

AFO P3700.1L



# **AIRFIELD OPERATIONS MANUAL**



**TURNER FIELD**  
Marine Corps Air Facility  
Quantico, Virginia



UNITED STATES MARINE CORPS  
MARINE CORPS AIR FACILITY  
2100 ROWELL ROAD  
QUANTICO, VIRGINIA 22134-5063

IN REPLY REFER TO:  
AFO P3700.1L  
AF 143

AIR FACILITY ORDER P3700.1L

From: Commanding Officer  
To: Distribution List

Subj: AIRFIELD OPERATIONS MANUAL, MARINE CORPS AIR FACILITY  
QUANTICO, VIRGINIA (SHORT TITLE: AIRFIELD OPERATIONS  
MANUAL)

Ref: (a) OPNAVINST 3710.7U  
(b) NAVAIR 00-80T-114  
(c) NAVAIR 00-80R-14  
(d) NAVAIR 00-80T-103  
(e) NAVAIR 00-80T-109  
(f) SECNAVINST 3770.1C  
(g) OPNAVINST 3700.19D  
(h) OPNAVINST 3710.31D  
(i) OPNAVINST 3721.20B  
(j) OPNAVINST 3750.6R  
(k) NAVSEA OP-5  
(l) FAA JO 7110.65  
(m) MCO 4630.16C  
(n) MCO 5740.2F  
(o) AFO P11320.4D  
(p) 14 CFR PART 91

Encl: (1) LOCATOR SHEET

1. Situation. This manual establishes rules and regulations for aircraft operations in the airspace under the control and cognizance of Marine Corps Air Facility (MCAF) Quantico and vehicle operations on the airfield movement areas.

2. Cancellation. AFO P3700.1K.

3. Mission. To promulgate the Airfield Operations Manual (AOM) to govern the operation and control of aircraft and vehicles at MCAF Quantico and flight operations within the local flying area.

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. This Manual has been prepared in accordance with references (a) through (p) and organized in accordance with the requirements of reference (b).

(2) Concept of Operations. The rules and regulations established by this Manual do not supersede orders and instructions issued by higher authority, nor do they relieve pilots of their responsibility to exercise good judgment and observe safety precautions.

b. Coordinating Instructions

(1) All Air Facility staff sections and tenant commands shall conduct a thorough review of this Manual.

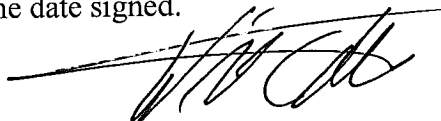
(2) Amendments to this order not requiring a complete revision shall be effected by a change to this order. See the example located in Appendix N.

5. Administration and Logistics. File this Order in accordance with current Marine Corps directives.

6. Command and Signal

a. Command. This order is applicable to all Commands operating from, visiting and transiting MCAF Quantico.

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



W. C. PACATTE

DISTRIBUTION: A

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COMNAVAIRSYSCOM, Code 4.5.9.2, Bldg 8131, Villa Road, St Inigoes, MD 20680, ATTN:  
ATC Military Team Lead

Commander, Naval Safety Center (CODE 114)

Patuxent River

MC NCR (G-3)

CO HMX-1 (5)

2d MAW

4th MAW

TBS (AIR OPS)

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LOCATOR SHEET

Subj: AIRFIELD OPERATIONS MANUAL, MARINE CORPS AIR FACILITY  
QUANTICO (SHORT TITLE: AIRFIELD OPERATIONS MANUAL)

Location: \_\_\_\_\_  
(Indicate the location(s) of copy(ies) of this Manual.)

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## RECORD OF CHANGES

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## CHAPTER 1

## GENERAL

1000. GENERAL PRUDENTIAL RULES

1. Scope. The regulations prescribed herein shall govern the operation of all aircraft at Marine Corps Air Facility (MCAF) Quantico, Restricted Area 6608 (R-6608), DEMO Military Operating Area (MOA), and control areas under cognizance of this Air Facility. The rules and regulations established by this Manual govern aircraft operations at MCAF Quantico and in the Local Flying Area. References (a) through (p) apply. All personnel operating from MCAF Quantico shall comply with the provisions of this Manual.
2. Intent. The intent of these rules and regulations is to ensure an efficient flow of air traffic, prevent air traffic conflicts, and provide for the uniform delivery of aviation services. These rules and regulations do not cover every contingency.
3. Responsibility and Authority of the Pilot in Command. The pilot in command is responsible for the safe and orderly flight of the aircraft and the well-being of the crew. The pilot in command retains the prerogative to exercise their best judgment and may deviate from these rules and regulations during an emergency.
4. Personnel authorized to operate vehicles on the airfield. Personnel other than pilots who have specific duties or functions on the airfield are expected to be familiar with applicable portions of these regulations.
5. Vehicle Operations. This Manual regulates vehicle operations on the MCAF Quantico airfield movement areas (see paragraph 3013).

1001. DEFINITIONS. Word usage and intended meanings as used in this manual are as follows:

1. Shall. Used when application of a procedure is mandatory.
2. Should. Used when application of a procedure is recommended.
3. May and Need Not. Used when application of a procedure is optional.
4. Will. Used only to indicate futurity. Never indicates any degree of requirement for application of a procedure.
5. Units of measurement. Unless otherwise specified, all headings in this manual are magnetic, all distances are in nautical miles, all altitudes are in height above Mean Sea Level (MSL), and all times are local.

1002. AIRFIELD LOCATION. MCAF Quantico is located on the west bank of the Potomac River, 25 nautical miles south of Washington D.C. and 60 nautical miles north of Richmond, Virginia, at latitude 38° 30' 13.048"N, longitude 77° 18' 18.114"W. The assigned magnetic variation is 10° 25' west and field elevation is 10 feet MSL.

### 1003. AIRFIELD DATA

1. Physical Layout. The airfield consists of one concrete/asphalt runway: 02/20; five taxiways: A, B, C, D, and E; one Vertical Takeoff Operating Landing platform (VTOL); a LCAC landing site; and a 300'x 300' auxiliary asphalt helicopter landing site (LZ-1A).

2. Runway. The runway consists of two materials. The first 1,300 feet of each landing runway are constructed with concrete grooved with a trapezoid Z pattern for increased friction. The remainder of the runway is constructed with non-grooved asphalt. The runway dimensions are as follows:

<u>Runway</u>	<u>Dimensions</u>	<u>Overrun</u>
02/20	4250' X 200'	RWY 02: 125' x 200'

### 3. Wheel Load Capacity

a. The Aircraft Classification Number/Pavement Classification Number (ACN/PCN) System is utilized for MCAF Quantico. Based upon the most recent Runway Friction Measurements and Airfield Pavement Condition Index (September 2007), the PCN is 51 and the average recorded friction level is 0.71. ACN limitations are contained in the Flight Information Handbook, or appropriate individual aircraft publications.

b. The maximum allowable wheel loading limits in operating areas are listed below. Any requests for deviations to these limits shall be addressed to the MCAF Airfield Manager or Operations Officer for approval. Taxiway A wheel loading limits are not suitable for C-17 aircraft.

<u>Area</u>	<u>Single</u>	<u>Dual</u>	<u>Single Tandem</u>
Runway 02/20	72,000	100,000	175,000
Taxiway A	72,000	100,000	175,000
Taxiway B	72,000	100,000	175,000
Taxiway C	72,000	100,000	175,000
Taxiway D	72,000	100,000	175,000
Taxiway E	72,000	100,000	175,000
LZ-1A	Not available		
Runway 02 Overrun	Emergency use only		

NOTE: All weights are in accordance with the reference Runway Friction Measurements and Airfield Pavement Condition Index (August 1997). All weights are based on 150 Pounds per Square Inch (PSI).

4. Parking Ramps. C-17 aircraft are limited to parking on the Visiting Aircraft Line (concrete ramps) southeast of the control tower, taxiways, or on the concrete ramp east of the tower. The north ramp (See Appendix A) is restricted to C-130, MV-22, and all helicopters.

#### 1004. WASHINGTON SPECIAL FLIGHT RULES AREA (SFRA)

1. SFRA: An area of airspace over land or water in which the ready identification, location, and control of civil aircraft is required in the interest of national security.

2. The Washington, DC Metropolitan SFRA: That airspace described by current Notice to Airmen (NOTAM), the dimensions of which change due to the terrorism threat level. No aircraft may operate within the Washington SFRA unless they:

- a. Are equipped with an operable two-way radio.
- b. Establish and maintain two-way radio communication with ATC prior to entering the SFRA and subsequently maintain communication while operating within.
- c. Receive an ATC clearance to enter class B, C, D, or E airspace within the SFRA.
- d. Are equipped with an operating transponder with automatic altitude reporting capability.
- e. Receive a discrete transponder code from ATC.
- f. Continuously emit the appropriate ATC assigned code.
- g. File and activate a flight plan prior to entering or departing the SFRA.
- h. Have completed, FAA mandated, SFRA training to operate within 60 miles of DCA VOR.

3. The Flight Restricted Zone (FRZ) surrounding the Washington, DC Metropolitan Area is a part of the Washington SFRA and is also described by NOTAM. Unless specifically authorized by the FAA and other appropriate authorities, flight operations are prohibited within the Washington Metropolitan FRZ.

#### 1005. PRIOR PERMISSION REQUIRED (PPR) POLICY

1. MCAF Quantico has a 24-hour advance notice (72 hours in advance for freight) PPR policy. Pilots may obtain a PPR number by contacting the Flight Clearance Office, DSN 278-2085/2908, COMM (703) 784-2085/2908. All transient aircraft must have a PPR number.

2. Civil Aircraft. Civil aircraft may operate at MCAF Quantico if the proposed operation is in conjunction with official government business. In addition to a PPR number, a Civil Aircraft Landing Permit or Naval Facilities License is required.

#### 1006. HANGAR AND SERVICE FACILITIES

1. Transient services are available on a limited basis. PPR numbers are required. Limited hangar space is available to transient aircraft for emergency repairs only. Federal Aviation Administration (FAA) flight inspection aircraft shall be given priority for refueling and servicing over routine transient aircraft.

2. Fuel and oil available. Aircrew may obtain a PPR number by contacting the Flight Clearance Office, DSN 278-2085/2908, COMM (703) 784-2085/2908. All transient aircraft must have a PPR number.

- a. Fuel – Diesel, Mogas, F-24
- b. Oil – 23699 oil for turbine engines.

3. Ground Support Equipment (GSE). Coordinated through the Flight Clearance Office: DSN 278-2085/2908, COMM (703) 784-2085/2908. 24 hour request to the max extent practical.

- a. Electric starting units, NC-10.
- b. Tugs – max 100,000lb.
- c. Air Start Unit – flow 56 PSIA or Bleed Air 204 lb/min.
- d. Tow Bar L5 short and Tow Bar 24 long.

4. Arresting Gear. An M-31 arresting gear support pad is available for installation of arresting gear equipment. All Tail Hook-Equipped aircraft requesting an arrested landing at MCAF Quantico shall contact the 2d Marine Aircraft Wing (MAW) for M-31 installation no later than 72 hours before estimated time of arrival. No M-31 equipment or personnel are located at MCAF Quantico. Any tactical fighter operations will be requested by contacting Airfield Manager or Operations Officer at Commercial (703) 784-1449, 784-1448 or DSN 278.

5. MCAF Quantico is not an Aerial Port of Debarkation (APOD). There are no organic Air Freight or Passenger Section capabilities. The following cargo and/or passenger coordination requirements must be met:

- a. TSA trained customs personnel available for travelling military personnel. A seventy-two (72) hour notification and PPR is required for the handling of all inbound/outbound freight.



b. Arrangements for inbound and outbound freight loading/unloading will be made by the shipping/receiving organization.

c. Organizations arranging freight and passenger transportation will furnish an on-the-spot supervisor for cargo loading/unloading and for passenger loading/unloading when ground transportation is required.

d. The Visiting Aircraft Line (VAL) will be utilized for all routine arrival and departure of passengers. Very Important Person (VIP) flights will board and disembark at the VIP spot located at the southeast corner of Hangar 2105.

6. "Space Available/Space Required" Flight Information. No space available travelers are authorized to arrive or depart MCAF Quantico. The Air Facility is not an Air Mobility Command (AMC) terminal and does not have regularly scheduled flights.

7. Complete flight planning and weather service facilities are available in the Airfield Operations Building (Hangar 2105).

8. The engine test area is located on the extreme northeast portion of the Air Facility. Its use is scheduled through the Flight Clearance Office, DSN 278-2085/2908, COMM (703) 784-2085/2908.

#### 1007. AIRFIELD LIGHTING

##### 1. Runway Lighting

###### a. Runway 02/20

(1) Variable, High Intensity Runway Edge Lights (HIRL).

(2) Runway End Identifier Lights (REIL) with strobes.

(3) Precision Approach Path Indicator (PAPI), 3.0 degree angle, which coincides with the Precision Approach Radar (PAR) glideslope for Runway 02.

(4) Runway 02, high intensity centerline lights, first 1000' of runway.

2. Runway 02 has a 125 foot unlit hard surface overrun.

3. Airfield Beacon. A standard, military, alternating green and dual peaked white rotating beacon is located 1,850 feet south of the air traffic control tower. The airfield beacon operates between the hours of sunset and sunrise, when the airfield is below basic Visual Flight Rules (VFR), and continuously when the airfield is closed.

4. Taxiway Lighting. Standard blue lighting of fixed intensity. Lighted guidance signs for Alpha, Bravo, Charlie, and Echo taxiways are present when departing the runway. Taxiway Delta and LZ-1A are not marked or lighted.

5. Runway Distance Markers. Lighted runway distance markers are located on both sides of Runway 02/20 and indicate in thousands of feet the length of usable runway remaining.

#### 1008. HOURS OF OPERATION

1. The airfield hours are published in the DOD Instrument Flight Rules (IFR) En Route Supplement. However, airfield hours vary based upon operational requirements.

2. <u>Day</u>	<u>Hours</u>
Monday	0800 - 2100
Tuesday	0800 - 2100
Wednesday	0800 - 2100
Thursday	0800 - 2100
Friday	0800 - 1700
Saturday	Closed
Sunday	Closed

3. Requests for changes to operating hours to meet special requirements should be made to the MCAF Quantico Airfield Manager or Operations Officer 24 hours in advance. Operations may be extended, suspended, or curtailed temporarily by the MCAF Commanding Officer or his/her representative for the following reasons:

- a. Prevailing weather
- b. Conditions of landing area
- c. Priority Missions
- d. Degraded airfield support capability

1009. COMPASS REFERENCE LINE. Compass calibration is not available aboard the airfield.

#### 1010. WEATHER SERVICES

1. General. The MCAF Quantico Weather Service Branch is responsible for providing meteorological services to the Air Facility, tenant organizations, Marine Corps Base (MCB) Quantico, Marine Corps Combat Development Command (MCCDC), and transient aircrews in accordance with current directives. The weather forecaster can be reached at DSN 278-2468, COMM (703) 784-2468, METOC frequency 355.3, or weather website <https://www.metocwx.quantico.usmc.mil>.

## 2. Average/Annual weather data

a. Winter temperatures at MCAF Quantico are normally 2-3 degrees (Fahrenheit) higher than outlying areas due to the influence of the Potomac River. Snowfall amounts are particularly influenced by the higher temperatures, with differences of 2-3 inches occurring within 1/2 mile west of the airfield. The mean annual snowfall is 19 inches, but the rapid melt-off results in small accumulations. Accumulations more than 10 inches are rare. The mean snow depth for the months of December through March (when over 95% of the snowfall occurs) is 4 inches, 5 inches, 4 inches, and 4 inches, respectively.

b. Rainfall is relatively moderate, averaging close to 38 inches annually and 3.2 inches monthly. There is no significant dry or moist season, but the month of October has the lowest average of 2.5 inches, while August has the greatest average of 4.3 inches.

c. Summers are warm and humid and winters are mild. During spring and autumn, generally pleasant weather prevails. The coldest weather occurs during January and February. The warmest weather occurs in late July and early August. The annual mean temperature is 57 degrees Fahrenheit. Temperature extremes range from 5.0 to 105.0 degrees Fahrenheit. Mean relative humidity is 69%.

d. The visibility remains greater than three miles and the ceiling above 1,000 feet 90% of time. The prevailing winds are northwesterly with a mean speed of six knots.

e. Although Quantico's weather is sometimes influenced by passing tropical disturbances, extensive damage is rare.

