

VIRTUAL UNITED STATES NAVY (VUSN) AND MIAMI CENTER (ZMA)
LETTER OF AGREEMENT
Effective: 06 JAN 2004

SUBJECT: VUSN SPECIAL USE AIRSPACE OPERATIONS

1. **PURPOSE:** This Letter of Agreement (LOA) outlines standard operating policies and procedures to be utilized by the Virtual United States Navy (VUSN) and Miami (ZMA) Center.
2. **CANCELLATION:** This LOA supercedes any and all previous LOA's between vUSN and ZMA.
3. **SCOPE:** The provision and procedures contained herein are supplemental to those contained in FAA Order 7110.65, FAA Order 7610.4 and VATSIM/VATUSA policies/procedures.
4. **DISTRIBUTION:** This LOA is intended for use by ZMA and VUSN personnel staffing ZMA military positions and joint-civil military positions, and for ZMA controllers operating positions adjacent to ZMA military and joint civil-military positions.
5. **BACKGROUND:** This LOA has been developed and shall be maintained to establish standard operating procedures, policy items, and flight management procedures for VUSN operations, so that ZMA ARTCC ATC staff and VUSN pilots can expect consistent ATC support within the ARTCC. The procedures set forth in this LOA shall be disseminated to VUSN leaders, pilots, and the ZMA ARTCC ATC Staff and controller roster.
6. **DEFINITIONS:**
 - a. ATCAA – Air Traffic Controlled Assigned Airspace is airspace defined by vertical/lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic.
 - b. Facilities - Two types: "joint civil/military" and "military-only". ZMA controllers and VUSN military controllers, who are certified as ZMA controllers shall be authorized to man "joint" facilities. ZMA controllers shall not be authorized to man "military-only" facilities.
 - c. MARSA- Military Authority Assumes Responsibility for Separation of Aircraft. A condition whereby the military services involved assume responsibility for separation between participating military aircraft in the ATC system.
 - d. MOA (Military Operation Area) - Airspace established outside of Class A airspace area to separate or segregate certain non-hazardous military activities from IFR traffic and to identify for VFR traffic where these activities are conducted.
 - e. Restricted Area - Airspace designated under 14 CFR Part 73, 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 en route charts. Where joint use is authorized, the name of the ATC controlling facility is also shown.
 - f. Warning Area – A warning area is airspace of defined dimensions extending from 3 nautical miles outward from the coast of the United States, that contains activity that may be hazardous to nonparticipating aircraft. The purpose of such warning areas is to warn nonparticipating pilots of the potential danger. A warning area may be located over domestic or international waters or both.

7. GENERAL POLICIES:

a. ZMA's role within this agreement is to provide air traffic control (ATC) to VUSN aircraft while within civilian sectors of ZMA ARTCC's boundaries, and to relinquish control of said aircraft when entering military controlled airports or special use airspace delineated in this LOA at the described Transfer of Control Points (TCP).

b. The VUSN shall have complete and unlimited control of all aircraft within the direct vicinity of their installations, up to and including arriving and departing aircraft from said airfields up to the described Transfer of Control Point (TCP), where control will then be transferred to ZMA_CTR or comparable controlling position.

c. Personnel are restricted to controlling airports that are within their respective organizations control. At no time shall personnel from either organization, unless affiliated, qualified or certified with both, control each other's airspaces.

(1) ZMA ARTCC controllers shall not, at any time, unless certified, qualified and affiliated with the VUSN, control either airspaces or facilities designated under the control of the VUSN as specified in this document.

(2) VUSN controllers shall not, at any time, unless certified, qualified and affiliated with ZMA ARTCC, control any airspaces or facilities other than those designated within this document.

(a) All VUSN controllers must hold an S-3 grade or higher to work an authorized shore-based military Approach Control position, and must be listed as approved for the position at both the VUSN and ZMA Websites.

(b) VUSN controllers acting as Carrier ATC Controllers (CATCC) must be designated by the VUSN Commander and listed as approved for the position at both the VUSN and ZMA Websites.

d. VUSN controllers are entitled the use of the ZMA ARTCC website and the information provided herein for the purpose of obtaining information on other possible destined aircraft within ZMA ARTCC airspace.

e. Both parties will abide by all VATUSA/VATSIM rules and regulations regarding Air Traffic Control (ATC), its airspaces, position restrictions, and its personnel policies.

f. Neither party can dictate or strike to change either parties' policies and guidelines set forth within their own charters.

g. VUSN military controllers shall be considered a unique class of visiting controller. They shall not be required to comply with the ZMA ARTCC visiting controller policy. They shall instead be subject to provisions contained solely in this LOA. This shall be referred to as "military controller privileges".

h. A Military Control Instructor shall be appointed by VUSN to certify and ensure that all personnel designated by either organization has received the appropriate instruction and has attained an appropriate level of proficiency to be approved for military controller privileges.

