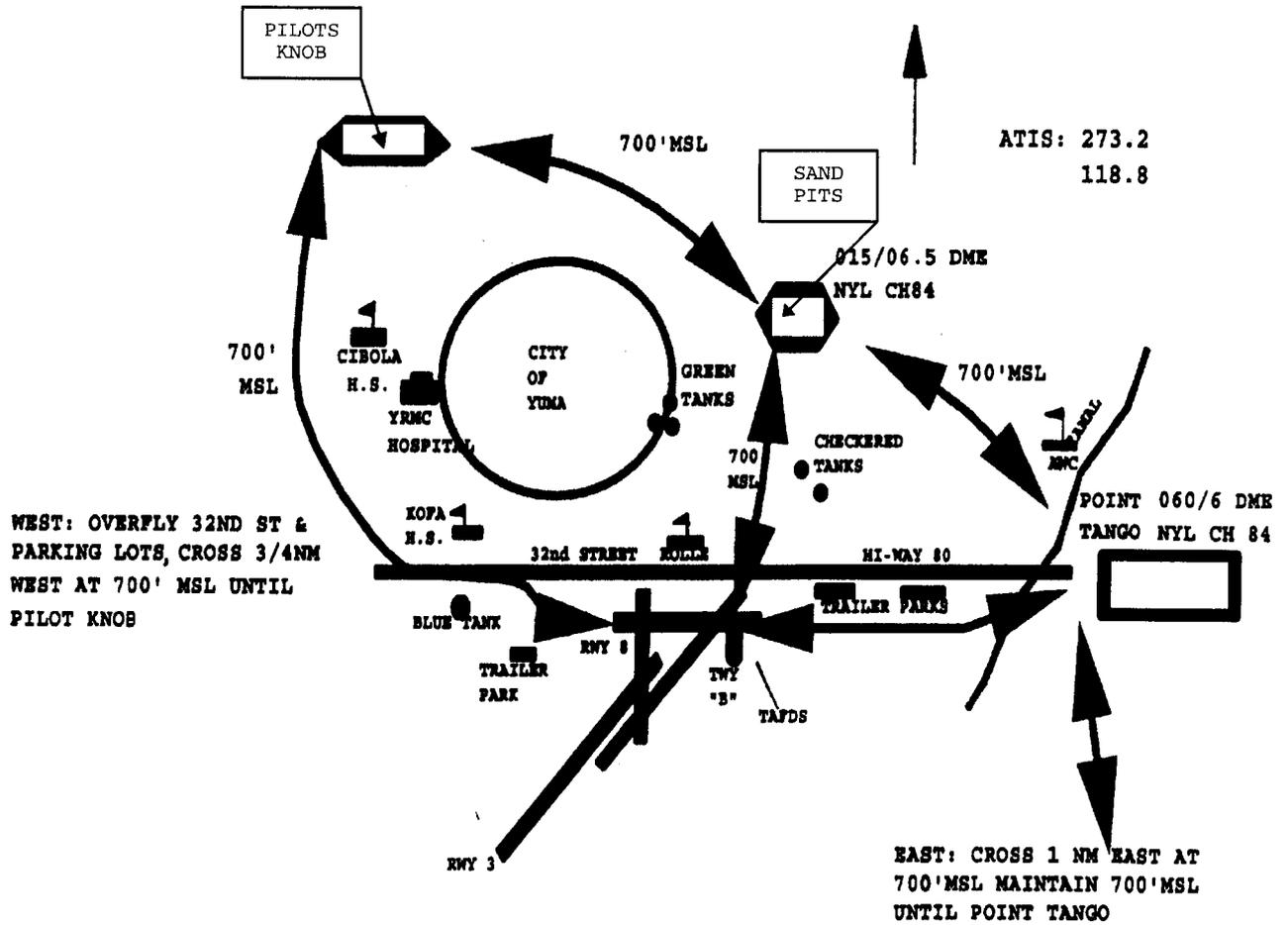
AIRFIELD WEIGHT BEARING CAPACITIES

Runway	PCN	PCI
3L / 21R	72/R/B/W/T	90
3R/21L	52/F/B/W/T	83
08/26	38/F/B/W/T	38
17/35	27/F/B/W/T	61
Taxiway		
B	44/F/B/W/T	75
C	99/R/C/W/T	82
D	88/R/C/W/T	87
E	77/R/C/W/T	76
F	85/R/C/W/T	89
H	105/R/C/W/T	78
M	92/R/C/W/T	85
N	71/R/C/W/T	83
Q	80/R/C/W/T	82
R	60/R/B/W/T	84
S	57/R/B/W/T	83

AIRFIELD OPERATIONS MANUAL

APPENDIX D

STANDARD HELICOPTER REQUIRED ROUTING



HELICOPTER ARRIVAL AND DEPARTURE ROUTES

AIRFIELD OPERATIONS MANUAL

APPENDIX E

ANNAUL CLIMATIC CONDITIONS

<u>TEMPERATURE</u>		<u>HUMIDITY</u>	
AVERAGE MAX	88 F	0500L	49%
AVERAGE MIN	60 F	1400L	22%
ABSOLUTE MAX	124 F	1700L	21%
ABSOLUTE MIN	24 F	AVG	35%
AVERAGE	74 F		

<u>PRECIPITATION</u>		<u>SKY CONDITION</u>	
ABSOLUTE MAX	6.9 inches	SKC	55%
ABSOLUT MIN	0.3 inches	SCT	22%
AVERAGE	3.5 inches	BKN	14%
		OVC	9%

<u>FIELD CONDITION</u>		<u>THUNDERSTORM</u>
IFR	1.0%	AVG # OF DAYS 2.1
VFR	99.0%	

<u>SURFACE WINDS</u>		<u>CEILING/VSBY</u>
ALL HOURS	N 8.0 kts	<3,000 & 3 SM 1.0%
MAX SE	66.0 kts	<1,500 & 3 SM *
		<1,000 & 3 SM *
		* < than 0.5%

1. Temperature: MCAS Yuma's mean annual temperature is 74 F with a daily average maximum of 88 F and a daily average minimum of 60 F. The absolute maximum temperature for the station is 124 F, occurring on 28 July 1995. The coldest day was a temperature of 24 F on 8 January 1971. Climatologically speaking, January is the coldest month of the year and July the hottest.