## 3. Services

a. A DD-175-1 Flight Weather Brief is prepared for all flights for which a DD-175 is received. The DD-175-1 may be provided via fax or in person. DD-175-1 briefs will normally not be provided by METRO over the telephone. Weather briefs will be provided via <https://fwb.metoc.navy.mil/fwb10>. A brief requires a one-hour advance notice to allow time for preparation.

b. VFR briefs may be stamped upon request for local flights in forecasted visual meteorological conditions.

c. Flight Weather Packages are normally provided upon request for cross-country or transoceanic flights. The package will include a forecast Horizontal Weather Depiction chart, flight level winds/temperatures, DD-175-1, and flight forecast folder. Routine flight weather packages require four hours for preparation.

d. Squadron/Strike briefs are available with 48-hour advance notification for routine missions. The brief will include a flight weather presentation and may include electromagnetic predictions, electro-optical tactical decision aids, and other environmental products relevant to the mission.

e. Climatologic briefs and Climatology/Astronomical/Tidal Data reports are available for any location.

4. Web Page. The Weather section maintains a web page service at <https://www.metocwx.quantico.usmc.mil/>. The web page will contain current weather and local forecast, but does not replace the DD-175-1 flight weather brief.

1011. DANGER TO LIFE OR PROPERTY. A pilot shall report, without delay, to the MCAF Airfield Manager or Operations Officer if any of the following occur:

1. Unintentional or unintended jettison of ordnance outside the limits of regularly defined target areas.
2. Post-flight inspection determines that ordnance and/or aircraft parts or stores have been inadvertently dropped. Reporting pilot shall initiate a "Things Falling off Aircraft" (TFOA) report with the MCAF Airfield Manager if required.
3. Any flight maneuver that is employed, or gives the appearance of endangering the life or property of military or civilian personnel.
4. Observes an apparently uncontrolled fire or ship in distress.
5. Observes violations of flying regulations or of the general prudential rules of flying.

1012. SUSPENSION OF FUELING OPERATIONS. Based on information received from the Control Tower, the MCAF Operations Officer or Airfield Manager shall suspend all fueling operations whenever lightning is observed within 10 miles of the airfield or when the airfield is in Thunderstorm Condition I. Fueling may resume when the MCAF Operations Officer or Airfield Manager determines that the electrical storm has moved a sufficient distance from the airfield.

1013. ENVIRONMENTAL CONCERNS. Tenant and transient aircrews, and maintenance personnel will work to eliminate all possible hazardous material (HAZMAT) releases and spills from their aircraft, auxiliary internal tanks, external fuel pods, repair and cleaning materials, and all servicing equipment.

1. In the event of a HAZMAT release/spill, personnel involved will: Immediately secure the source/flow of the material if possible, clear all personnel from the endangered area, and report the HAZMAT release/spill by telephone to the MCAF Airfield Manager or Operations Officer at DSN 278-1448/1449, COMM (703) 784-1448/1449 (after hours to Aircraft Rescue and Fire Fighting (ARFF) DSN 278-2312/2571/3629, COMM (703) 784-2312/2571/3629), and the Natural Resources and Environmental Affairs at (703) 784-4030.
2. The person(s) responsible for a HAZMAT release/spill and that person's command/unit are accountable for the HAZMAT cleanup to include contracted support if required. The MCAF

Quantico Commanding Officer or MCB Quantico Commanding Officer may initiate administrative or punitive actions and/or Federal, State, or Local Environmental Protection Agencies may impose fines.

1014. PERIODS OF CONSTRUCTION. When contract construction is being performed on the airfield, the specific areas, control, and use of the contractors' vehicles and equipment must be coordinated by prior written agreement between the Operations Officer or Airfield Manager and the Resident Officer-in-Charge of Construction. The Logistics Officer will arrange daily or routine coordination and notify the Airfield Manager. Construction within close proximity of the runway will require two-way radio communications with the control tower. A radio will be provided to the foreman from the Flight Clearance (FLC) Office. FLC personnel shall direct the construction foreman(s) to the Air Traffic Control Section (ATCS) to be indoctrinated in the Airfield Vehicle Operator Course (AVOC) and obtain an airfield driver's license.

#### 1015. BIRD/ANIMAL STRIKE HAZARDS (BASH)

1. The hazard posed by birds and animals to safe flight operations at an airfield is an ever-present problem that cannot be completely eliminated. An active program has been implemented to reduce aircraft exposure to bird and animal hazards on and about the airfield. Aircraft users shall be made aware of potential hazards via Automatic Terminal Information Service (ATIS) broadcast and other radio broadcasts whenever bird/animal activities are observed or reported. BASH reports are available in the Flight Clearance Section.

2. The Natural Resources Manager is notified whenever significant or dangerous bird/animal activities are observed, and an officer from the U.S. Fish and Wildlife Service may be dispatched to disperse or remove the wildlife.

3. All airfield users shall report every animal/bird strike in accordance with OPNAVINST 3750.6R (Naval Aviation Safety Program). The MCAF Airfield Manager or Operations Officer shall be notified of all bird/animal strikes. MCAF Quantico VA //AF 143-1// should be an information addressee on all BASH reports for incidents occurring upon the airfield or in airspace under its control.

#### 1016. AIR FACILITY PHOTOGRAPHIC SECURITY

1. No military, civilian, or news media representatives are permitted to take official or unofficial photographs (still or video) of any aircraft operating area without the specific authorization from the Commanding Officer of Marine Corps Air Facility Quantico, or his/her designated representative.

2. All personnel are directed to be alert for unauthorized personnel taking photographs (still or video) aboard the Air Facility. Unauthorized personnel discovered to be violating this order will be reported immediately to HMX-1 security personnel. The MCAF Installation Protection Officer will be notified at the earliest opportunity at DSN 378-1417, COMM (703) 432-1417.

1017. BASE OPERATIONS FREQUENCY. MCAF Quantico Base Operations frequency is 355.3 (the same as the METRO frequency). Transient aircrew are encouraged to call Base Operations to confirm estimated time of arrival (ETA), any codes aboard, fuel requests, or special requirements. This frequency is available during normal and any special hours of operation.

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## CHAPTER 2

## FLIGHT PLANNING

2000. GENERAL. Flights originating at MCAF Quantico will be authorized in accordance with procedures outlined in Office of the Chief of Naval Operations (OPNAV) Instructions, FAA directives, Flight Information Publications (FLIP), and this manual. The Flight Clearance Section provides planning services for the tenant squadron of the Air Facility and for transient aircrews as necessary.

2001. CLEARANCE AUTHORITY. The pilot in command of an aircraft or formation leader is authorized to approve the flight plan for his/her proposed flight or modification thereof.

2002. FLIGHT PLANNING PROCEDURES

1. Flight Planning Room. The flight planning room is available during airfield operating hours and is located on the southeast corner of the first deck of Hangar 2105.

2. Filing. Flight Plans (DD-175) shall be filed for all flights originating at this facility with the following exceptions:

a. A local flight is any Visual Flight Rules (VFR) flight which originates and terminates at MCAF Quantico and is conducted within the local flying area. (See Appendix M)

c. Local flights which utilize R-6608 and the MCAF Quantico local flying area will be cleared by a published squadron flight schedule submitted to the Flight Clearance Section, or cleared individually with the HMX-1 Operations Duty Officer (ODO) prior to departure.

3. Flight Plans

a. Flight plans for aircraft airborne may be filed through ATC using normal flight planning procedures.

b. VFR flight plans should be filed 30 minutes prior to the ETD.

c. Instrument Flight Rules (IFR) flight plans should be filed 45 minutes prior to the ETD.

d. International flight plans should be filed 60 minutes prior to the ETD.

2003. WEATHER MINIMA

1. VFR Minima. Ceiling not less than 1,000 feet and visibility not less than three statute miles.

2. Special VFR (SVFR) Minima. Ceiling of 500 feet and one statute mile visibility in controlled airspace. In uncontrolled airspace, 1,200 feet Above Ground Level (AGL), clear of clouds, when

visibility is less than one statute mile if operated at a speed that allows the pilot adequate opportunity to see and avoid other air traffic and maintain obstacle clearance.

3. SVFR Procedures

- a. Pilots must request authorization from ATC for SVFR operations.
- b. Aircraft must remain clear of clouds.
- c. Pilots and aircraft must be certified for instrument flight when operating under SVFR conditions. The number of SVFR aircraft in the tower pattern will be at the discretion of ATC.

4. IFR Departure Minima

- a. Special Instrument Rating. No take-off ceiling or visibility minima apply. Take-off shall depend on the judgment of the pilot and the urgency of the flight.
- b. Standard Instrument Rating. Ceiling six hundred feet, one statute mile visibility, or ceiling 300 feet and  $\frac{3}{4}$  to one statute mile visibility, provided Quantico Arrival is open (check lowest takeoff minima).

5. IFR Landing Minima. Pilots shall be guided by the minima published for the utilized approach.

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## CHAPTER 3

## COURSE RULES

3000. GENERAL. The pilot in command of an aircraft is directly responsible for the safe conduct of the flight and for compliance with all regulations governing that flight. ATC personnel are responsible for the issuance of clearances and control instructions based on known traffic and airport conditions. ATC will issue advisory assistance with regard to field and weather conditions, as required. Pilots operating in visual meteorological conditions, regardless of the type of clearance (IFR/VFR), are ultimately responsible for avoidance of other aircraft. Note: For the purposes of this section, MV-22 aircraft operating in conversion mode are considered rotary wing/helicopters, and MV-22 aircraft operating in airplane mode are considered fixed wing.

1. Positive Control. Aircraft entering the Quantico Class Delta Surface Area (CDSA) shall contact Quantico Tower prior to entering the CDSA. Deviations from clearances or control instructions are permitted only in the event of an emergency or when, in the judgment of the pilot, adherence would jeopardize safety.

2. Course Rules Brief. The course rules brief covers local flying procedures and special considerations while operating at MCAF Quantico. Course rules briefs are available to all transient aircrew. Contact ATC personnel at DSN 278-1470, COMM (703) 784-1470 in order to arrange for a course rules brief.

3001. AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS)

1. The ATIS is broadcast on 263.15.

2. ATIS information includes, but is not limited to, weather and field conditions, BASH, landing runway, NOTAMS, status of restricted areas and Military Operating Areas (MOA), and other pertinent information.

3. Pilots should obtain ATIS information prior to contacting Ground Control, Approach Control, or Tower, and advice on initial contact which current ATIS information has been received.

3002. TAXI INSTRUCTIONS

1. All aircraft shall request taxi and departure instructions from Ground Control prior to aircraft movement. Taxiing aircraft shall remain on the Ground Control frequency and monitor Guard until ready for departure or instructed to switch frequency by Ground Control.

2. Aircraft shall be taxied only on the runway, designated taxiways, and/or parking ramps. Taxiway Echo (south diagonal) is closed to all aircraft except HMX-1 (see Appendix A).

3. Pilots of taxiing aircraft sighting emergency vehicles on the field displaying a flashing red light, or having knowledge that the Control Tower is controlling an emergency, shall stop and



hold their position until authorized to proceed by radio or light signals from the Control Tower. During emergencies, taxiing aircraft will maintain strict radio discipline.

4. Clearance delivery will normally be accomplished on Ground Control frequency and clearances should be requested prior to requesting taxi instructions.

### 3003. TAKE-OFF INSTRUCTIONS

1. Aircraft shall not take position on the runway or depart without specific clearance from the Control Tower. Aircraft instructed to "line up and wait" shall acknowledge "line up and wait" instructions.
2. Rotary-wing aircraft may operate on LZ-1A but are advised to utilize caution as LZ-1A is a non-movement area.
3. Fixed-wing section departures for aircraft of similar performance are authorized in accordance with OPNAVINST 3710.7 (General NATOPS) provided weather conditions are VMC and approved by the parent unit.

### 3004. LANDING INSTRUCTIONS

1. Fixed Wing. Fixed wing aircraft shall contact Quantico Tower at least ten miles out for landing information and instructions to follow one of the below procedures:

- a. Overhead Approach. The initial point is located on the extended runway centerline, five miles from the approach end of the runway. Initial altitude is 1,500 feet with a level break over the runway at mid-field descending to 1,000 feet on downwind. The initial point will be approached at a 45 degree angle or less to the extended runway centerline with right breaks to Runway 02 and left breaks to Runway 20. (see Appendix B)

- b. Straight-in Approach. Straight-in approaches shall commence at least five miles from the runway at or above 1,000 feet.

- c. Downwind Entry. Aircraft shall enter the downwind leg at a 45 degree angle or less at 1,000 feet.

2. Rotary Wing

- a. Runway. Rotary wing aircraft will conform to the flow of runway traffic at a pattern altitude of 500 feet. Alternate altitudes above 500 feet may be approved upon request with the tower.

- b. LZ-1A (Landing Zone One Alpha). Rotary wing aircraft operations may be approved upon pilot's request; however, pilots are to use caution because LZ-1A is a non-movement area. The LZ-1A landing zone is 96' X 96' and it is constructed of concrete with AM-2 matting overlaying. Arrivals and departures directly to the west of the airfield from LZ-1A are not

authorized. Closed traffic operations to LZ-1A shall conform to the flow of runway traffic at an altitude of 300 feet or below, and remain at least 250 feet from the eastern edge of Runway 02/20.

c. Helicopter Overhead Approach. The initial point is located at five miles on the extended centerline of the runway of intended landing. Standard break point is over the upwind numbers, for spacing purposes, unless otherwise instructed by the control tower. Altitude is 1,000 feet throughout the procedure.

### 3005. ORDNANCE/WEAPONS/HAZARDOUS CARGO AREA

1. MCAF Quantico does not operate a hazardous cargo (Red Label) storage area for forward-firing ordnance, rockets, and missiles. Up to Class 1.4 ordnance (ball or practice ammo) can be aboard aircraft and handled in accordance with MCB Quantico Order P8023.1 (Handling, Storage, Transportation, and Disposition of Ammunition and Explosives). All rotary wing aircraft with this classification of ordnance will be required to have the aircraft's ordnance systems disarmed prior to landing. Landings will take place on LZ-1A, to allow for the grounding of aircraft and refueling trucks. Refueling, or the upload or download of ordnance for armed aircraft will not take place aboard MCAF Quantico unless the aircraft is landing due to an in-flight emergency. The Arm/De-arm heading for LZ-1A is 160.

2. MCAF Quantico does not handle nuclear cargo.

### 3006. HAZARDOUS CARGO

1. MCAF Quantico is not certified for hazardous cargo/red label operations.

2. Per DoD 6055.9-STD (DoD Ammunition and Explosives Safety Standards), limited hazardous cargo loading may be conducted on aircraft parking aprons upon approval of an event waiver by the Naval Ordnance Safety and Security Activity. All requests for event waivers shall be submitted to MCB Quantico Explosive Safety Division at DSN 278-1092 or COMM (703) 432-1092.

3. Inbound aircraft with an approved waiver for hazardous cargo will inform ATC on initial contact of amount and type of hazardous cargo. After landing, aircraft will taxi as directed by the Control Tower.

### 3007. HUNG/UNEXPENDED ORDNANCE

1. Aircraft with hung/unexpended ordnance will avoid all populated and built-up areas and are only authorized to land at MCAF Quantico in the event an in-flight emergency exists. Recommended divert airfields for non-emergency aircraft are Andrews Air Force Base (AFB) and Naval Air Station (NAS) Patuxent River.

2. Pilots will inform ATC of hung ordnance conditions as soon as possible and proceed as pre-briefed, or return to the staging area, i.e. NAS Patuxent River, R-5 buildup area, or home base (whichever is applicable), and execute hung ordnance procedures for that station.

3. In the event of an emergency landing with hung/unexpended ordnance, a straight-in approach will be executed. Upon landing, the aircraft will be taxied to LZ-1A and shut down on a heading of 160 degrees. The aircrew will pin and make safe all ordnance on the aircraft. Under no circumstances will aircraft be fueled or maintenance performed while the aircraft is armed. No aircraft will leave LZ-1A while armed.

3008. JETTISON AREA. The ordnance jettison area is TA-9 (R-6608) and shall be used only after prior coordination with the Commander, MCB Quantico (Attn: Director, Operations Division). External ordnance shall be dropped in the safe position. Range Control's frequency is 337.6, and Range Control's telephone is DSN 278-5322, COMM (703) 784-5322.

