



LETTER OF AGREEMENT

Effective: 31 AUG 2016

SUBJECT: VUSN SPECIAL USE AIRSPACE OPERATIONS

Drafted by: RMDL Robert "Axe" Timberlake, Deputy Chief Naval Operations – Fleet 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 Washington DC (ZDC) Center.
2. **CANCELLATION:** This LOA supersedes any and all previous LOA's between VUSN and ZDC.
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 ZDC and VUSN personnel staffing ZDC military positions and joint-civil military positions, and for ZDC controllers operating positions adjacent to ZDC 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 ZDC 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 ZDC 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". ZDC controllers and VUSN military controllers, who are certified as ZDC controllers shall be authorized to man "joint" facilities. ZDC controllers shall not be authorized to man "military-only" facilities.
 - c. MARSAs- 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 enroute 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.

g. vZDC – The Virtual Washington Air Route Traffic Control Center.

7. GENERAL POLICIES:

a. vZDC's role within this agreement is to provide air traffic control (ATC) to vUSN aircraft while within civilian sectors of vZDC's airspace, and to relinquish control of said aircraft when entering military controlled airports or special use airspace delineated in this LOA [[when certified vUSN controllers are logged onto positions defined in section 8]].

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 [[positions defined herewith]] --said airfields up to the described Transfer of Control Point (TCP), where control will then be transferred to the en-route controller or comparable controlling position.--

(1) ZDC 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.--

c. vUSN controllers shall notify any overlaying or adjoining control facilities before they come online. Upon signing on after notification the vUSN controller(s) will have control of KNTU and Oceana airspace for all civil and military aircraft as necessary. vUSN controllers shall also have control for warning areas when the aircraft carriers defined in section 9(d). vUSN shall make known any additional airspace requests prior to signing in.

d. VUSN controllers are entitled the use of the ZDC --ARTCC-- website and the information provided herein such as VRC --maps--sector files, policy letters, procedural information or other possible pertinent data required for the positive control of military aircraft in vZDC airspace.

e. Both parties will abide by all VATUSA/VATSIM rules and regulations regarding Air Traffic Control (ATC) 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 ZDC 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". Each military controller will be certified by the Commanding Officer of VUSN to have completed required training and be competent/qualified to control traffic IAW VATSIM/ATC policies and procedures.

h. A Military Control Instructor shall be appointed by VUSN to certify and ensure that all designated VUSN personnel have received the appropriate instruction and have 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 VATSIM following appointment.

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

i. VUSN will use special equipment to place and operate a carrier for their operations. This equipment is available to each pilot and therefore each pilot can and may place a carrier in the Warning Area(s). This carrier is a moving platform and will be used to launch military fleet fighter and support aircraft and also to recover the same type aircraft aboard. This carrier will remain in the designated Warning Airspaces as indicated below.

8. AUTHORIZED FACILITIES:

These positions may be manned by properly VATSIM certified --, and— [[or]] VUSN-designated military controllers:

KNTU NAS Oceana, VA. NTU_TWR, NTU_APP **NOTE:** Only one position will be online at any one time.
KNFE NAS Fentres, VA. Used for fleet Field Carrier Landing Practice (FCLP) practice/qualifications.

CATCC (USS NIMITZ, CVN68) CV68_M_TWR (tower), CV68_M_APP (approach), CV68_M_CTR (marshal). Callsign "War Fighter"

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. Example 4001 will be issued to the Chief Naval Operations, 4101 is the fleet Commanding Officer. This is to readily identify the aircraft to both ZDC and VUSN personnel.

4) VUSN will use Warning Area W-387A (sfc to FL240) and Warning Area W-72B (sfc to unlimited) to conduct their CATCC operations. If ZDC is active at the start time of VUSN operations then the CATCC controller will coordinate with the active ZDC controller prior to assuming control of this airspace. This coordination will comprise of advising that the Warning Areas are active and what type of CATCC control will be used. If no CATCC control will be used then the senior ranking pilot will advise DC_CTR on the active frequency of the Warning Area(s) being active and that he is assuming control of the Warning Area.

b. vZDC Responsibilities

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

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

(3) To the maximum extent possible, DC_CTR should keep all civil aircraft clear of W-387A or W-72B when carrier operations are present.

(4) DC_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) vUSN will provide ZDC a list of names and CIDs of the CATCC controllers authorized to conduct CATCC operations. Also a single name will be also provided as the primary POC for coordination between VUSN command and ZDC staff.

(2) Properly certified VUSN military controllers shall be authorized by vZDC to operate Carrier Air Traffic Control Centers (CATCC) for offshore CV operations and authorize VUSN controllers to operate ATC in KNTU class D/E airspace to include extensions for KNFE (FCLP).