2. Precipitation: MCAS Yuma is located in the low desert region and precipitation is minimal. The annual average rainfall is 3.50 inches. Historically, December and August are the wettest months with a mean rainfall of .62 and .72 inches, respectively. The wettest year in record occurred in 1905 with 11.41 inches and the driest in 1956 with .30 inch. Snowfall at MCAS Yuma was recorded in December of 1932 with 1.5 inches. A trace fell in January 1937, and December 1967.

3. Wind: There is a marked shift in the seasonal prevailing wind direction from a northerly component in the winter to a southerly component in the summer. This orientation of the Colorado River Valley also serves to enhance the north/south wind direction. The average wind speed recorded throughout the year is 8 nautical miles

## AIRFIELD OPERATIONS MANUAL

per hour (Knots). The highest wind speed ever recorded was 66 knots. This occurred during September 1976.

4. Field Conditions: VFR field conditions exist at MCAS Yuma in excess of 99% of the time with visibility being greater than 7 miles more than 98% of the time. The ceilings over Yuma are greater than 10,000 feet 87% of the time, and clear skies predominate for 48% of the time. Blowing dust, sand, and infrequent periods of fog, are the main causes of IFR weather at Yuma.

5. Pressure: A monthly composite of mean pressure is available. Diurnal pressure graphs are located in the appendix portion of this handbook. These graphs are an invaluable aid in the altimeter forecasting.