### 3009. NOISE ABATEMENT/AVOIDANCE AREAS

1. Aircraft operating in the vicinity of MCAF Quantico shall maintain a distance of one mile or a minimum altitude of 3,000 feet from the following areas:

- a. Mainside (west of the airfield)
- b. Mason Neck Wildlife Refuge (045/11)
- c. Mount Vernon (045/16)
- d. Indianhead Controlled Firing Area (055/8)
- e. EXXON fuel storage area in Springfield (010/10)

NOTE: All bearings and distances are approximate from MCAF Quantico.

2. Aircraft operating to the west of MCAF Quantico shall maintain a distance of one mile or a minimum altitude of 1,500 feet from the MCCDC Ammunition Supply Point (ASP) located four and one half miles west of MCAF Quantico.

3. Aircraft operating in the vicinity of MCAF Quantico are required to maintain a 500 foot radius around and 1000 feet above any Bald Eagle nesting areas. See Appendix L for locations of these nesting areas.

3010. LOCAL FLYING AREA. The local flying area is depicted in Appendix M. VFR entry and exit points are depicted in Appendix F.

### 1. Entry Altitudes

- a. Helicopter – 500' Mean Sea Level (MSL) (Swamp 1000' MSL for EPA minimum)

- b. Fixed Wing – 1000' MSL

\*NOTE: For all entry into the Class D Surface Area, call Quantico tower with position, altitude, and desired entry point.

## 2. Exit Altitudes

- a. Helicopters – 800'-1000' MSL
- b. Fixed Wing – 1000'

3. Swamp Arrival/Departure. All arriving aircraft entering through the swamp procedure will ensure 1000' MSL is maintained. Report 1 NM west of the airfield for "over the top" crossing permission. Upon reaching midfield, begin descent into a right or left downwind for a Runway 02/20 arrival. For aircraft departures, depart Runway 02/20, enter a downwind, and climb to 1000' MSL and proceed to the west. Report clear of the airspace.

## 3011. RESTRICTED AREAS AND MILITARY OPERATING AREAS (MOA)

### 1. Definition

a. Restricted Area. A restricted area is airspace within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Most restricted areas are designated joint use, and IFR/VFR operations in the area may be authorized by the controlling ATC facility when it is not being utilized by the using agency. Restricted areas are depicted on enroute and sectional charts. Where joint use is authorized, the name of the ATC controlling facility is also shown.

b. Military Operating Areas. A MOA is an airspace assignment of defined vertical and lateral dimensions established outside positive control areas to separate/segregate certain military activities from IFR traffic and to identify for VFR traffic where these activities are conducted.

NOTE: Caution should be exercised when working in MOAs, as civilian aircraft operating VFR may fly in or through these areas without contacting ATC. MCB Quantico's DEMO MOAs are located above and south-southwest of R-6608 (see Appendices C, D).

2. Location of areas. Restricted areas and MOAs are located to the west, south, and southwest of MCAF Quantico (see Appendix C).

<u>AREA</u>	<u>VERTICAL LIMITS</u>	<u>CONTROLLING AGENCY</u>	<u>USING AGENCY</u>
R6608	SFC – 10,000	Potomac TRACON	MCB Quantico
R6601	SFC - 5,000	Potomac TRACON	Fort A.P. Hill
R6611	SFC – 40,000	Washington Center	Navy Dahlgren

R6612	SFC - 7,000	Washington Center	Navy Dahlgren
R6613	SFC - 40,000	Washington Center	Navy Dahlgren
DEMO 1	500 - 5,000	Potomac TRACON	MCB Quantico
DEMO 2	10,000 - 15,000	Potomac TRACON	MCB Quantico
DEMO 3	5,000 - 15,000	Potomac TRACON	MCB Quantico
HILL	SFC - 3,000	Potomac TRACON	Fort A.P. Hill

### 3. Scheduling and procedures

#### a. R-6608 and DEMO MOAs 1, 2, and 3

(1) Ranges for live-fire exercises and demonstrations are available in R-6608.

(2) All units requiring use of these areas shall request authorization from the Director, Operations Division, MCB Quantico, Virginia at DSN 278-5502 or COMM (703)784-5502.

(3) Once authorization is received, scheduling can be accomplished by contacting the Marine Corps Base Scheduler at the Range Management Branch, Operations Division, no later than five working days prior to the requested times. One of the following methods may be used:

(a) DSN: 278-5502/5328

(b) COMM: (703)784-5502/5328

(c) Guard Mail: Range Scheduler, Range Management Branch Operations Division, Code-B032.

(4) Pilots planning to utilize R-6608 shall check the weekly Terrain and Gate Schedule (MCCDCBul 1500), prior to launch, for detailed information on scheduled activity.

(5) No aircraft shall enter a restricted area without first contacting MCB Range Control on FM 38.70 or 225.025 for authorization to enter R-6608 and DEMO MOA, in accordance with MCCDCO P1500.1.

(6) Aircraft requesting an IFR clearance upon exiting the restricted area should advise Quantico ATC of their request at least five minutes prior to their exit time. This procedure will allow for coordination with Potomac Terminal Radar Approach Control (TRACON) and reduce delay time for aircraft clearance exiting the area.

(7) Quantico ATC shall provide radar containment services for fixed-wing aircraft operating in R-6608 and the DEMO MOAs. Quantico Arrival will coordinate containment services with aircraft upon entry into R-6608 or DEMO MOA.

**NOTE:** Due to the close proximity of the Dulles Class B Airspace and the Manassas and Stafford Airports to the DEMO MOAs and R-6608, pilots must be extremely vigilant when working these areas to avoid spill outs. The area north of R-6608 and DEMO 2 has become increasingly congested with commercial and private aircraft because of its close proximity to Manassas Airport. Pilots should exercise vigilance when inbound to or outbound from the Quantico restricted areas in VFR conditions due to primary arrival and departure corridors located west and east of R-6608. It is recommended that Pilots request flight following from Quantico Arrival to avoid traffic in those areas (see Appendices C, D, and E).

b. R-6601 and Hill MOA. Scheduling may be accomplished by contacting R-6601 scheduling office at DSN 578-8333, 8224/8374/8303, COMM (804) 633-8406 a minimum of 30 days in advance of requested times.

### 3012. LOCAL OBSTRUCTIONS (see Appendix F)

1. Local obstructions that are hazardous to flight within five miles of MCAF Quantico are:

OBSTRUCTION	LOCATION	HIGHEST POINT
Transmitter tower	2.25 NM N	358'
Power Plant	2 NM NNE	396.19'
Power Lines West Bank	2 NM NE	274.59'
Power Lines East Bank	2 NM NNE	244.84'
ASR Antenna	0.75 NM SE	252'
Rotating Beacon	0.5 NM SE	83'
Church	1 NM SSW	161.37'
Tree Line	0.5 NM W	255.38'
Tower	1 NM NNW	252'
Water Tower	1.75 NM N	338.7'
Water Tower	2.5 NM NW	337.19'
Control Tower	Hanger 2105	85'

\* Obstructions in bold are not depicted in Appendix F

2. All obstructions within the traffic pattern, except the hills, are clearly marked by obstruction lights.

### 3013. AIRPORT VEHICLE RESTRICTIONS/TRAFFIC PROCEDURES

1. The use of taxiways and runways by personnel or vehicles, other than those specifically assigned to do so in the performance of their normal duties, is prohibited except by prior permission from the MCAF Airfield Manager or Operations Officer.

2. In this paragraph, the term "vehicle" is defined as any vehicle, i.e. GSE, Mighty-Mites, contractor equipment operating on the airfield movement areas.

3. Reference (b) requires that all vehicle operators shall complete an Airfield Vehicle Operators Course (AVOC) administered by ATC prior to operating unescorted vehicles on the airfield movement areas.

4. ATC conducts the AVOC when requested, on a case by case basis.

The course may be scheduled through the ATC Tower Chief at DSN 278-1470, COMM (703) 784-1470. The Airfield Operations Department is responsible for issuing Airfield Drivers Licenses.

5. The AVOC is an annual requirement. The license is valid for one year from date of issue and is required to obtain hand-held radios, beacons, and flags.

6. MCAF Quantico Visiting Aircraft Line (VAL), Fuels Division, ATC Maintenance (ATCM), ARFF and HMX-1 Security personnel shall attend the Airfield Vehicle Operator Course annually in addition to conducting MOS/equipment specific training.

7. Vehicles operating on the airfield shall maintain two-way radio communication with Quantico Ground Control and be equipped with an amber rotating beacon or an orange and white-checked flag. The operator of a vehicle not equipped with a radio shall obtain a hand-held radio from Flight Clearance.

8. Vehicle operators shall obtain approval from Quantico Ground Control prior to crossing a runway or operating on the taxiways, runway, runway shoulders, runway end zones, or landing zones. Before crossing a runway, the vehicle operator shall ensure the runway is clear of aircraft.

a. All vehicles must stop at the yellow non-movement line, located at the old ARFF burn pit site and contact Ground Control for approval to proceed north of the burn pit and along the access road.

b. Upon the receipt of approval by a vehicle operator to proceed north of the burn pit, no delay should occur while patrolling the area north of the burn pit.

c. If a reasonable delay will occur north of the burn pit, i.e. construction, repairs, or emergencies, personnel shall inform ATC of the reason and length of delay.

9. Vehicles should remain on the hard surface after entering the airfield. If it is necessary to travel on an unimproved surface, vehicle operators shall conduct a tire FOD check upon returning to the hard surface.

10. Vehicles operating on the airfield at night or in adverse weather conditions shall use head lights and parking lights unless directed otherwise by the ATC tower.

11. Aircraft shall have the right of way over all vehicle traffic except emergency vehicles responding to an emergency.

12. Aircraft under-tow on a movement area must be in two-way radio communication with the ATC tower.

13. No vehicles will proceed onto a runway or taxiway when the airfield is closed, with the exception of ARFF, HMX-1 Security, VAL, and ATCM vehicles performing official duties IAW an approved letter of agreement.

14. Do not park or drive a vehicle closer than 25 feet in front or 100 feet behind an aircraft.

15. Speed Limits. Emergency vehicles shall adhere to the established speed limits except during an emergency or drill and then at speeds commensurate with safe vehicle operation with special consideration to weather, ambient light, airfield surface conditions, and proximity to aircraft. The following speed limits shall be observed:

- a. Vehicles towing aircraft – 5 MPH
- b. Vehicles in the vicinity of operating aircraft – 5 MPH
- c. Vehicles on parking and ramp areas – 10 MPH
- d. Vehicles on runways or taxiways – 25 MPH
- e. Aircraft, while on parking and ramp areas, shall taxi no faster than a person can comfortably walk.

16. During the hours of darkness, the following rules shall apply:

- a. Aircraft that are being towed with internal power systems shall have external lights on.
- b. Headlights shall be on low beam. Vehicles shall not be operated with only parking lights illuminated.
- c. Vehicles shall be operated in such a manner that headlights are not directed at aircraft taxiing, departing or arriving.

17. Cunningham Road has two red traffic lights installed to control vehicle movement on the access road near the southern end of the runway. After passing through Cunningham Gate, vehicles shall stop at the traffic light and take the following action:

- a. If the red light is flashing, vehicles shall stop, conduct a visual sweep of the runway and the approach zone, ensuring there are no aircraft with which they would conflict. Once it is determined all is clear, the vehicle shall proceed, with no undue delay, to their destination.



b. If the red light is steady red, the vehicle shall stop and wait for it to begin flashing before proceeding.

c. All vehicles entering an automated gate must wait until the gate is completely closed behind them before they can proceed further.

18. All persons, except those duly authorized, who desire access to enter the Control Tower or RATCF shall obtain permission from the Air Traffic Control Facility Officer (ATCFO).

19. HMX-1 Security Area. All personnel, with the exception of HMX-1 flight line and security personnel, are restricted from the security area located on the south end of the airfield adjacent to Hangar 2133, bordered by a red painted line, including a portion of Taxiway Echo inside that area (See Appendix A).

#### 3014. CLOSED AIRFIELD OPERATIONS

1. Authority to conduct closed airfield operations is granted to tenant HMX-1 personnel by the Commanding Officer of MCAF Quantico as outlined in reference (a) and in accordance with the Letter of Agreement (LOA) between MCAF and HMX-1.

2. Emergencies. When the field is closed, ARFF services are reduced in accordance with NAVAIR 00-80R-14 (NATOPS US Navy Aircraft Firefighting and Rescue Manual), to a level below operational airfield category limits. A runway alert (Hot Spot) crew is posted during closed airfield operations. ARFF, with backup from the MCB Quantico Fire Department, will respond when alerted to an emergency or medical evacuation (MEDEVAC). Medical support must be dispatched from the MCB Quantico Clinic. Pilots assume additional risk during closed airfield operations due to a potential delay in emergency response. To report an emergency during closed field, use any of the following:

<u>Unit</u>	<u>DSN 278-</u>	<u>COMM(703) 784-</u>	<u>VHF FM</u>
ARFF Dispatch	2571/2312	2571/2312	140.1
Fire Department	2222/3333	2222/3333	

3. When the field is closed weather information may be obtained via the internet at <https://www.metocwx.quantico.usmc.mil/>.

4. Flight planning can be accomplished by contacting Flight Service Station (FSS) Leesburg at (703) 724-4288 or by radio contact once airborne.

#### 5. Closed Airfield Course Rules

a. The MCAF Quantico Course Rules are in effect for Closed Airfield Operations.

b. No more than two (2) aircraft are allowed in the touch and go pattern during closed airfield operations.

c. At least one hour prior to closed airfield operations the HMX-1 Operations Duty Officer (ODO) or the pilot in charge of the aircraft shall notify the Potomac (PCT) Operations Manager in Charge (OMIC) and the National Capitol Regional Coordination Center (NCRCC), IAW the MCAF and HMX-1 LOA.

d. Once airborne, the pilot shall establish and continuously monitor PCT Approach frequency(s) 124.65/306.925 to verify that the aircraft has an operable transponder in order to conduct closed airfield operations in the SFRA.

e. During closed airfield operations, pilots shall broadcast in the blind to "Quantico Traffic" on tower frequency: 118.6.

f. Pilots of departing aircraft shall report all movement on the airfield and when airborne until clear of MCAF Quantico local flying area. Pilots of arriving aircraft shall report entering MCAF Quantico local flying area and all subsequent movement on the airfield until parked.

g. The pilot in command is responsible to see and avoid other aircraft and to prevent traffic conflicts by strict adherence to the course rules.

3015. LOST COMMUNICATIONS. Aircraft without radio communications shall squawk 7600 and over-fly the airport at 1,500 feet or higher to ascertain the current landing pattern direction. Aircraft shall then enter the pattern via the downwind leg, rocking wings (daylight hours) or flashing lights (after dark), and observe the tower for the appropriate light gun signals.

3016. HOT BRAKES. Aircraft with smoking or apparently overheated brakes shall not return to normal parking areas until it is determined that no fire hazard exists. When the flight crew of an aircraft larger than a C-130 notices the existence of hot brakes, an emergency shall be declared and the aircraft shall remain in position until ARFF units respond and secure the emergency. If no threat to other aircraft or personnel exists, then all aircraft smaller than a C-130 may taxi to the southern end of the VAL to await ARFF response.

### 3017. OVERDUE AIRCRAFT

1. Responsibility. An aircraft is considered overdue when neither communications nor radar contact can be established and the aircraft is overdue for its destination ETA by 30 minutes. The Flight Clearance Section shall monitor all DD-175 flight plans inbound to MCAF Quantico. HMX-1 shall monitor local squadron flights on their daily flight schedule. Flight Clearance should be notified immediately when an aircraft becomes overdue.

2. Procedures for Overdue Aircraft. Flight following procedures shall be initiated and monitored by Flight Clearance. The following action shall be taken for overdue aircraft:

a. Initiate a check at the destination airfield for the aircraft in question. Tenant unit will make a physical check of their flight line and report results to Flight Clearance.

b. Contact FSS and request a preliminary communications search be initiated.

c. For local flight plans, if the aircraft has not been located within one hour after issuance of the alert notice, the MCAF Operations Officer or Airfield Manager shall ensure the Rescue Coordination Center, Langley AFB, Hampton, Virginia has been notified. The Rescue Coordination Center telephone number is DSN: 574-8112.