(3) When a CATCC is in operation, the CATCC shall assume the responsibilities in W-72B, or W-387A From DC_CTR for the associated offshore Warning Area Complex in which the carrier is operating.

(4) If no DC_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.

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

(6) VUSN CATCC or Senior Pilot in command is responsible for coordinating mission plans when multiple flights will use the same SUA complex.

(7) 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.

(8) VUSN Pilots/Commanders will provide ZDC with the following information when aircraft carrier scenery is being used by VUSN pilots in the area: (this information will be contained in the pilot's flight plan)

- (a) Carrier Hull number and/or Name (eg: CVN68, Nimitz)
- (b) Which Warning Area(s) will be used.
- (c) Ship's TACAN Frequency

(9) All aircraft must be served first come/first served. No priority will be given to any aircraft.

d Special Use Airspace (SUA)

(1) The following Special Use Airspace is designated by ZDC as joint civil/military use airspace
Complex Floor Ceiling
W-72B SFC UNLTD
W-387A SFC FL240

(2) At the time of SUA utilization, if DC_CTR is offline, aircraft are permitted to conduct operations without any further coordination. If DC_CTR opens while aircraft are using the SUA, the flight leader shall inform DC_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 DC_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) The carrier will always remain within the confines of the Warning Areas. If the ship exits the Warning Area, the CATCC controller or Senior Commander will take immediate action to return the carrier to the confines of the Warning Area and will advise DC_CTR of the spill out and what action is being taken.

(5) Aircraft requiring IFR flight for return-to-base (RTB), shall contact ATC for an inflight IFR clearance no later than OUTES intersection and 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.

(3) CATCC radio communication frequencies.

ICAO	Location	Tactical Call sign	Air Boss/TWR	Approach Controller	Marshal Controller
CV68	W387A/W72B	War Fighter	135.80	135.82	135.85

10 NAS Oceana, VA (KNTU) Operations without CATCC active.

a Flights leaving the CATCC operations area will proceed to OUTES intersection at 10000 ft MSL. If ZDC is active the flight will call up DC_CTR prior to OUTES and advise his intentions.

b. Flights leaving KNTU for the Warning areas will request to depart direct to OUTES intersection at 9000 ft MSL. Upon Sweet lock and Sweet comm with the carrier or prior to reaching KENSI intersection the aircraft will be instructed to contact "War Fighter Radar" (CV68_M_CTR/APP) on 135.85 mhz or 135.82 mhz respectively.

c. IF ZDC is active then the first flight into the area will request the Warning Area active then the last aircraft out of the Warning area will advise that the area is "cold".

11. CARRIER OPERATIONS IN W-72B, W-387B:

a. Current Aircraft Carrier Locations: due to the maneuverability of the carrier and it not being a static scenery item, the carrier will be situated within the confines of the Warning Areas.

b. Upon activation of the Warning areas DC_CTR will be advised of the specific area(s) that are hot and the carrier TACAN frequency.

c. Carrier Air Traffic Control Center (CATCC) is the facility delegated responsibility for ATC during carrier operations. Authorized CATCC text/callsigns are:

CV68_M_TWR, CV68_M_APP, CV68_M_CTR.

d. Duties include:

(1) Primarily responsible for approach sequencing and departure separation services for VUSN aircraft operating to/from offshore carriers. Separation and sequencing of departing/arriving traffic to KNTU Oceana NAS, VA. When manned.

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

e. CATCC shall assign IFR departure routings in accordance with this LOA and established ZDC policies/procedures.

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

g. CATCC shall be delegated an airspace consisting of the confines of the Warning Areas, from surface to the specified upper limit, not including airspace over land. NTU_M_TWR, NTU_M_APP will be delegated the class D/E airspace around KNTU and extensions to KNFE.

h. The primary users of this airspace shall be VUSN. Other virtual Navy organizations may use this LOA if they adhere to the stated policies and procedures set out by this LOA and subsequently become signatory agents to it. Typical operations within offshore Warning Areas are combat training, carrier operations proficiency training, aerial refueling, and AEW/EW training.

i. MARSAs (Military Assumes Authority for Separation of Aircraft) shall be maintained by VUSN aircraft within a flight, element, CV68 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.

j. 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.