### 6. Monthly Summary

a. January. The Jet Stream and associated storm tracks have migrated to their southern most position. This gives Yuma a generally stronger westerly flow aloft compared to the rest of the year. The majority of fronts affecting the local area move through at a faster speed than other months. This results in less accumulation of precipitation than December. January is the coldest month of the year; yet, it is considerably milder than other areas of the country at the same latitude.

b. February. The Jet Stream and its associated storm tracks have started their northward migration for the upcoming summer. This migration begins to weaken the high-pressure system that has dominated the northwest since autumn. This weakened state allows the Nevada Low-pressure system to affect the local area.

c. March. The Pacific Ridge begins to migrate north and gradually intensify. The Thermal Low Trough begins to establish in New Mexico, Arizona, and southeastern California. With the influx of warmer air, the high pressure located over the northwest U.S. has almost disappeared. This weakened state allows for more frequent affects of the Nevada Low-pressure systems.

d. April. Mid-April through mid-October is Yuma's summer season. The Subtropical Ridge continues its northward migration and intensifies. The Nevada Low is almost nonexistent during this month. These situations normally result in no thunderstorms and no precipitation.

e. May. The Jet Stream and associated storm tracks have migrated too far north to affect the local area. The upper level flow is predominantly from the west and dry. These combined features result in the "Dry Monsoon", high temperatures and low humidity.

## AIRFIELD OPERATIONS MANUAL

f. June. The Dry Monsoon has its strongest affect on the local area during this month. The mountains located west of Yuma usually block moisture. This lack of moisture results in rare occurrences of thunderstorms. If thunderstorms do occur, ceilings are fairly high due to the lack of low-level moisture.

g. July. The Bermuda High has migrated to its northern most position. The flow aloft has become more southerly to southeasterly advocating moisture from the Gulf of Mexico and the Gulf of California into Arizona. This moisture, along with higher temperatures, increases the possibility of thunderstorm activity over Yuma.

h. August. The position of the Bermuda High-pressure system has not changed from July, but now covers a more extensive area. The easterly flow from the high is at its greatest, bringing moisture in as far as northern Arizona and southeastern Nevada. The Thermal Trough also covers a more extensive area influencing regions as far north as Oregon. This results in the highest number of thunderstorms and the wettest month of the summer season.

i. September. The Bermuda High begins to weaken and cover a smaller area. The Thermal Through is now at its most intensive stage. The majority of thunderstorms occurring usually affect the mountains east of Yuma. Due to upper level winds, the potential for tropical cyclones affecting the local area is at its greatest.

j. October. The Thermal Through has started to weaken and its area of influence is gradually receding southward. The Pacific High has also started its southerly migration. A weak area of high pressure sets up over the northwestern U.S. Fronts occasionally winds occur in the local area.