### 3018. DIVERT AIRFIELDS

#### 1. Military

a. Primary Divert – Andrews AFB

b. Secondary Divert – NAS Patuxent River

#### 2. Civilian

a. Primary Divert – Manassas Regional Airport

b. Secondary Divert – Stafford Regional Airport or Shannon airfield

3019. VIOLATIONS OF FLIGHT REGULATIONS. Violations of flight regulations will be reported to the MCAF Airfield Manager or Operations Officer at DSN 278-2908/2085 or COMM (703) 784-1449. The MCAF Airfield Manager or Operations Officer will notify the MCAF ATCFO who will investigate each incident and determine if a flight violation did occur. A report of his/her investigation and appropriate recommendations will be forwarded to the MCAF Commanding Officer via the MCAF Operations Officer for action as set forth in either OPNAVINST 3710.7 (NATOPS General Flight and Operating Instructions) or FAA Regulations, as applicable. The MCAF Operations Officer shall initially investigate, on an informal basis, all accidents of inadvertent discharge/jettison of ordnance or aircraft components and report all such incidents to the MCAF Commanding Officer.

3020. AIRSPEEDS. To reduce midair collision hazards associated with high aircraft speeds at low altitudes, references (a) and (p) impose a maximum airspeed limitation of 250 knots indicated airspeed (KIAS) on all aircraft operating below 10,000 feet MSL in airspace where references (a) and (p) apply, and a maximum of 200 KIAS for aircraft operating:

1. At or below 2,500 feet above the surface within four NM of the primary airport of a class C or D airspace area.

2. In the airspace underlying a class B airspace area designated for an airport or in a VFR corridor designated through such a class B airspace area. The regulation grants exceptions for operations that cannot safely be conducted at airspeeds less than the prescribed maximum airspeed. The FAA has authorized the DoD to exceed the 250 KIAS below 10,000 feet MSL for certain military requirements.

3. Aircraft engaged in drug interdiction operations are exempted from the general speed limit of 250 knots below 10,000 feet MSL. However, pilots of aircraft so involved are required to establish and maintain two-way radio communication with the tower prior to entering the class B, C, or D airspace and, unless otherwise authorized by ATC, avoid the traffic patterns for any airport in class B, C, or D airspace.

3021. UNUSUAL MANEUVERS. The MCAF Commanding Officer does not have the authority to approve deviations from 14 CFR Part 91. Pilots shall not request unusual maneuvers such as low passes, fly-bys, or high-performance takeoffs.

3022. QUIET HOURS. During published quiet hours, all airfield movement will be limited. Requests for quiet hours shall be forwarded to the MCAF Airfield Manager or Operations Officer.

1. Quiet Hours are a restriction on aircraft, GSE, heavy equipment, and flight operations.

2. Units shall submit a written request not later than five working days prior to the planned ceremony. The request must specify date, time, location, type of ceremony, and requested duration.

3. Approved Quiet Hour periods shall not normally exceed one hour.

4. Appropriate Ceremonies. Quiet Hours request are normally for an officially sanctioned and scheduled ceremony.

5. Prohibited Activities

a. Operation of mobile electric power plants and other heavy equipment on the flight line within 500 yards of the ceremony.

b. Vehicle operations within 500 yards of the ceremony.

c. Aircraft ground operations.

d. Aircraft operations in the Class D Surface Area within three nautical miles of the airfield or below 2,500 feet above ground level (AGL), touch-and-go landings, missed/low approaches, low altitude flyovers, and departures and arrivals except as specified by paragraph 1012.6.

6. Exceptions for Aircraft Arrivals/Departures During Quiet Hours

a. In-flight Emergencies. Aircraft experiencing a declared in-flight emergency may land.

b. Banner Missions. Aircraft designated as Banner Missions directly support the President of the United States and may land and depart during quiet hours.

c. Marine Helicopter Squadron One (HMX-1). HMX-1 helicopters are authorized to arrive and

depart during quiet hours providing the mission is in direct support of Presidential or Vice Presidential missions.

d. Operational Support Aircraft. Operational Support Aircraft (OSA) with an assigned Joint Operational Support Airlift Center (JOSAC) mission to support a DV (military Code 6 and above or civilian equivalent) may, with the prior approval from the Commanding Officer of MCAF Quantico, operate during Quiet Hours.

7. Arrivals During Quiet Hours. Pilots shall plan for a straight-in, full-stop landing. Pilots shall land and taxi directly to parking for shutdown or land and shutdown immediately after clearing the runway.

8. Departures During Quiet Hours. Pilots shall use minimum time on the runway and plan to depart straight-out or as vectored by ATC while climbing to their initially assigned altitude as expeditiously as possible consistent with aircraft limitations and passenger comfort.

9. Quiet Hours shall not be extended past the approved duration without the approval from the Commanding Officer of MCAF Quantico.

10. ATC shall include the Quiet Hour periods in the ATIS broadcast and shall announce the beginning of the Quiet Hour period 30 minutes prior to its scheduled start.

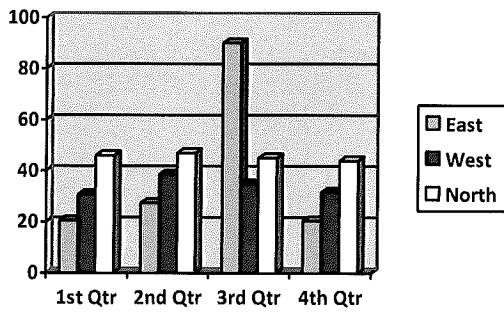
11. Pilots operating in the local traffic pattern or on LZ-1A shall plan to depart or land and taxi to parking for shutdown prior to the beginning of Quiet Hours.

### 3023. LASER RANGE FINDER OPERATIONS

1. The Naval Research Lab (NRL) operates a laser range finder used to determine the orbital paths of various satellites. The operation of this laser can result in permanent ocular damage to aircrew. The hazard is higher when in close proximity to the laser emitter. The characteristics of the beam and built-in safety systems to prevent direct lasing of aircraft in the beam path significantly reduce the possibility of any exposure to aircrew. Additional procedures have been created to further reduce the risk in the immediate vicinity of the emitter. This section describes the characteristics of the laser system being used, built-in safety systems to prevent lasing of aircraft, and local procedures that shall be undertaken to mitigate the hazard to aircrew.

2. System Description. The laser system is characterized by high-energy pulses of very short duration repeated at a slow rate, with a wide beam width. The result is a moderate energy density for each pulse.

a. Location. The laser is located in the Midway housing area at N 38° 29' 57.17447" W 77° 22' 15.98160" at 78.523 feet MSL.

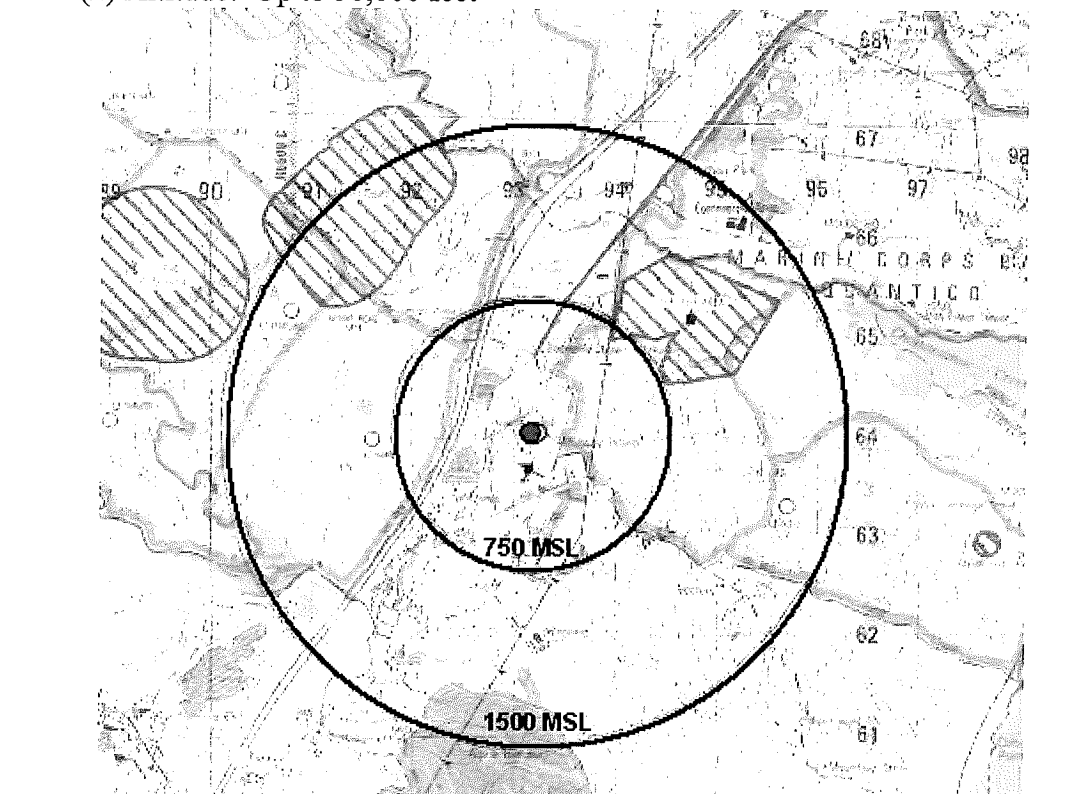


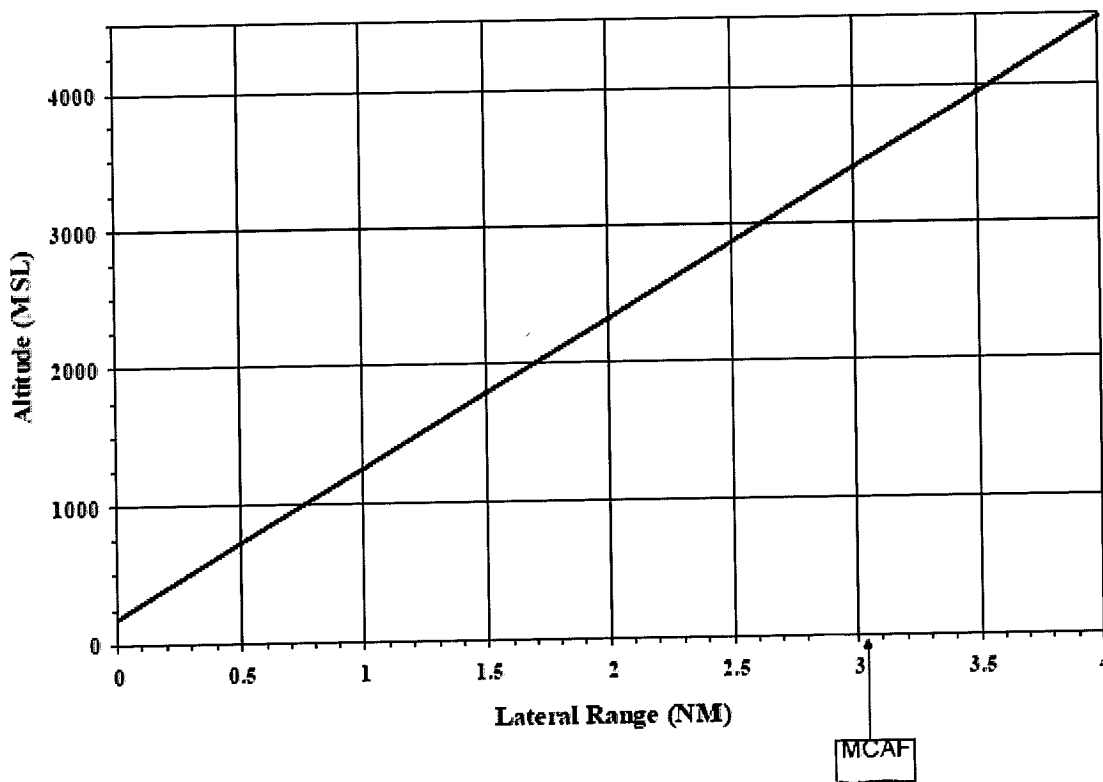
b. Wavelength. 1064Hz. This wavelength is not visible to human eyes, therefore dazzle or flash-blinding are not hazards to aviators.

c. Radar Coverage

(1) Range: 22.6 NM

(2) Altitude: Up to 50,000 feet





3. Built-In Safety System. The laser system is equipped with a radar system that scans for aircraft within a narrow cone around the beam. Detection of an aircraft inside this cone will cause the laser to shut down before lasing of the aircraft occurs.

#### 4. Local Procedures

a. Notification of intent to conduct laser procedures.

(1) NRL will notify the following agencies prior to conducting laser operations: HMX-1 Operations Duty Officer (ODO), MCAF S-3, Marine Corps Base G-3 and MCB Range Control.

(2) Notification will be made one hour prior to commencement, at the end of operations, and at 0800 daily during extended operations.

#### 3024. Night Vision Device (NVD) Operations

1. Night vision device operations and associated aircraft lighting in the CDSA shall comply with reference (a). FAA regulations prohibit ATC personnel from using NVDs to locate aircraft operating on the airfield movement areas and within the CDSA. Therefore, aircraft conducting NVD operations within the CDSA and on the airfield movement areas shall use appropriate overt lighting commensurate with safety of flight and collision avoidance. Pilots shall notify ATC upon initial contact of intent to conduct NVD operations and any special

handling required.

2. Airfield Lighting. Aircraft may request the reduction of intensity or suspension of runway/taxiway lighting during NVD operations. Airfield lighting shall be returned to standard settings to support the arrival and departure of non-NVD aircraft.

3. VFR Traffic Pattern. A maximum of three NVD aircraft shall operate in the VFR traffic pattern simultaneously. Only aircraft operating with similar lighting configurations will be allowed to operate in the VFR pattern, i.e. non-NVD with non-NVD or NVD with NVD.



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## CHAPTER 4

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## CHAPTER 4

## INSPECTIONS

4000. GENERAL. The prevention of Foreign Object Damage (FOD) is an essential and ongoing program. The elimination of foreign objects and the early detection and reporting of airfield surface damage directly relates to establishing a safe operating environment and the preservation of material and personnel assets.

4001. OPERATING AREA INSPECTIONS. Prior to airfield opening each day, and again at sunset, the ARFF Division shall inspect the runway, taxiways, and parking ramps for foreign objects, obstructions or any other unsafe condition(s). Upon completion of the inspection, ARFF personnel shall submit the inspection results to the Flight Clearance Section. Upon receipt of the inspection report, Flight Clearance shall inform ATC of the condition of the airfield.

1. Airfield Lighting Inspections. The ARFF Division will visually inspect all airfield lighting systems to include:

- a. Runway edge lights
- b. Taxiway lights and directional lights
- c. Runway end identification lights with strobes
- d. PAPI lights
- e. Rotating beacon
- f. Obstruction lights
- g. Runway marker lights
- h. Steady red bi-directional stop lights on perimeter road
- i. Bird and wildlife activity on the airfield
- j. Windsock lights: two at midfield, one north of, and one south of the runway.

2. Closed Airfield Inspection. When authorized closed airfield operations are expected, the ARFF Division shall inspect, at sunrise, the runway, taxiways, and parking ramps for foreign objects, obstructions, or any other unsafe condition(s). New hazards (those not reported on the day the airfield was last open) will be reported to the HMX-1 Duty Officer at DSN 278-2760/2209 or COMM (703) 784-2760/2209, and forwarded by formal report(s) via the chain of command on the next day the airfield is open.

3. Airfield Inspection Sheet. The airfield inspection sheet will be utilized to document and forward discrepancies found during operational airfield area checks. Noted discrepancies will be circled and numbered with corresponding comments included. The completed report will be forwarded to the Airfield Manager at the beginning of normal working hours. Problems that may affect safety of flight shall be immediately relayed to ATC.

4. Airfield Hazard/Obstruction Notification. Airfield Operations shall notify pilots of airfield hazards, obstructions, and construction projects by NOTAM and Frost Call. ATC shall include pertinent NOTAM information in the ATIS broadcast. NOTAM information is available from the Defense Internet NOTAM Service (DINS) web site.

#### 4002. NOTIFICATION OF CONDITIONS AFFECTING SAFE OPERATION

1. The Flight Clearance Section will ensure appropriate NOTAMs are issued to identify conditions that may affect the safe operations of aircraft. The ATC section will issue ATIS broadcasts as appropriate.

2. These conditions include, but are not limited to the following:

- a. Construction or maintenance work on pavement or safety areas.
- b. Damage of airfield surfaces.
- c. The presence and depth of snow, slush, ice, or water on runways or taxiways.
- d. The presence of parked aircraft or other objects on or next to runways or taxiways.
- e. The failure or irregular operation of all or part of the airport lighting system, including the approach, threshold, runway, taxiway, and obstruction lights.
- f. The presence of a large number of birds.