(1) The Military Control Instructor shall hold no less than a C-3 rating, and shall be eligible for an Instructor rating within VATUSA following appointment.

(2) The Military Control Instructor shall serve as a liaison between VUSN and ZMA ARTCC and will work with both organizations to facilitate interagency operations.

8. AUTHORIZED JOINT-USE AND MILITARY-ONLY FACILITIES:

a. The following facilities are designated as joint-use civil/military facilities, with the associated authorized positions. Properly certified VUSN or ZMA controllers may man these positions:

<u>Joint-use Facility</u>	<u>Authorized positions</u>
KNQX NAS Key West, FL	NQX_TWR, NQX_APP

b. The following facilities are designated as military-only facilities, with the associated authorized positions. These positions may be manned by properly VATSIM certified, and VUSN-designated military controllers:

<u>Military-only Facility</u>	<u>Authorized positions</u>
CATCC	CVNxx_TWR/APP/CTR NOTE: Only one is online at any one time

9. OPERATIONAL PROCEDURES AND RESPONSIBILITIES:

a. General. Unless otherwise coordinated, the following procedures shall apply:

(1) Military operations in excess of 250 knots below 10,000' should be conducted in Special Use Airspace to the maximum extent possible. No speeds above 250 KIAS over land is authorized at anytime.

(2) Unless otherwise coordinated, VUSN pilots are responsible for remaining within their specified area and exercising "see and avoid" during visual conditions.

(3) VUSN aircraft operating within specified warning areas are required to squawk 4 plus their three-digit side number. This is to readily identify the aircraft to both ZMA and VUSN personnel.

b. ZMA Responsibilities

(1) ZMA shall be responsible for separation of air traffic within airspace assigned to the ARTCC.

(2) MIA_CTR, when operating, shall issue advisories to civil aircraft when Warning Area airspace is reported as active.

(3) To the maximum extent possible, MIA_CTR should keep all civil aircraft clear of W-174 or W-465 if carrier operations are present.

(4) MIA_CTR will provide VUSN flight leaders using Warning Area Airspace with traffic advisories if civil aircraft penetrate an active Area. The term "whiskey alert" shall be used by ATC to indicate that a "spill in/out" situation (unauthorized penetration of the warning area) is imminent.

c. VUSN Responsibilities.

(1) Properly certified VUSN military controllers shall be authorized by LOA with ZMA to operate Carrier Air Traffic Control Centers (CATCC) for offshore CV operations.

(2) When a CATCC is in operation, the CATCC shall assume the responsibilities in W174, or W486 from MIA_CTR for the associated offshore Warning Area Complex in which the carrier is operating.

(3) If no MIA_CTR is online, the senior VUSN member shall be responsible for the proper conduct of all VUSN pilots operating within the confines of the Warning Area utilized.

(4) VUSN aircraft shall assume separation responsibility (MARSA) within Special Use Airspace(SUA) when operating in airspace that has been coordinated for use.

(5) VUSN chain of command is responsible for coordinating mission plans when multiple flights will use the same SUA complex. Flight leaders must inform MIA_CTR when multiple flights will be operating within the SUA.

(6) During CV operations, when no Carrier Air Traffic Control Center is operating, the senior ranking aircraft commander within the associated Warning Area shall coordinate carrier approaches and departures.

(7) VUSN Commanders will provide ZMA with the following information when aircraft carrier scenery is being issued and used by VUSN pilots in the area:

- (a) Carrier Hull number and Name (eg: CVN68, Nimitz)
- (b) Ship's Latitude/Longitude, or, bearing/range from major VORTAC.
- (c) Ship's TACAN Frequency

d. Special Use Airspace (SUA)

(1) The following Special Use Airspace is designated by ZMA as joint civil/military use airspace

<u>Complex</u>	<u>Floor</u>	<u>Ceiling</u>
W-168	SFC	UNLTD
W-174	SFC	UNLTD
W-465	SFC	UNLTD
Tortugas MOA	SFC	5000 feet

(2) At the time of SUA utilization, if MIA_CTR is offline, aircraft are permitted to conduct operations without any further coordination. If MIA_CTR opens while aircraft are using the SUA, the flight leader shall inform MIA_CTR the area is 'hot,' as soon as practical.

(3) MARSA if not previously granted, shall take effect once aircraft cross the entry fix. If MIA_CTR can not grant MARSA due to civil aircraft still in the SUA, ATC shall:

- (a) Issue a clearance that will insure separation with any civil aircraft still in the SUA, or
- (b) Issue a traffic advisory to the flight lead and instruct the flight to maintain VFR and issue a frequency change.

(4) Aircraft requiring IFR flight for return-to-base (RTB), shall contact ATC for an inflight IFR clearance no later than 5 minutes prior to exit from the SUA. The IFR route shall start from the exit fix. Aircraft shall proceed to and hold at the exit fix in a holding pattern that will keep them primarily within the SUA. Aircraft shall be radar identified at the exit fix and ATC shall assume separation responsibility.

e. Communications

(1) When operating in flights or elements, the flight leader shall be responsible for obtaining the ATC clearance and squawk codes for his/her flight. Wingman shall be instructed to squawk standby.