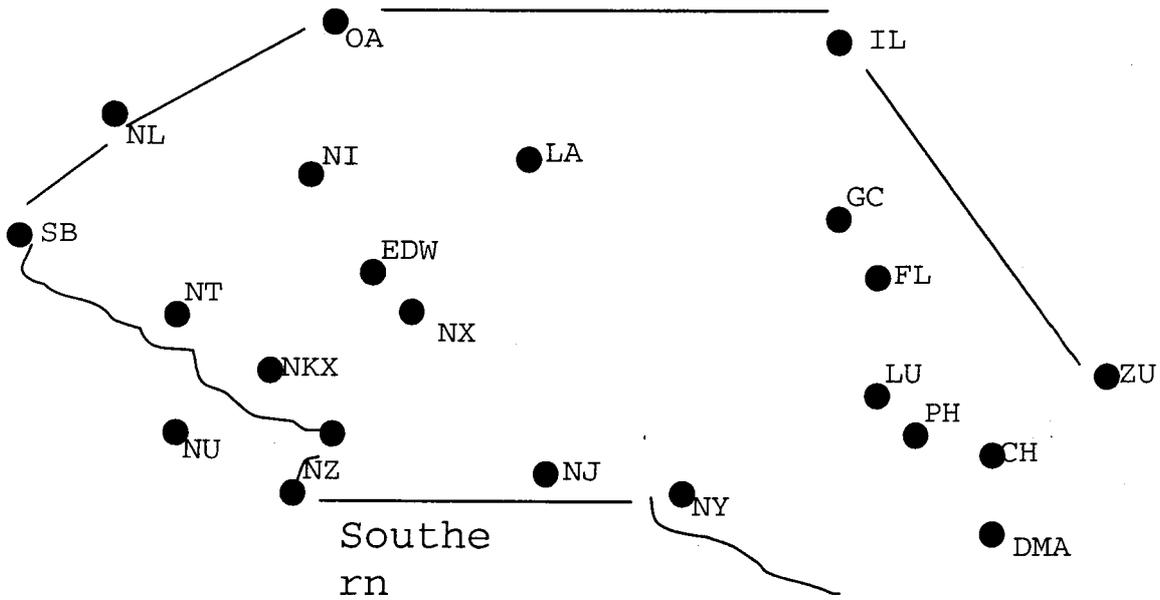
k. November. November begins our winter season. High-pressure systems (Great Basin High) begin to set up over the northwest. The Thermal Trough extends over southeastern Arizona, which is considerably weaker than October. This results in mild temperatures, breezy wind and little precipitation for the area.

l. December. With the southward migration of the Jet Stream and its associated storm track, a Cut-Off Low may develop off the coast of southern California. This period of transition causes a significant change in the temperature and precipitation, along with a noticeable difference in humidity. The greatest chance of fog (after frontal passage) occurs this month.