4003. FOREIGN OBJECT DAMAGE (FOD) PREVENTION. Units occupying hangar space are responsible for the maintenance of FOD control programs for the hangar and flight line on which they work. Those conditions that cannot be corrected by the units, or are beyond their capability will immediately be reported to the Airfield Manager. A sweeper may be requested by contacting the Flight Clearance Office at DSN 278-2085/2908 or COMM (703) 784-2085/2908.

4004. EMERGENCY EQUIPMENT CHECK. Prior to the start of each day's flight operations, the ARFF Division will complete pre-operational inspections of assigned aircraft firefighting and support vehicles and organic equipment required to support the level of scheduled flight activity. Required equipment that is not operational will be reported to the Airfield Manager. A reduction of flight operations per NAVAIR 00-80R-14 may be required.

4005. CRASH ALERT SYSTEM CHECK. ATC will check the primary crash phone 10 minutes prior to the scheduled field opening on a daily basis. ATC will check the secondary

crash phone once a week, on Monday or the first operational day of that week, immediately after the primary crash phone check.

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## CHAPTER 5

## AIR TRAFFIC CONTROL TABLE OF CONTENTS

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## CHAPTER 5

## AIR TRAFFIC CONTROL

5000. GENERAL. All aircraft shall obtain specific ATC clearance prior to maneuvering on an airport movement area, or within MCAF Quantico's designated airspace. Positive air traffic control shall be exercised by Quantico Tower over all civil and military aircraft during published operating hours. No aircraft may operate on the Quantico Movement Area or Class D Surface Area without two-way radio communications unless prior coordination has been accomplished (see Appendix H).

5001. AIRSPACE DESCRIPTION

1. Quantico Arrival Airspace. Quantico Arrival Control Airspace is located immediately south of the Baltimore-Washington TRI-AREA Terminal Control Area (TCA). Adjacent ATC facilities include Reagan National to the NNE, Navy Patuxent River to the east, Richmond to the south, and Dulles to the NNW. By letters of agreement, Dulles, Richmond, and Washington National (PCT) delegated MCAF Quantico that airspace depicted in Appendix C.

2. There are no civilian operations which infringe upon the Class D and E airspace.

5002. FREQUENCIES AND NAVIGATIONAL AIDS

1. Frequencies. Commonly used frequencies in use at MCAF Quantico are listed below. A complete list of local frequencies is given in Appendix G.

- |  |           |         |          |
|--|-----------|---------|----------|
| a. Quantico Tower                          | - 360.2   | 118.6   |          |
| b. Quantico Ground                         | - 340.2   | 121.75  | 140.1 FM |
| c. Quantico Approach                       | - 290.375 | 127.05  |          |
| d. Quantico Containment                    | - 346.25  |         |          |
| e. SFAs                                    | - 351.95  | 363.15  |          |
|  |           | 353.65  | 120.925  |
| f. ATIS                                    | - 263.15  |         |          |
| g. METRO/Base Operations                   | - 355.3   |         |          |
| h. Closed Field Operations PCT Frequencies |           |         |          |
| (1) BARIN                                  | - 128.52  | 306.925 |          |
| (2) TYSO                                   | - 118.95  | 257.2   |          |

(3) SFRA SOUTH - 125.12

i. Search and Rescue frequency - 282.8

## 2. Navigational Aids

### a. Brooke VORTAC

(1) Located 10 miles south of MCAF Quantico

(2) Identifier – BRV

(3) Frequency – 114.5 / Channel 92

## 5003. AIR TRAFFIC CONTROL SERVICES

1. VFR Control. Quantico Tower exercises positive control over all air traffic within its operational airspace. When deemed safe, efficient, and in accordance with Letters of Agreement, Quantico Tower may exercise preventive control on operations conducted to both the active runway and LZ-1A. All aircraft operating on the airport will be issued instructions and clearances by radio or visual techniques.

2. IFR Control. Quantico Arrival Control is responsible for all IFR aircraft operation and IFR handling of VFR aircraft within the Arrival Control Airspace assigned to MCAF Quantico. Besides MCAF Quantico, arrival control services are also provided to Shannon Airport, Dahlgren Naval Surface Weapons Center, Stafford Regional Airport, and Fort A. P. Hill. Standard separation procedures are applied for all aircraft operating within Quantico Arrival Control jurisdiction.

3. SVFR Procedures. SVFR operations are authorized within the MCAF Quantico Airspace. Quantico Tower issues SVFR clearances after obtaining approval from Arrival Control. Weather minimums for SVFR operations are outlined in FAA Handbook 7110.65 and the Airman's Information Manual (AIM), as well as paragraph 2003.2 of this order.

## 5004. INSTRUMENT APPROACH PROCEDURES

1. Available navigation aids and approved instrument approach procedures are published in current DoD Flight Information Publications (FLIP). Radar and instrument approaches are available to Runway 02 only, with priority given to inbound IFR traffic. The PAR to Runway 02 is the primary approach in use at MCAF Quantico. Pilots can expect to be offered this approach upon initial contact.

2. Pilots should be vigilant when flying in the vicinity of Brooke VORTAC as it is the initial approach fix for Stafford Regional Airport, Shannon Airport, and MCAF Quantico. Brooke VORTAC is also used as a feeder fix for Dulles Airport. Pilots should be especially vigilant for

commercial and private aircraft descending to 4,000 feet proceeding northbound from Brooke VORTAC.

3. MCAF Quantico is equipped with a Precision Approach Radar and any restrictions to this system are contained in the FLIP.

5005. CIRCLING APPROACHES. When Runway 20 is the duty runway, pilots can expect to circle east of the field for landing due to the unavailability of instrument or radar approaches to Runway 20. Caution should be exercised during these operations because of the necessity of the Control Tower to control opposite direction traffic.

NOTE: Circling is not authorized west of the airfield or from a PAR approach.

5006. DUTY RUNWAY DESIGNATION. The Tower Watch Supervisor is responsible for designating the duty runway. In making this designation, primary consideration is given to prevailing wind direction and speed. Other weather and airfield conditions, status of available NAVAIDS, and type of air traffic expected are taken into consideration. Pilots experiencing an emergency will be given their choice of runway whenever possible.

5007. EMERGENCY PROCEDURES

1. Pilots of aircraft experiencing an emergency should contact ATC as soon as possible and preface their transmission with, "This is an emergency." This procedure will give the Control Tower maximum time to notify appropriate supporting agencies.

2. Pilots of distressed aircraft should provide the following information to ATC as soon as possible:

- a. Call sign.
- b. Type of aircraft.
- c. Nature of emergency.
- d. Position.
- e. Intentions.

NOTE: Above is the minimum information required by ATC to plan their actions. If time permits, the following info should be provided:

- f. Number of persons on board.
- g. Fuel remaining in minutes.
- h. Ordnance/Hazardous cargo.

3. Aircraft with an emergency will be given appropriate priority over all other aircraft.
4. When an emergency is declared, the Ground Controller and Tower Watch Supervisor shall notify the Immediate Alert Position and the ARFF Division. The Tower Flight Data Controller shall notify other sections with immediate responsibilities using the Primary Crash Phone. The Flight Clearance Section shall provide follow-up notification using the Secondary Crash Phone.
5. The ARFF Watch Section Supervisor is solely responsible for the movement and control of all crash vehicles. ATC shall not deny permission for movement on the runways and taxiways unless it presents a hazard. The ARFF Watch Section Supervisor or other competent authority shall secure emergencies.

#### 5008. MINIMUM FUEL

1. Pilots should be aware of the distinction made between the terms “Emergency Fuel” and “Minimum Fuel.”
2. Pilots should advise ATC of minimum fuel status when the fuel supply is such that upon reaching your destination, you cannot accept any undue delay.
3. Declaring “minimum fuel” does not indicate an emergency situation. Declaring “minimum fuel” merely indicates an emergency situation is possible should any undue delay occur and does not imply a need for priority handling.
4. If the remaining usable fuel supply suggests the need for traffic priority to ensure a safe landing, pilots should declare an emergency (“emergency fuel”) due to low fuel and report fuel remaining in minutes.

#### 5009. WHEELS CHECK PROCEDURES

1. Voice Report
  - a. All pilots will report “wheels down and locked” prior to landing. This report will normally be given prior to turning base leg or prior to one mile final on a straight-in approach.
  - b. If the wheels down report has not been received by base leg, ATC shall advise the aircraft to “check wheels down” prior to issuing a landing clearance.
2. Visual Check. When doubt exists as to the position of the landing gear, pilots may request clearance for a low pass for a visual inspection by the Control Tower.

#### 5010. ATC LIGHT SIGNALS

1. Standard light signals are used. A departure clearance will not be granted to NORDO aircraft using light signals without the prior permission of the Airfield Operations Officer.

2. All personnel operating aircraft or vehicles, whether in the Class D Surface Area or on the airfield movement area, shall be familiar with ATC light gun signals.

<u>Color and Type of Signal</u>	<u>Meaning to A/C On the Ground</u>	<u>Meaning to A/C In Flight</u>	<u>Meaning to Vehicles, Equipment, and Personnel</u>
Steady Green	Cleared for take-off	Cleared to land	Cleared to cross, proceed, go
Flashing Green	Cleared to taxi	Return for landing (to be followed by steady green at proper time	N/A
Steady Red	Stop	Give way to other aircraft and continue circling	Stop
Flashing Red	Taxi clear of landing area/runway in-use	Airport unsafe do not land	Clear the Taxiway/Runway
Flashing White	Return to starting point on airport	N/A	Return to starting point on airport
Alternating Red and Green	General warning signal - exercise extreme caution	General warning signal - exercise extreme caution	General warning signal - exercise extreme caution

NOTE: The warning signal is not a prohibitive signal and can be followed by any other light signal, as circumstances warrant.

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## CHAPTER 6

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## CHAPTER 6

## TRANSIENT AIRCRAFT

6000. GENERAL

1. Facilities available to transient pilots and aircraft are limited. Aircrew should consult the IFR Supplement and NOTAMs for current information.
2. The Visiting Aircraft Line (VAL) is responsible for the handling of transient aircraft. Visiting aircrew are responsible for arranging their own billeting and transportation requirements prior to, or after securing their aircraft.

6001. TRANSIENT AIRCRAFT OPERATIONS. Emergency service will be provided to any aircraft upon request. In an emergency, a Civil Aircraft Landing Permit (CALP) is not required; however, the pilot will be required to fulfill this requirement prior to the aircraft being authorized to depart.

1. Military

- a. Pilots of inbound aircraft are requested to make maximum use of radar services available, consistent with their mission.
- b. Transient aircraft will be parked on the VAL unless prior arrangements have been made with tenant activities. Flight Clearance personnel will coordinate any aircraft services.
- c. The designated VIP area is the ramp area immediately to the south of the Control Tower (VIP-1).
- d. MCAF Quantico provides limited transient hangar space. Transient aircraft requesting hangar space shall contact Flight Clearance at DSN 278-2085/2908, COMM (703) 784-2085/2908.

2. State, Federal, County, and Life Flight

- a. Pilots of State, Federal, County, and Life Flight aircraft may conduct practice radar approaches terminating in either a low approach or missed approach.
- b. Practice approaches shall not interfere with locally based aircraft operations. For practice approaches when Runway 20 is the duty runway, a two mile turnout will be issued for all aircraft conducting practice approaches if two or more military aircraft are in the local pattern. Practice approaches to Runway 02 will be authorized at the discretion of the tower supervisor.

3. Civil

- a. Civil aircraft operations are governed by SECNAVINST

3770.1.

b. Civil aircraft are not permitted to use MCAF Quantico unless prior coordination has been made with the MCAF Operations Department. Civil aircraft may conduct practice radar approaches terminating in either a low approach or missed approach.

c. Civil aircraft landing at MCAF Quantico must be on Official Business Only, and must provide a DD Form 2400 (Civil Aircraft Proof of Insurance), DD Form 2401 (CALP), and DD Form 2402 (Civilian Hold Harmless Agreement). These forms may be found on the MCAF Quantico Website at <http://www.quantico.usmc.mil/activities/?Section=MCAF>

#### 6002. BILLETING

1. Military. Transient quarters are available at MCB Quantico and are arranged through the Liversedge Bachelor Officer Quarters (BOQ), DSN 278-3148/3149, COMM (703) 784-3148/3149 or the Crossroads Inn at (800) 965-9511 or (703) 630-4444.

2. Civil. The area surrounding the base offers several motels for those personnel authorized or who desire to use off station quarters. Contact Flight Clearance, DSN 278-2085/2908, COMM (703) 784-2085/2908 for a listing of available off-base lodging.

#### 6003. MESSING

1. Military Facilities. Officers and enlisted service members may eat in the Air Facility messhall. Personnel on COMRATS/PerDiem must pay for their meals.

2. Flight rations are available. Requests should be made 24 hours in advance.

#### 6004. TRANSPORTATION

1. MCAF Quantico has limited military transportation available. There is no base taxi. Information regarding government transportation is available from the Flight Clearance section when requesting a Prior Permission Request (PPR).

2. A civilian taxi service is available for those personnel who desire to go off base. The Yellow Cab Company can be reached at (703) 640-6464.

3. Rental cars are available through Enterprise Rentals, located in the Quantico Marine Corps Exchange. Enterprise may be reached at (800) 736-8222.

#### 6005. EMBARKATION OF PASSENGERS

1. A passenger is any individual traveling in an aircraft that is not part of the aircrew.

2. No person shall enplane as a passenger nor any cargo be embarked on a Naval aircraft, unless authorization has been granted by competent authority in accordance with applicable directives.

See DoD 4515.13 (Air Transportation Eligibility) or OPNAVINST 4630.25 (Air Transportation Eligibility).

3. Squadron commanders may exercise passenger clearance authority for passengers embarked on their squadron aircraft.
4. Pilots will attach to their flight plan or file with their squadron, a complete roster containing last and first name, middle initials, grade, last four of their Social Security Number, and parent unit of all passengers on board.
5. No Space "A" passengers will be on or offloaded aboard the Air Facility due to security requirements.

6006. DISTINGUISHED VISITORS

1. Aircraft inbound to MCAF Quantico shall notify ATC upon initial radio contact of VIPs on board and provide the following information:

- a. Highest code on board.
- b. Chock time.
- c. Landing site if other than the airfield.
- d. Transportation requirements.
- e. Any other requests.

2. Pilots should anticipate parking on the VIP spot.

3. The Flight Clearance Section will notify the MCAF Operations Officer of the estimated time of arrival/departure of VIPs.

6007. ORDERS ENDORSEMENT. All endorsements for quarters and messing can be obtained through the Liversedge BOQ, DSN 278-3148/3149, COMM (703)784-3148/3149.

6008. CUSTOMS

1. Unless previously completed at an intermediate stop, all aircraft whose initial departure was from a foreign station are required to clear US Customs immediately upon arrival at MCAF Quantico.

2. Contact the Operations Department a minimum of 72 hours in advance if Customs services will be required at DSN 278-1449, COMM (703) 784-1449. It is the aircraft commander's responsibility to ensure that prior arrangements have been made with the MCAF Operations Department for Customs services.

6009. CLASSIFIED MATERIAL AND WEAPONS

1. There are no storage facilities available at MCAF Quantico for classified material. Transient flight crew may store registered materials with the MCB Quantico Classified Material Control Center, Building 3250, DSN 278-6265, COMM (703) 784-6265. Turn-ins and pick-ups are to be made during normal working hours.
2. Small arms may be temporarily stored at the MCAF Quantico Armory, Building 2106. To store small arms after normal working hours, prior arrangements must be made with the MCAF Logistics Officer, DSN 278-2559 or 378-1569, COMM (703) 784-2559 or (703) 432-1569.

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## CHAPTER 7

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## CHAPTER 7

## AIRCRAFT RESCUE AND FIRE FIGHTING

7000. GENERAL

1. The current edition of AFO P11320.4D, Aircraft Rescue and Fire Fighting (ARFF) Standard Operating Procedures (SOP), provides detailed instructions and procedures for the conduct of ARFF operations at MCAF Quantico. Each station or department concerned shall respond to all crash or emergency alarms in accordance with the instructions contained in the ARFF SOP.
2. The MCAF Operations Officer exercises direct control over the ARFF facilities assigned to MCAF Quantico. Firefighting and Rescue shall be under the supervision of the senior qualified member of the MCAF ARFF crew on duty.
3. Only ARFF and security personnel are authorized access to the scene of a crash. Unit commanders of aircraft involved, their Accident Investigation Board, and certain other technical personnel will be authorized access to the crash site at the earliest possible time consistent with safety.
4. In the event a crash occurs during closed airfield operations, ARFF will ensure that the following personnel are notified in the following order:
  - a. MCAF Operations Officer
  - b. MCAF Executive Officer
  - c. MCAF Commanding Officer

7001. SEARCH AND RESCUE. There are no designated Search and Rescue (SAR) services or aircraft at MCAF Quantico. All SAR services are provided by the Air Force Rescue Coordination Center, Tyndell AFB, Florida, DSN 523-5955/COMM (850) 283-5955 or (800) 851-3051.