(2) Flight shall not use ATC frequency for flight air-to-air communication.

10. NAVY KEY WEST (KNNQX)/MIAMI CENTER (ZMA) STEREO ROUTES:

a. The following routes are ideal ingress/egress routes for VUSN flights to and from aircraft carriers.

(1) Return route altitude will be 8000 feet KEYS and NICK Routes.

(2) Pilots may abbreviate clearance request using requested route. Update delay in area for proper planning (ex. NQX..KEYS1/D2+00..NQX)

RTE NAME	AREA	ALT	ROUTE
KEYS-1	W174A	160	NQX..NQX340045..NQX315060..W174A/D1+00..NQX315060..NQX340045..NQX
KEYS-2	W174B	160	NQX..NQX315050..W174B/D1+00..NQX315050..NQX
KEYS-3	W174F	160	NQX..NQX340045..W174F/D1+00..NQX340045..NQX
KEYS-4	W174C	160	NQX..NQX190020..W174C/D1+00..NQX190020..NQX
KEYS-5	W174D	160	NQX..NQX210040..W174D/D1+00..NQX210040..NQX
NICK-1	W465	150	NQX..NQX105045..W465/D1+00..NQX105045..NQX
FMY01	W168	220	NQX..MARCI..RSW232035..W168A/D1+00..RSW232035..MARCI..NQX

b. The following routes are preferred routes for military flights to and from other airfields.

c. Pilots may abbreviate clearance request using requested route. (ex. NQX TWR (or) MIAMI CENTER, NAVY123, KEYWEST1A on request).

RTE NAME	DEST	ALT	ROUTE
HOMESTEAD (KHST)			
NQX1	KHST	170	NQX..CAJUN..HST
NQX1R	KNQX	160	HST..FALCN1..TYNEE..HST190036..NQX
MACDILL AFB (KCMF)			
NQX2	KCMF	220	NQX..RSW..BOOGI..MCF
NQX2R	KNQX	210	MCF..BRANDI..SRQ..RSW..NQX
PATRICK AFB (KCOF)			
NQX3	KCOF	230	NQX..PHK..VRB..PIPER..COF
NQX3R	KNQX	220	COF..COF140015..LAL..RSW..NQX
NAVY JACKSONVILLE (KNIP)			
NQX4	KNIP	230	NQX..PHK..ORL..BARBS..NIP204035..NIP
NQX4R	KNQX	250	NIP..GNV..LAL..RSW..NQX
TYNDAL AFB (KPAM)			
NQX5	KPAM	280	NQX..RSW..PIE.J41.LICKS..CAROL..PAM
NQX5R	KNQX	290	PAM..LICKS.J41.PIE..RSW..NQX

NAVY PENSACOLA (KNPA)			
NQX6	KNPA	350	NQX..RSW..PIE.J41.TLH..CEW..NPA141010..NPA
NQX6R	KNQX	330	NPA..CEW.J2.TLH.J41.PIE..RSW..NQX
NAVY NORFOLK (KNTU)			
NTU1	KNTU	330	NQX..DEEDS..PHK..ORL.J53.CRG.J174.EDDYS..NTU

11. CARRIER OPERATIONS IN W-168, W-174, AND W-465:

a. Carrier Air Traffic Control Center (CATCC) is the facility delegated responsibility for ATC during carrier operations. Authorized ATC text callsigns and frequency are CVNxx_TWR/APP/CTR and 135.80. Duties include:

(1) Primarily responsible for approach sequencing and departure separation services for VUSN aircraft operating to/from offshore carriers.

(2) Secondary responsibility is range control of offshore warning area complex that the carrier is operating in.

b. CATCC shall assign IFR departure routings in accordance with this LOA.

c. MIA_CTR shall have a fixed point-out of any oceanic traffic transiting to/from oceanic areas that may encroach upon VUSN operations.

d. CATCC shall be delegated an airspace consisting of a 50nm radius from the carrier, from surface to unlimited, not including airspace over land.

e. The primary users of this airspace shall be VUSN. Typical operations within offshore Warning Areas are combat training, carrier operations proficiency training, aerial refueling, and AEW/EW training.

f. MARSAs (Military Assumes Authority for Separation of Aircraft) shall be maintained by VUSN aircraft within a flight, element, CV marshal and pattern area, and during tanking. During MARSAs operations, only the flight leader shall be required to maintain contact with ATC, and this may be via the text channel.

g. When operating in flights or elements, the flight leader shall be responsible for obtaining ATC clearances and squawk codes for his flight. Wingman shall be instructed to squawk standby.

h. Flights shall not use ATC frequencies for air-to-air communication.