AIRFIELD OPERATIONS MANUAL

APPENDIX F

LOCAL FLYING AREA

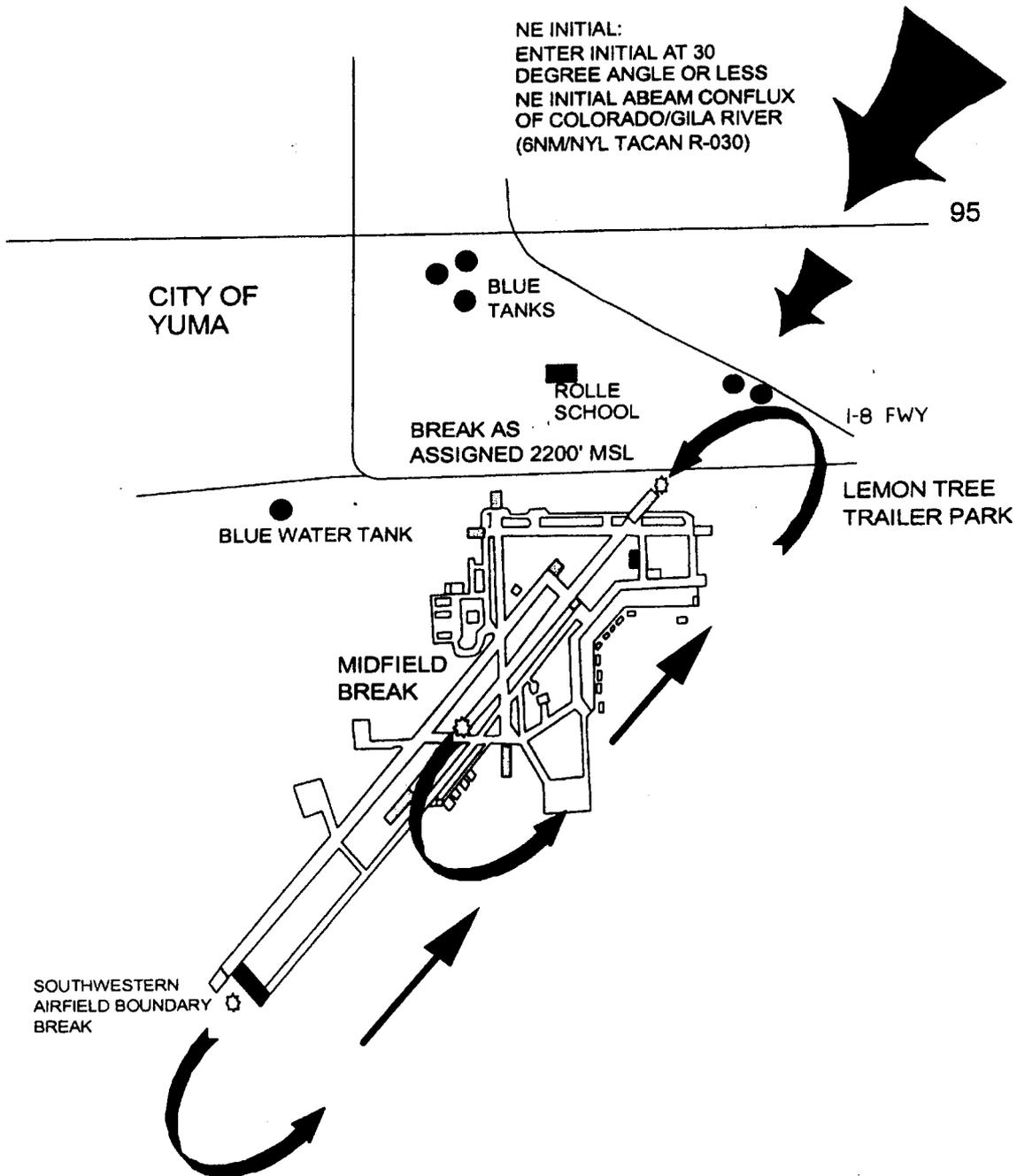