7002. AIRCRAFT SALVAGE

1. Salvage operations will not commence until the aircraft is released by the reporting custodian of the aircraft and will be completed as expeditiously as possible. The principal focus of salvage operations is the safe continuation of flight operations with the following priorities: Runways, taxiways, HMX-1 operations, and the Visiting Aircraft Line.
2. The MCAF Operations Officer will take the following actions during salvage operations:
  - a. If not already activated, activate the Air Facility Aviation Mishap Response Plan.
  - b. Assist in rescue or salvage, if practical.

- c. Maintain liaison with the command affecting the salvage operation.
  - d. Assist in providing transportation to the scene of the crash if required.
3. The MCAF Quantico Logistics Officer will assist in the coordination efforts during salvage operations. Personnel and equipment support will be requested from MCB Quantico as required.

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## Chapter 8

## FOREIGN OBJECT DAMAGE (FOD) PREVENTION TABLE OF CONTENTS

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## CHAPTER 8

## FOREIGN OBJECT DAMAGE (FOD) PREVENTION

8000. GENERAL.

1. The ingestion of foreign objects and debris is a continuous problem currently accounting for the largest percentage of premature removal of gas turbine engines from naval aircraft. It is also significant that the majority of gas turbine engines undergoing depot rework exhibit some degree of FOD. The present and upward trend of engine rejection due to FOD is excessive and, in the interest of economy and operational readiness, cannot and must not be tolerated aboard MCAF.

2. Although FOD prevention aboard MCAF is an all hands program, the following sections or individuals are considered to be essential in FOD prevention and are responsible for areas identified in Appendix M:

a. The Aviation Safety Program Manager is responsible for the oversight of the Installation FOD Prevention Program.

b. The Airfield Manager is designated in writing as the Airfield FOD Prevention Officer. Additionally, a senior enlisted person may be assigned as Airfield FOD Prevention NCO from within the Flight Clearance section of MCAF and tasked with ensuring daily compliance with the FOD Prevention Program within Zone 3 of Appendix M.

c. HMX-1 Quality Assurance is responsible for executing squadron policy as governed by both OPNAVIST 1542 and the Naval Aviation Maintenance program within zone 2, and to every extent possible, assist the Airfield Manager in FOD prevention in zone 1 during loading and unloading evolutions.

d. Aircraft Rescue and Fire Fighting will conduct surface checks of all runways, taxiways, and ramp areas prior to the airfield opening

e. Both commands will conduct, at a minimum, 2 weekly FOD walks unless more are required by higher orders or directives.

8001. TENANT COMMANDS. Tenant commands are responsible for:

a. Conduct FOD walk on a daily basis prior to the opening of the field for operations. The area of responsibility is shown in appendix (M).

b. Providing appropriately marked, covered containers for loose objects picked up during FOD prevention activities. They must be placed in strategic and accessible locations.

c. Report all cases of chipping, surface deterioration, or other FOD hazards to the MCAF Aviation Safety Program Manager or the FOD Prevention Officer.

8002. TRANSIENT COMMANDS. In accordance with reference (a), transient commands occupying hangar space are responsible for maintaining a FOD Prevention Program in the hangar and flight line vicinity. Those conditions which cannot be corrected will immediately be reported to the Airfield Manager.

8003. SWEEPER USE. A sweeper may be requested by contacting the Airfield Manager.

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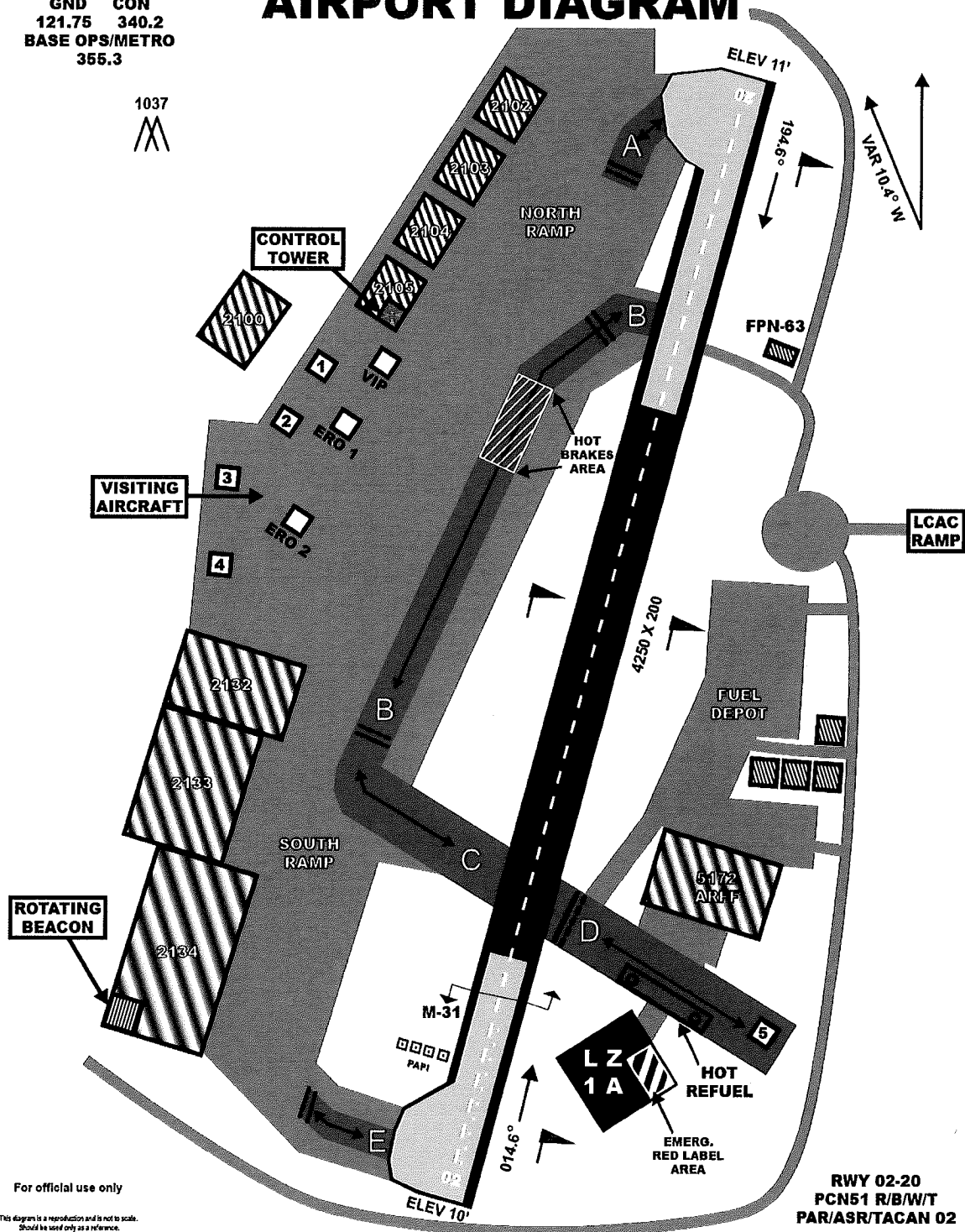
## APPENDIX A

## MCAF QUANTICO AIRFIELD LAYOUT

ATIS ★ 263.15  
 QUANTICO TOWER  
 ★ 118.6 360.2  
 GND CON  
 121.75 340.2  
 BASE OPS/METRO  
 355.3



# MCAF Quantico (KNYG) AIRPORT DIAGRAM



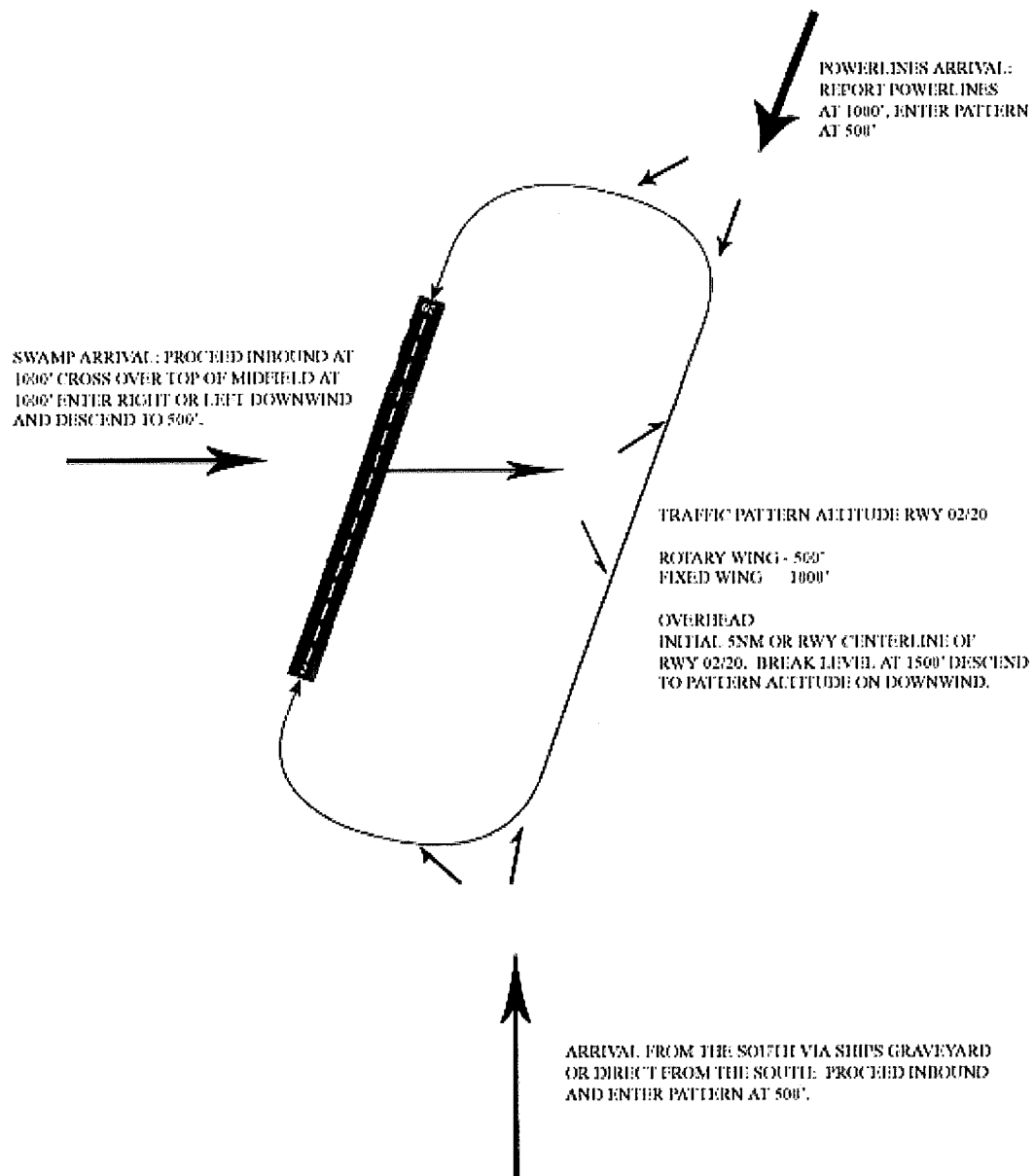
APPENDIX A

MCAF QUANTICO AIRFIELD LAYOUT

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## APPENDIX B

## TRAFFIC PATTERNS



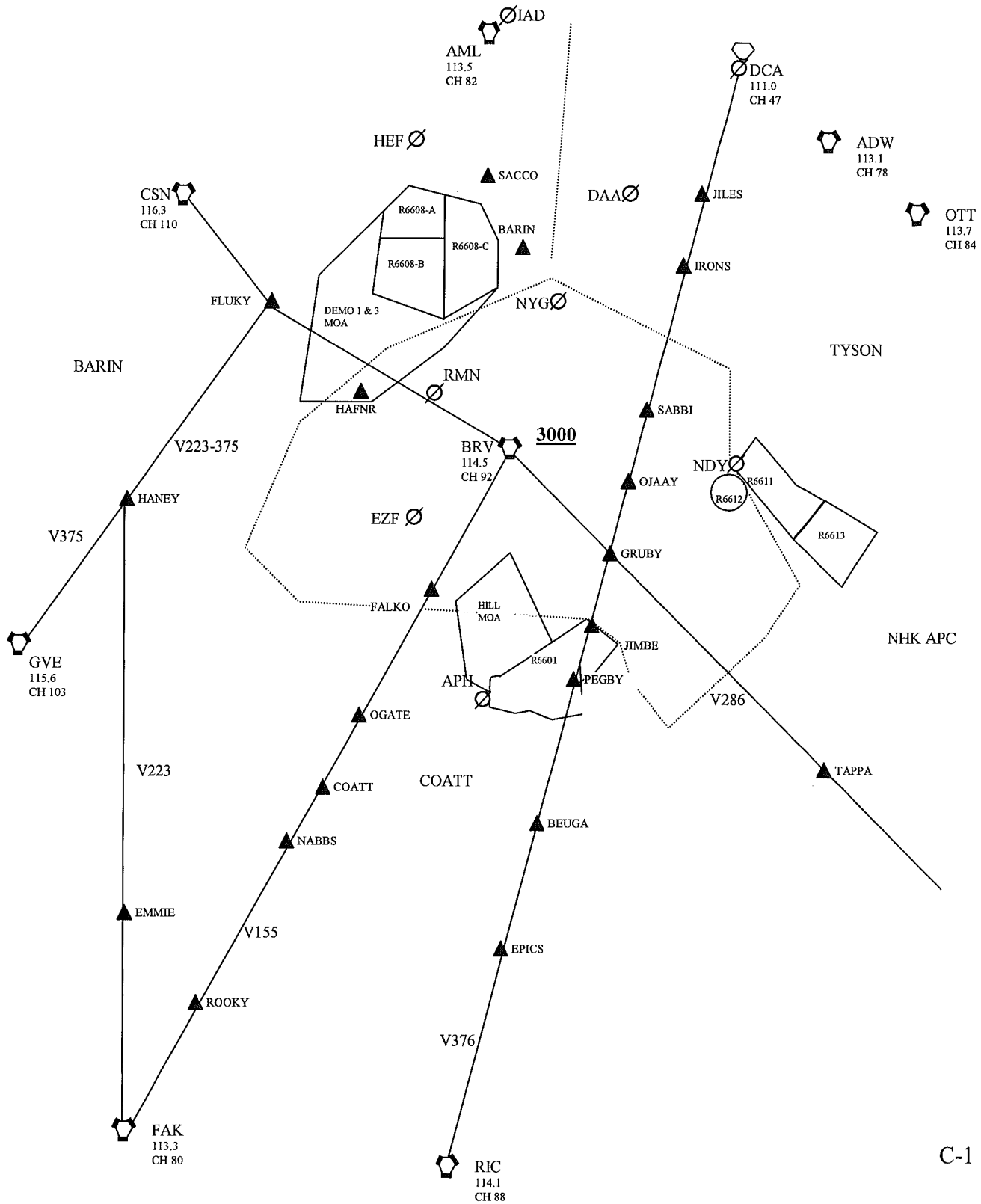
Note: For the purposes of this section, MV-22 aircraft operating in conversion mode are considered rotary wing/helicopters, and MV-22 aircraft operating in airplane mode are considered fixed wing.