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

12. ATC operations at KNTU:

a. Those individuals identified to have been certified by VUSN as CATCC controllers with at least a S3 grade or higher will be allowed by ZDC to control military aircraft only while operating to and from KNTU, NAS Oceana, VA. to include KNFE corridor extensions for FCLP practice.

b. The operating position will be NTU_M_TWR/APP and operate on freq TWR – 127.075 mhz and Approach – 123.90 mhz. Within the confines of the Class D/E airspace. Note: only one will be active at the same time.

c. No civilian traffic will be controlled by the VUSN controller while logged onto VATSIM.

d. The VUSN controller will adhere to all procedures and policies set forth under VATSIM ATC guidelines.

e. ATC service will be provided IAW FAA Order 7110.65, FAA Order 7610.4 and VATSIM/VATUSA policies/procedures.

f. The NTU_M_TWR/APP VUSN controller will utilize only approved ATC radar applications such as VRC, Euroscope...etc.

Department of the Virtual U.S. Navy

Letter of Agreement between
Virtual Washington DC Center and Virtual USN

Version 1.0

Approved By

_____Signed_____ Date 07/31/2016

Mike Hayden, Admiral
Chief Naval Operations

Virtual Washington ARTCC

Approved By

_____ Date _____

Ray Salvagnini,
Deputy Air Traffic Manager, vZDC

13. ATTACHMENTS

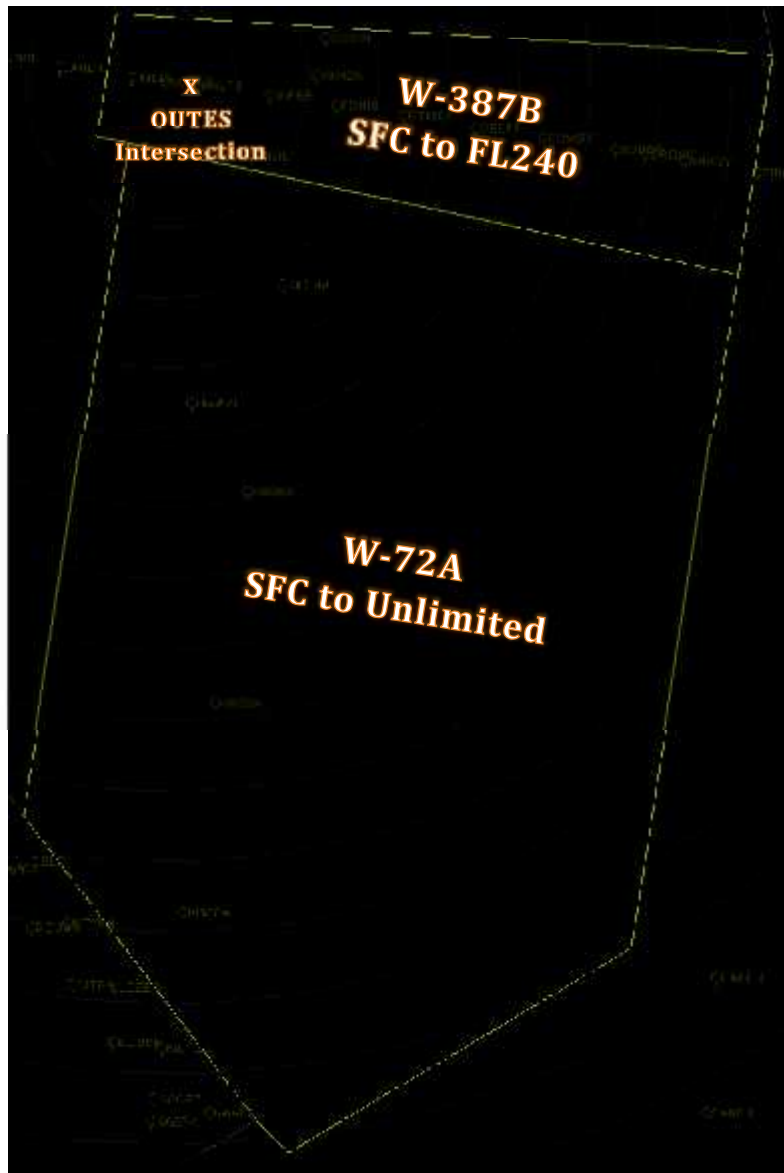
Attachment 1: World VFR map:



Warning Areas airspace:



KNTU and W-387B



Attachment 2: Names of Controllers delegated authority to Control Traffic.

Controller's Name	Controller's VATSIM CID	Controllers Rating
VADM Scott "LoVis" Gray	934228	CATCC-I
Lt Joe "Hawkeye" Gaviak	831521	CATCC-I
RDML Tomas "Swede" Hansson	840812	CATCC-I
*RDML Robert "Axe" Timberlake	1061479	CATCC
ADM Mike "Psycho" Hayden	800010	CATCC-I

REMARKS: CATCC-I: Carrier Air Traffic Control Center Instructor.

CATCC: Carrier Air Traffic Control Center.

*: Primary POC for CATCC and ZDC coordination