AIRFIELD OPERATIONS MANUAL

APPENDIX G

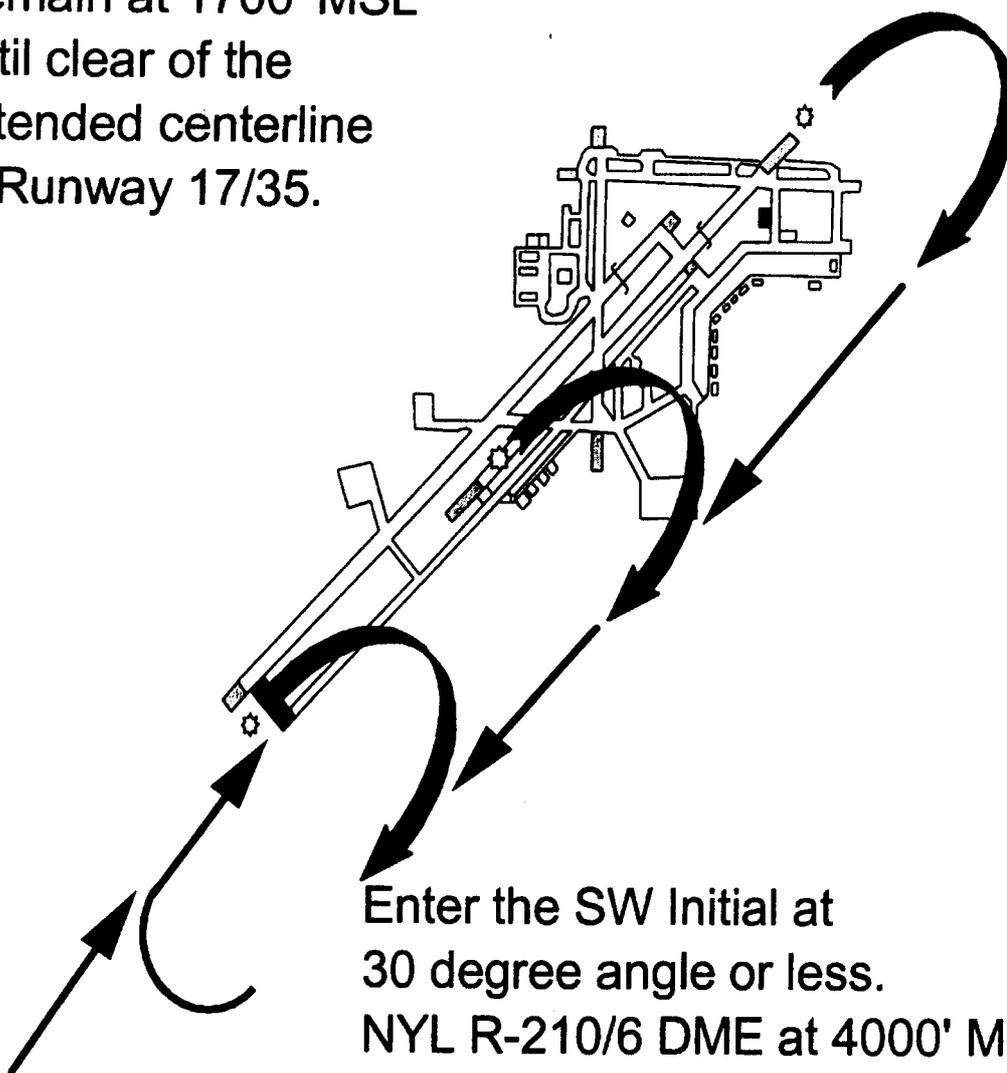
OVERHEAD MILITARY 360 (BREAK) (RWY 21) PATTERN