APPENDIX B  
TRAFFIC PATTERNS

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## APPENDIX C

## RESTRICTED AREA/ARRIVAL CONTROL AIRSPACE



APPENDIX C

RESTRICTED AREA/ARRIVAL CONTROL AIRSPACE

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APPENDIX D

DEMO MOAS

DEMO 1

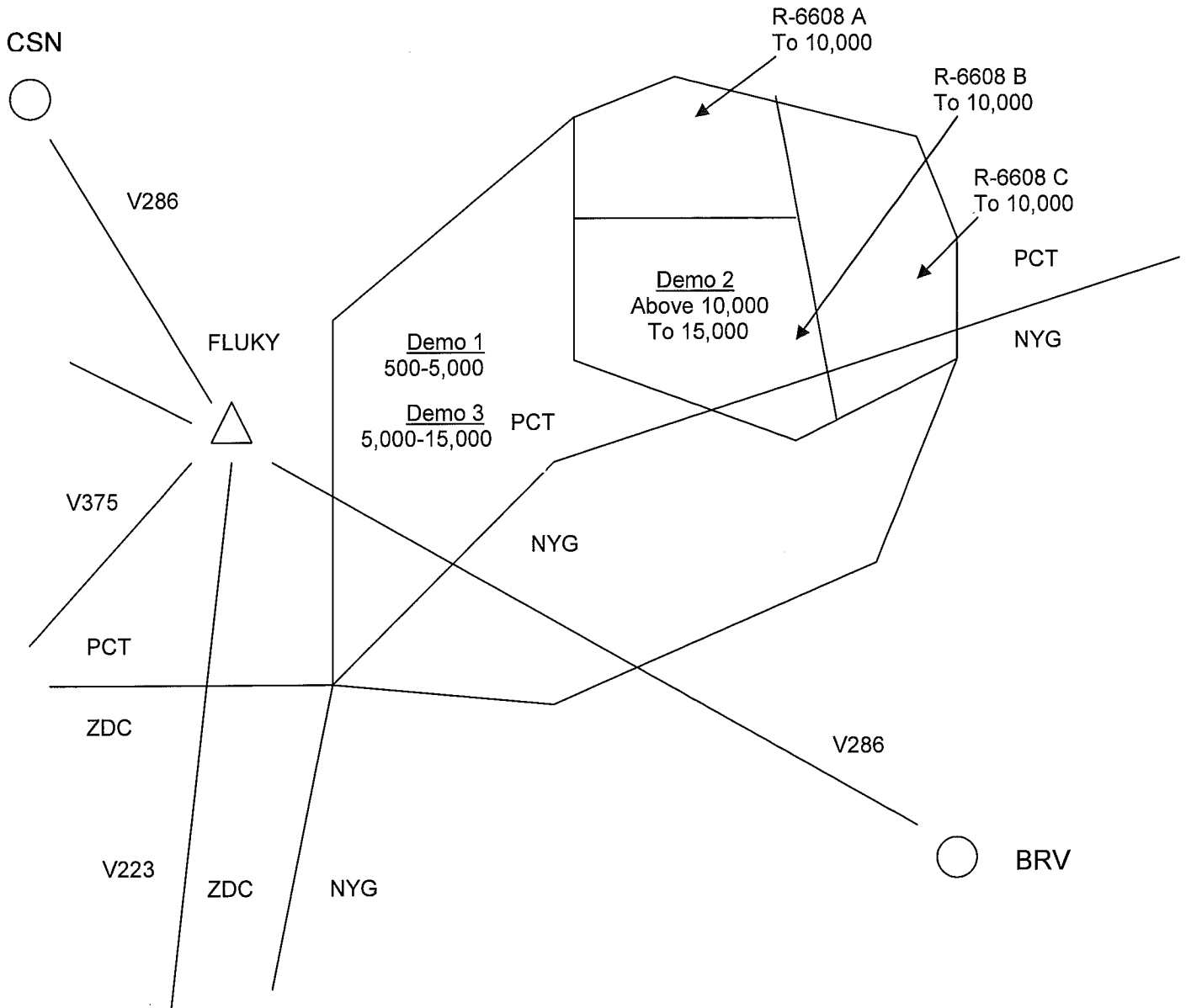
500  
to  
5,000

DEMO 2

10,000  
to  
15,000

DEMO 3

ABOVE 5,000 to  
15,000 EXCLUDING  
R6608 A, B, C

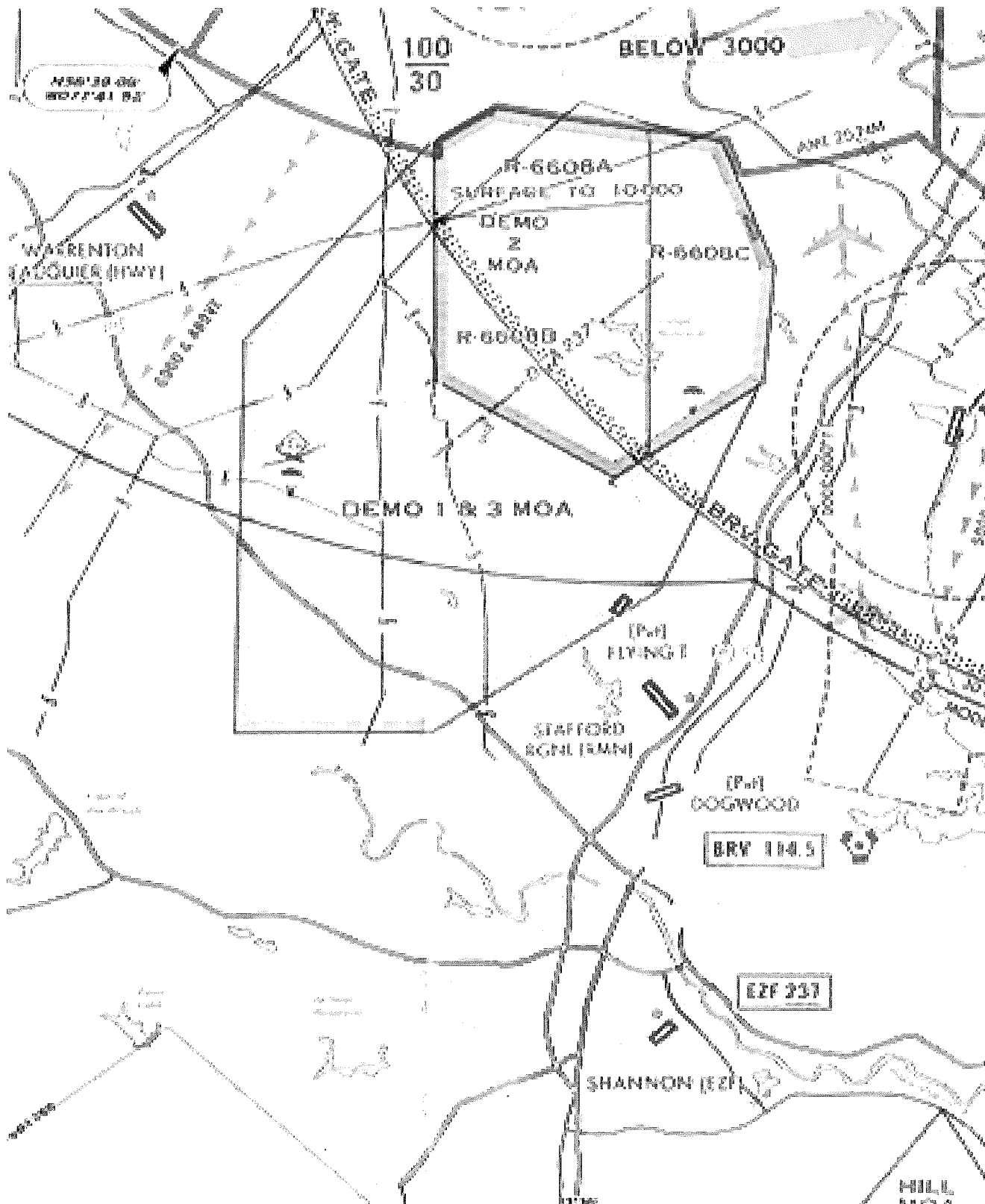


APPENDIX D

DEMO MOAS

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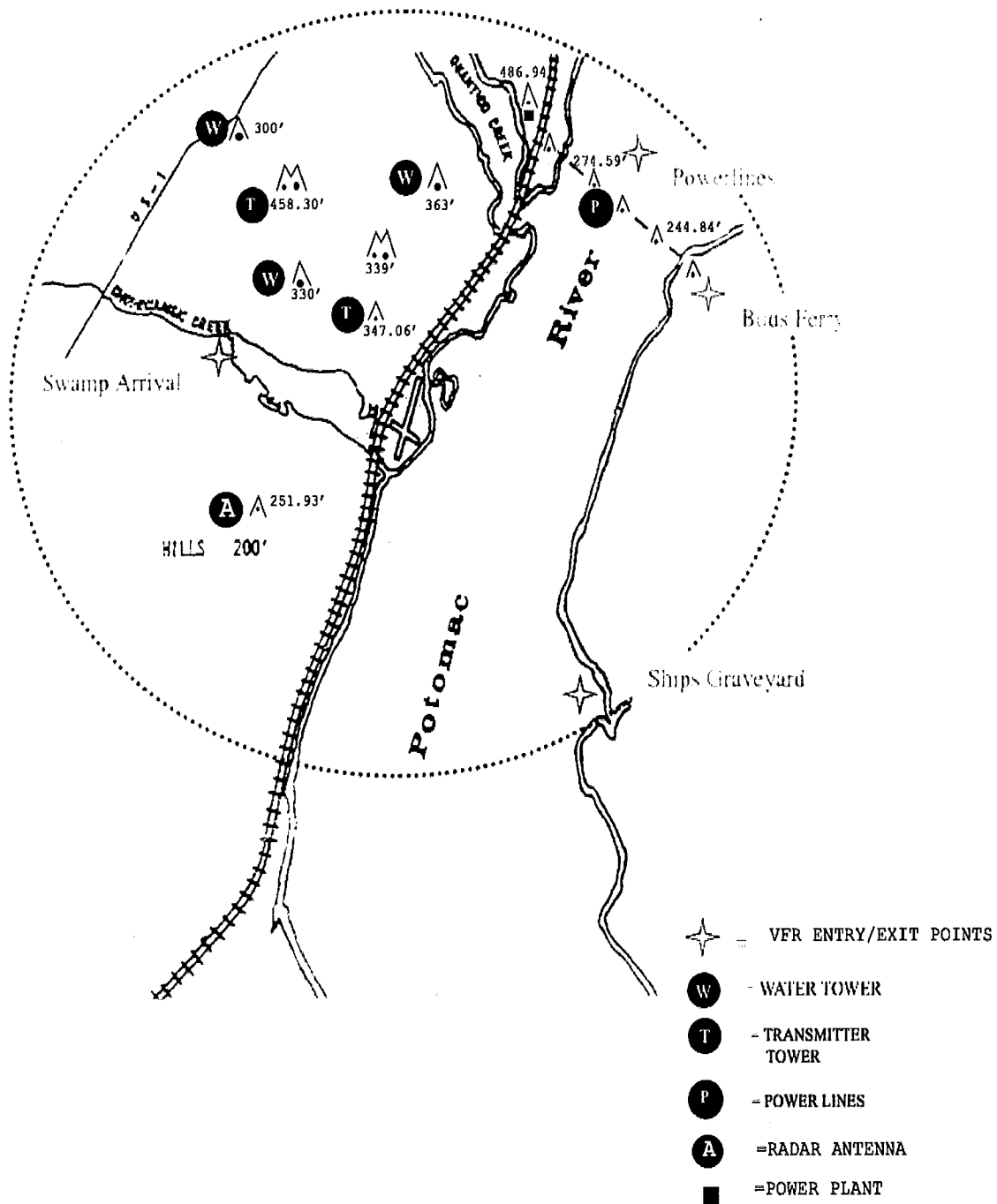
APPENDIX E

R-6608, DEMO MOAS, AND CLASS B AIRSPACE

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## APPENDIX F

## LOCAL OBSTRUCTIONS AND REPORTING POINTS



APPENDIX F

LOCAL OBSTRUCTIONS AND REPORTING POINTS

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APPENDIX G  
COMMONLY USED FREQUENCIES

	<u>VHF</u>	<u>UHF</u>
NYG ARRIVAL/DEPARTURE:	127.05	290.375
NYG CONTAINMENT:		346.25
R6608 RANGE CONTROL:	38.70(FM)	323.7
NYG SFA:	120.925	351.95
		353.65
		363.15
NYG TOWER:	118.6	360.2
NYG GROUND:	121.75	340.2
NYG METRO/BASOPS:		355.3
NYG ATIS:		263.15
POTOMAC APPROACHES (PCT):		
- BARIN (IAD):	128.52	306.925
- TYSON (DCA):	118.95	257.2
- FLATROCK (FAK):	126.75(V155)	307.2
- TAPPA:	126.4 (V286)	282.375
- CHARLOTTESVILLE (CHO):	132.85	323.12
EZF UNICOM:	122.8	
- EZF AWOS:	128.125	
- EZF GCO:	135.075	
RMN UNICOM:	122.725	
- RMN GCO:	135.075	

APPENDIX G

COMMONLY USED FREQUENCIES

- RMN AWOS:	126.325	
BROOKE VORTAC:	114.5	CH92

APPENDIX G  
COMMONLY USED FREQUENCIES

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## APPENDIX H

## AIRFIELD PHONE DIRECTORY

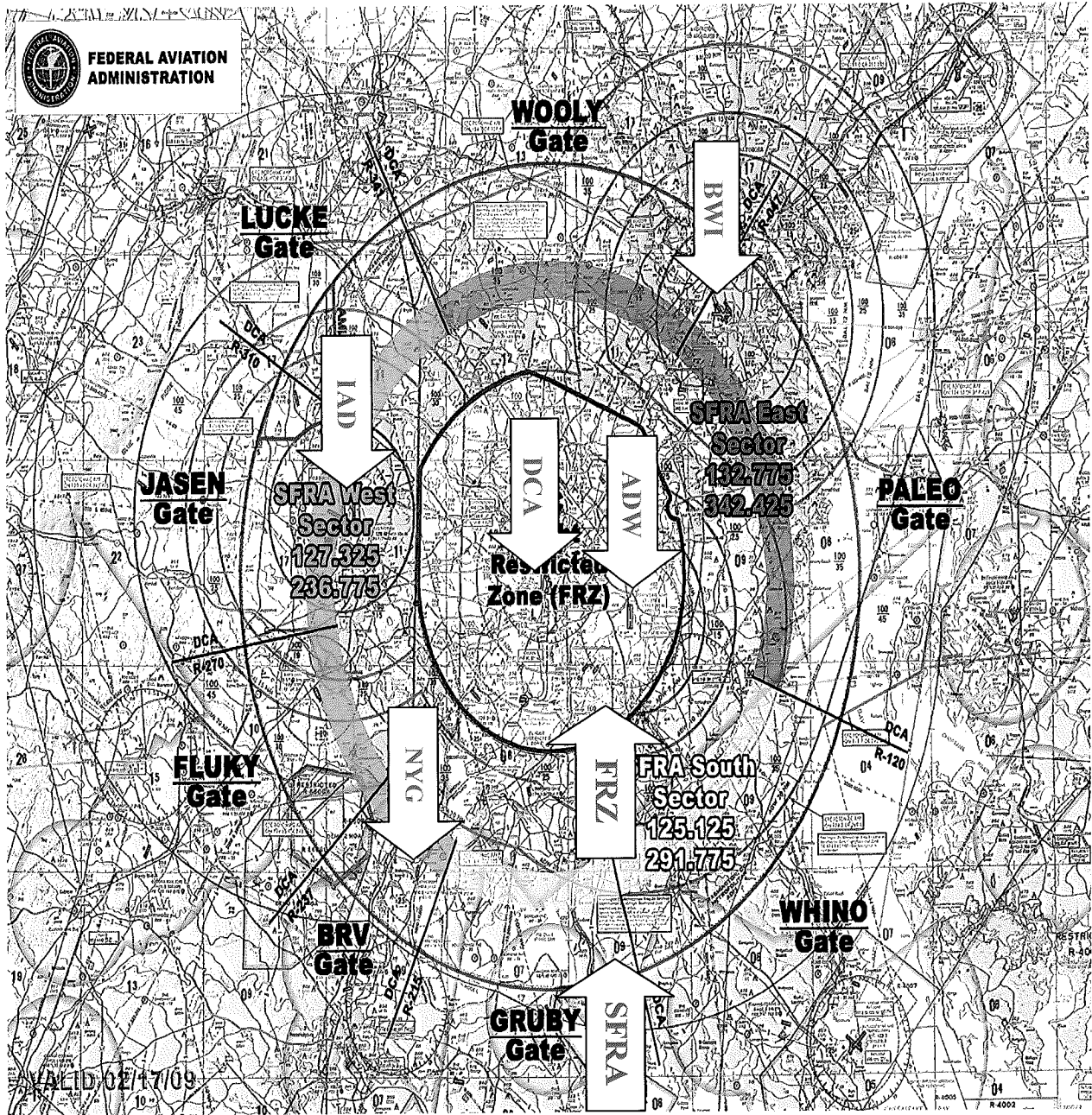
COMMANDING OFFICER	(703) 784-2442/2443/1432
EXECUTIVE OFFICER	(703) 784-2442/2443/1433
OPERATIONS OFFICER	(703) 784-1448
OPERATIONS CHIEF	(703) 784-1474
AIRFIELD MANAGER	(703) 784-1449
ATC FACILITY OFFICER	(703) 784-1455
ATC SNCOIC	(703) 432-0490
ATC OFFICE	(703) 784-1470
ATC MAINTENANCE OFFICER	(703) 784-1464
ATC MAINTENANCE CHIEF	(703) 432-0390
ATC MAINTENANCE	(703) 784-2490/2604
WEATHER OFFICE	(703) 784-2298/2468
FLIGHT CLEARANCE	(703) 784-2085
AIRCRAFT RESCUE FIRE FIGHTING (ARFF)	(703) 784-2571/4862
ARFF DISPATCH EMERGENCY	(703) 784-2312/2571
AIRCRAFT REFUELING	(703) 784-4297/4233
ARMORY	(703) 784-2247
HMX-1 ODO	(703) 784-2209
RANGE CONTROL	(703) 784-5321/5322
DSN PREFIX (784)	278-XXXX
DSN PREFIX (432)	378-XXXX



APPENDIX H  
AIRFIELD PHONE DIRECTORY

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## APPENDIX I

THE FLIGHT RESTRICTION ZONE (FRZ) AND  
SPECIAL FLIGHT RULES AREA (SFRA)**Reference:**

14 CFR Section 99.7, 99.139  
 AIM Chapter 5, Section 6  
 NOTAM FDC 3/2126 ZDC

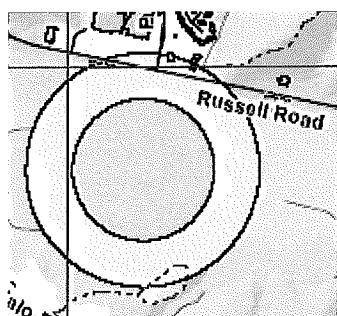
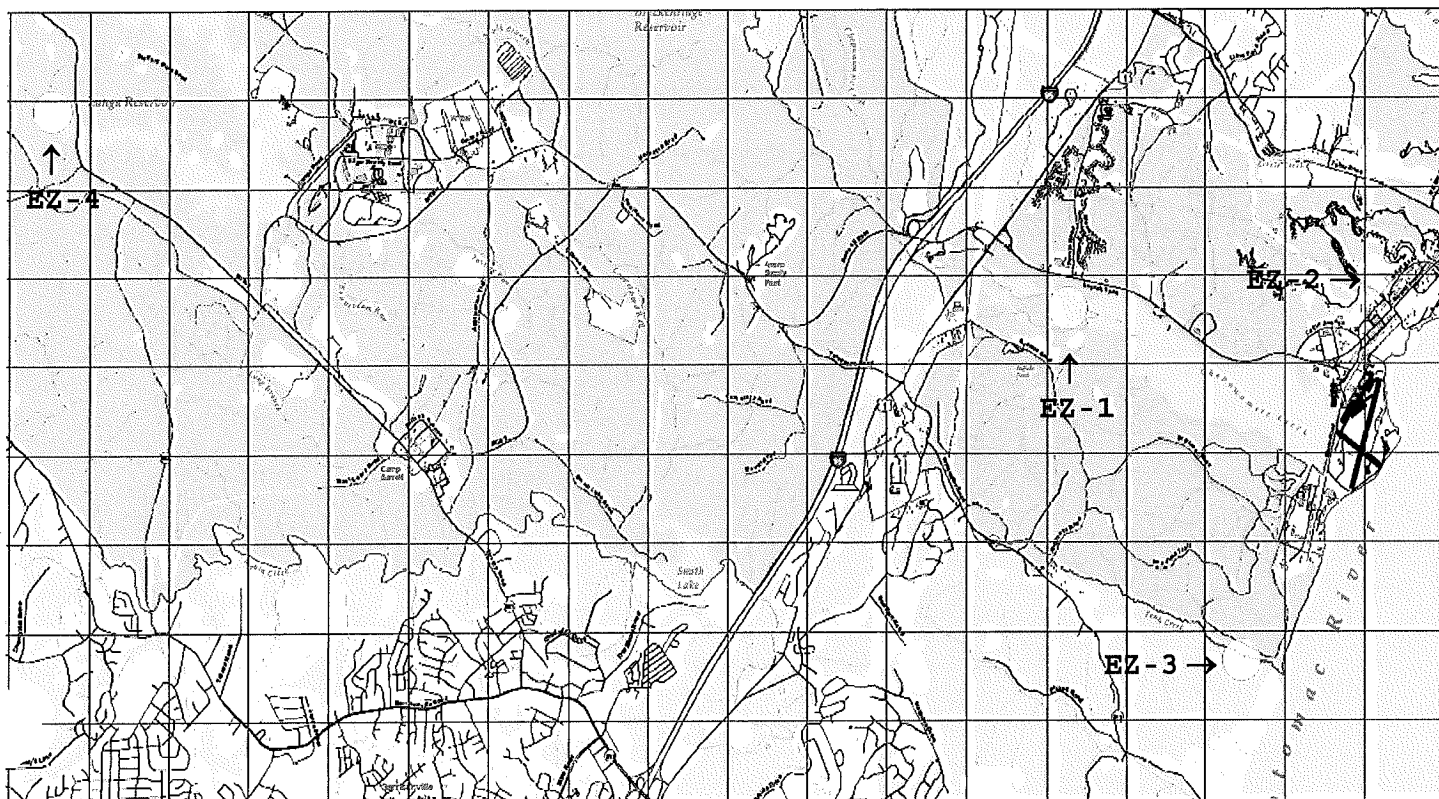
APPENDIX I

THE FLIGHT RESTRICTION ZONE (FRZ) AND  
SPECIAL FLIGHT RULES AREA (SFRA)

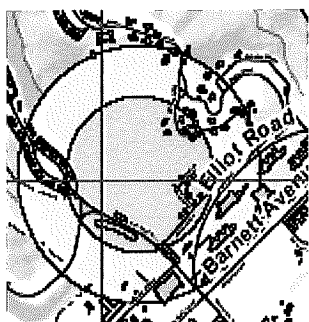
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# APPENDIX J

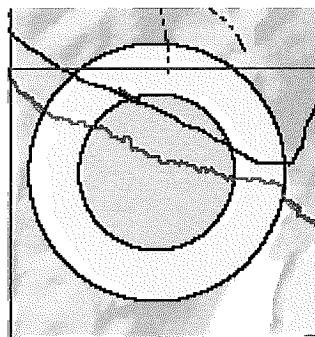
## BALD EAGLE NESTING AREAS



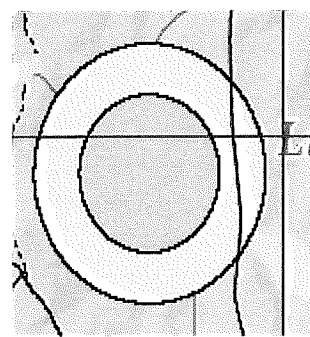
EZ-1



EZ-2



EZ-3

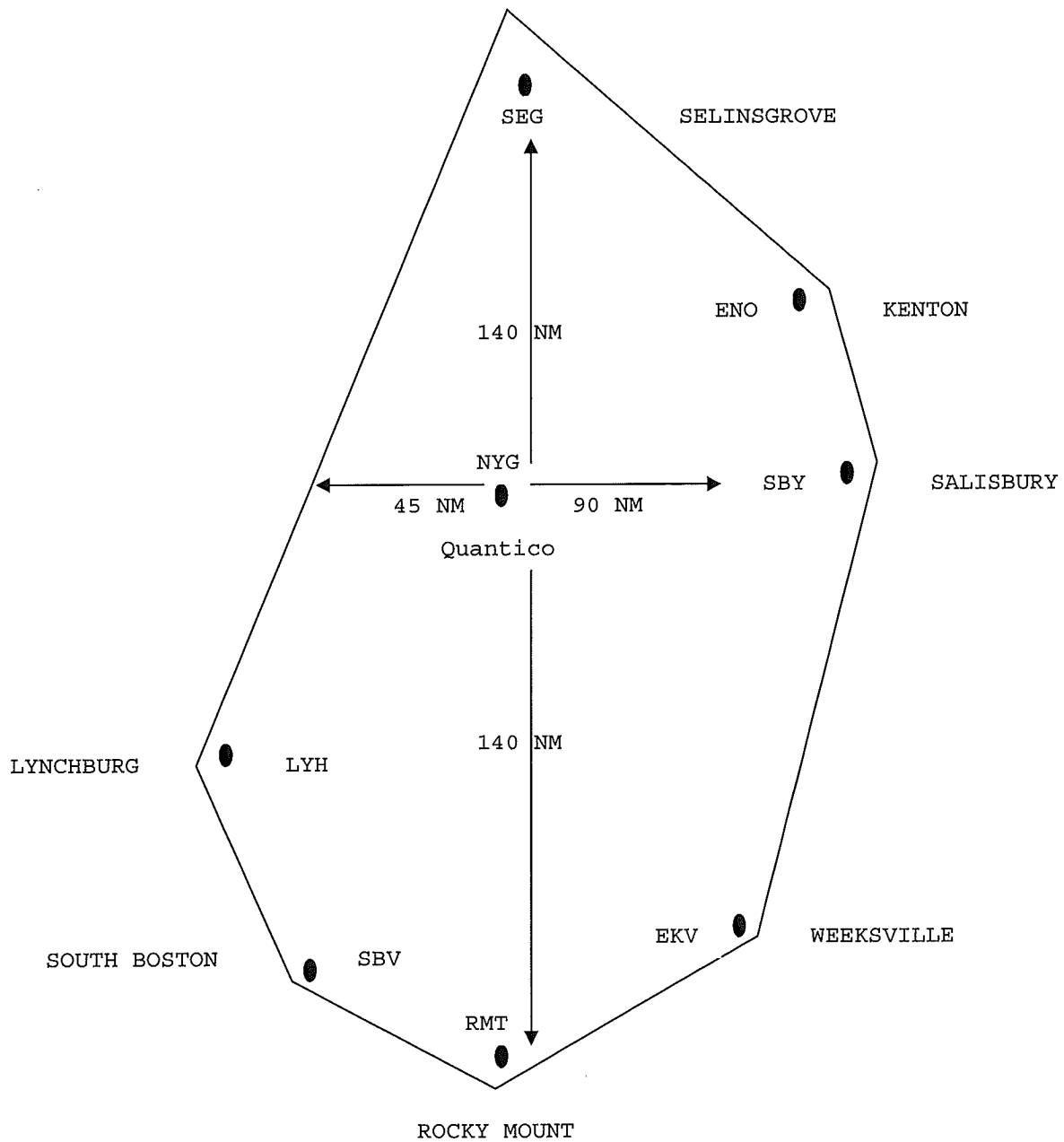


EZ-4

APPENDIX J  
BALD EAGLE NESTING AREAS

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# APPENDIX K LOCAL FLYING AREA



APPENDIX K  
LOCAL FLYING AREA

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APPENDIX L

ORDER CHANGE EXAMPLE



**UNITED STATES MARINE CORPS**  
MARINE CORPS AIR FACILITY  
2100 ROWELL ROAD  
QUANTICO, VIRGINIA 22134-5063

IN REPLY REFER TO:  
AFO P3700.1 Ch 1  
AF14

AIR FACILITY ORDER P3700.1

From: Commanding Officer  
To: Distribution List

Subj: MARINE CORPS AIR FACILITY AIRFIELD OPERATIONS MANUAL

1. Purpose. To direct a pen change to the basic order.
2. Action. The following are changes to the basic order.

Explain what change to make to what section / paragraph / subparagraph.

“Retype how the paragraph should read upon addition or amendment.”

More than one change is authorized per change letter.

3. Filing Instructions. File this change after the signature page.

I. M. COMMANDING



APPENDIX L  
ORDER CHANGE EXAMPLE

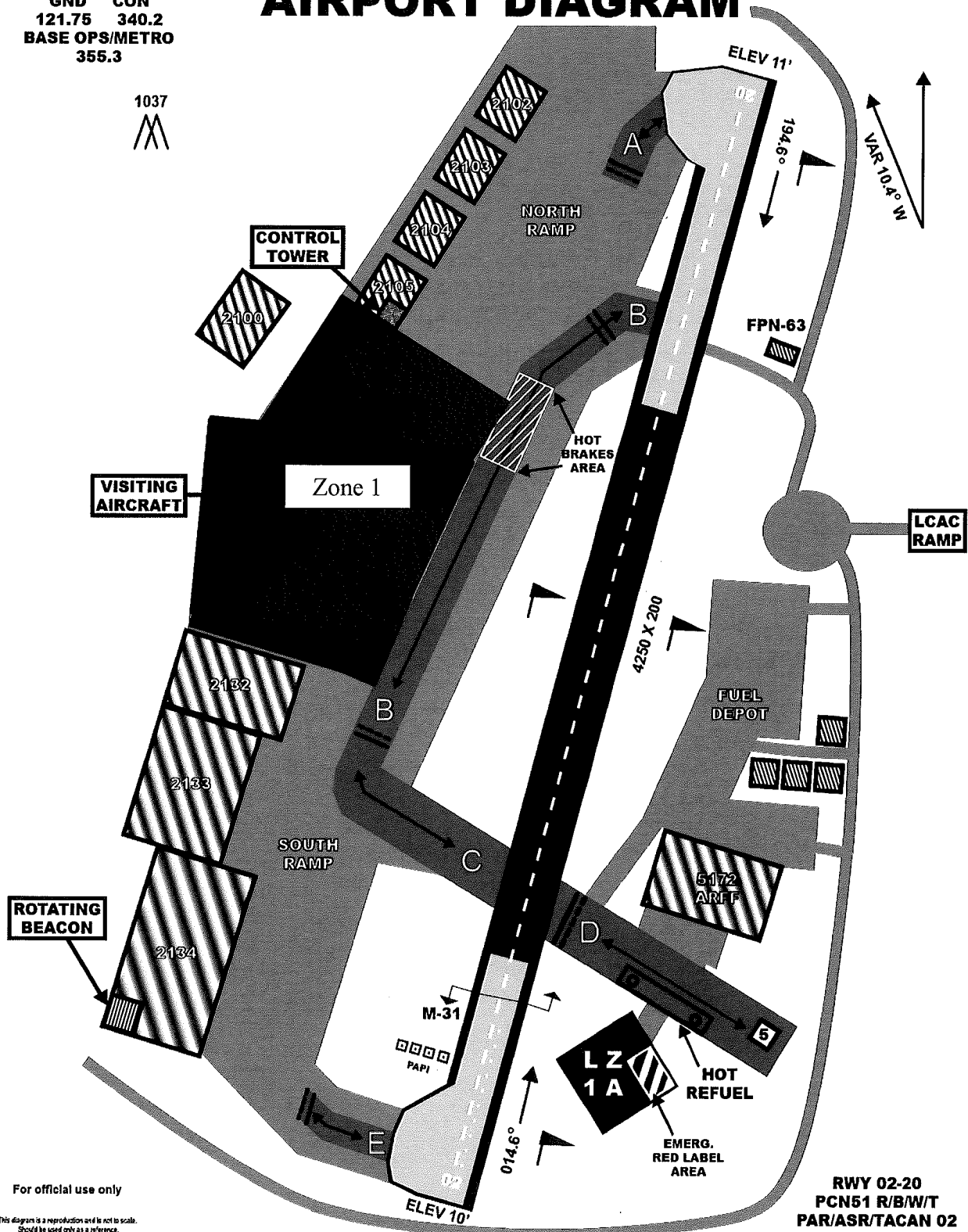
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## APPENDIX M

# MCAF Quantico (KNYG) AIRPORT DIAGRAM

ATIS ★ 263.15  
 QUANTICO TOWER  
 ★ 118.6 360.2  
 GND CON  
 121.75 340.2  
 BASE OPS/METRO  
 355.3

1037



For official use only

This diagram is a reproduction and is not to scale.  
 Should be used only as a reference.

RWY 02-20  
 PCN51 R/B/W/T  
 PAR/ASR/TACAN 02

APPENDIX M

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