# OVERHEAD MILITARY 360 (BREAK) PATTERN RUNWAY 21



# OVERHEAD MILITARY 360 (BREAK) PATTERN RUNWAY 3

Remain at 1700' MSL  
until clear of the  
extended centerline  
of Runway 17/35.

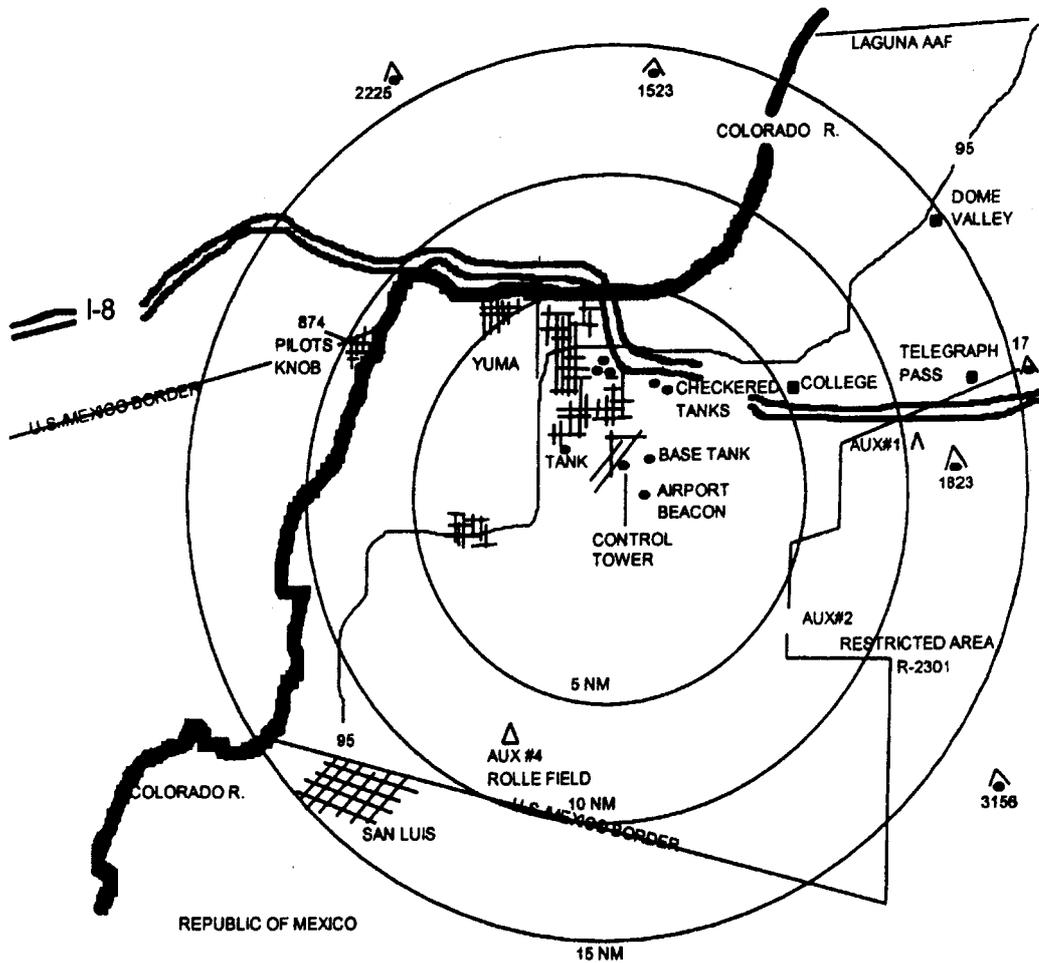


AIRFIELD OPERATIONS MANUAL

APPENDIX I

VISUAL REFERENCE DIAGRAM (LOCAL AREA)

MCAS YUMAYUMA INTERNATIONAL  
LOCAL AREA VISUAL REFERENCES



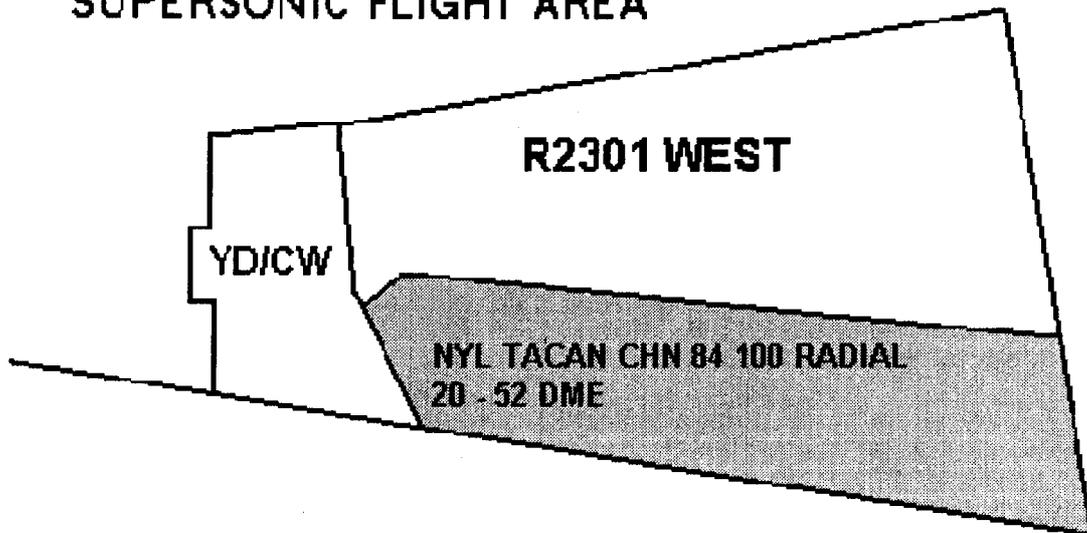


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APPENDIX K

SUPERSONIC FLIGHT AREA

SUPERSONIC FLIGHT AREA

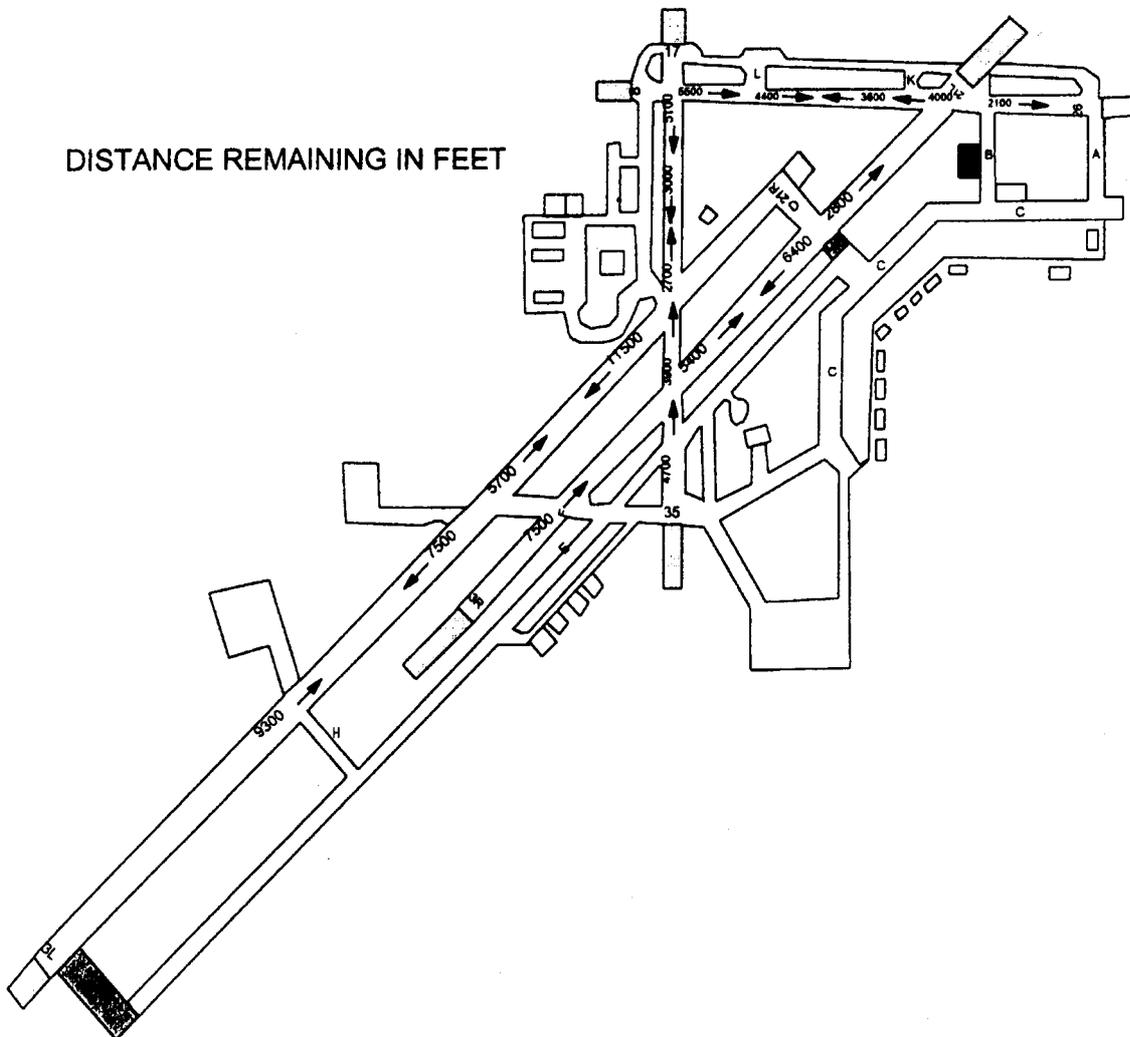


AIRFIELD OPERATIONS MANUAL

APPENDIX L

INTERSECTION DEPARTURE CHART

INTERSECTION DEPARTURE CHART



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