

Letter of Agreement
Washington ARTCC & United States Navy Virtual
Implementation Guidance and SUA Procedures

1 August 2025



ZDCARTCC
WASHINGTON DC

- Understanding VSOA on VATSIM
- Policy established through this LOA
- Controller & Pilot responsibilities
- Procedures Summary & Description
- IDS SUA Integration
- ERAM SUA Selections
- Other LOA Addressed Topics



- VSOA is “Virtual Special Operations Association”
- A VSOA is any organization that has meet the eligibility requirements, auditing, and training established by VATSIM to be considered a VSOA “Partner.”
- For the purpose of our LOA, vZDC works with Active Partners in the unrestricted category.
- Organizations that meet this eligibility have met a training standard to be able to perform these special functions to a set standard so as to not be a detriment to the other users on the network.



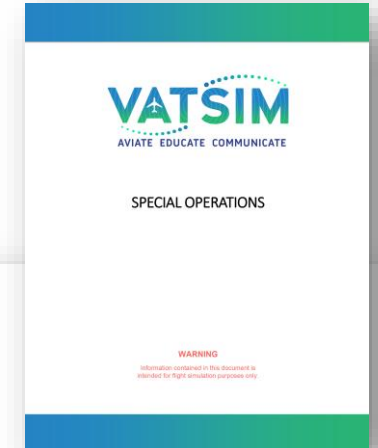
6 Policy

6.1 Activities Restricted to Virtual Special Operations Association (VSOA) Organizations

Only Virtual Special Operations Associations (VSOA) and their active members are permitted to engage in the following activities:

- Conducting joint training exercises with other approved VSOAs
- War games
- Air to air refuelling
- Carrier operations
- Flying low level military routes
- Flying escort missions
- Executing air combat manoeuvres
- Interception/scramble of other aircraft
- Having access to special use airspace.
- Search and Rescue Operations
- Firefighting Operations
- Launch and Recovery of Space Vehicles
- Air Displays (Flying Displays, Races)
- Fly unmanned aerial vehicles, e.g. Global Hawk

VATSIM does not allow civilian airlines or pilots who do not belong to a VSOA to perform the above operations. Any pilot wishing to take part in the activities is required to join a VSOA and complete the required training. Pilots may only perform these actions when flying under their VSOA's approved pilot identification/callsign. Any pilot found online and not complying with the rules may be subject to disciplinary actions in accordance with VATSIM Code of Regulations and Code of Conduct.



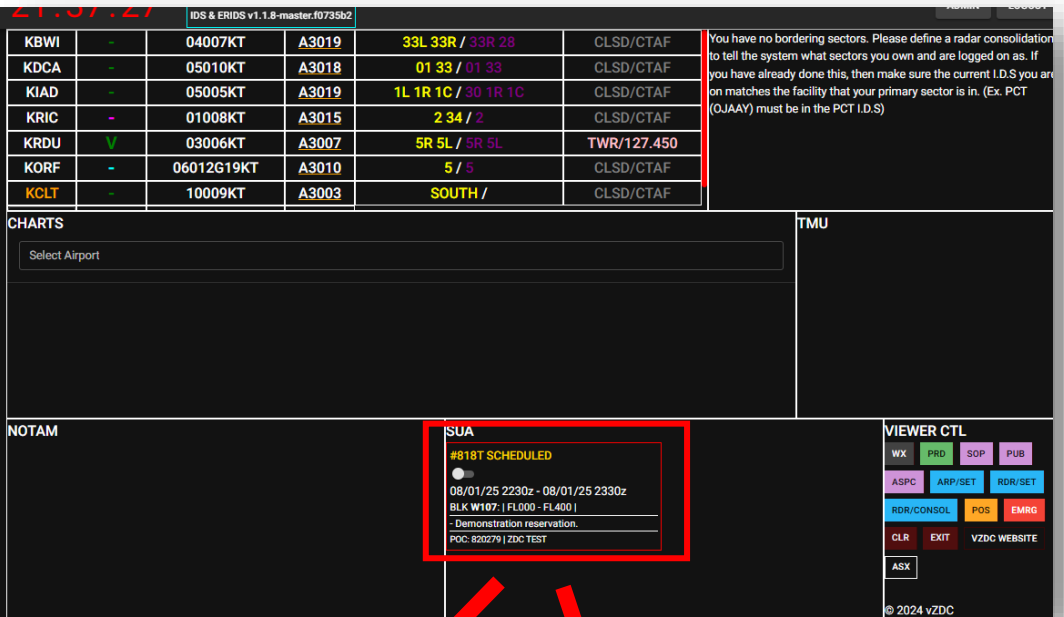
- vZDC is a large and active facility within VATUSA. This means we have the capability to train our controllers and provide the necessary support to accommodate VSOA activities within ZDC.
- Our goal is to simulate realistic operations on the network – this includes simulated military operations when conducted the “right way.”
- This LOA enables ZDC to establish the foundation for how operations under VSOA guidelines will be implemented here. This keeps us in the driver seat and ensures that support for these operations doesn’t create an adverse effect for the controllers and non-participating aircraft operating within ZDC.

- This letter is comprised of two key elements:
 - **Responsibilities:** This defines what each organization must do to ensure that the intent of this LOA is met.
 - **Procedures:** Defines the “how” each party complies. The procedures section is effectively the SOP for how the LOA is implemented.
 - Many VSOA type operations are addressed in this LOA.
- **ZDC Responsibilities:**
 - Retains ownership of all airspace and determines how/when it is delegated.
 - Releases SUA to VSOA pilots when the requirements of the LOA are satisfied
 - Provides scheduling tool for VSOAs seeking to access SUA
 - Limited facilities support as determined necessary (frequency, transmitter site, etc.)
- **VSOA Responsibilities:**
 - Utilize the airspace scheduling module provided on vzdc.org
 - Comply with all procedure elements of the LOA for *any* VSOA operations

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- Flight Plans.
 - Pilots will file a flight plan that includes an accurate route, and include in the remarks field the mission number, number of aircraft if a formation, if no mission number, then the SUA being requested real-time, and other pertinent remarks.
 - IFR is the preferred type of operation. However, pilots may operate under VFR. When doing so, VSOA pilots will file an IFR flight plan with all pertinent operational data and include in the remarks the flight will be completed VFR. *Note: this process allows all pertinent mission data to be collected and prevent having to have a detailed conversation on frequency. This is a simulated process that is roughly equivalent to military operations that would have normally filled via DD175/DD1801 flight plans.*
- Scheduling.
 - VSOA pilots are encouraged to schedule at least 24 hours in advance but may schedule at any point. Scheduled airspace will show in IDS.
 - Airspace scheduled less than 24 hours in advance will be serviced workload permitting by the controller when they are able to accommodate.
 - VSOA pilots will coordinate for airspace. ZDC will not police users airspace. Any VSOA seeking access to scheduled airspace will be cleared in, regardless of other users that may also be scheduled.

- Enroute and TRACON IDS will display an SUA module.
- Upcoming bookings will appear as “inactive.”
- When an aircraft receives a clearance to activate scheduled airspace, the controller that will work the airspace (usually center) will toggle the SUA in IDS to “active”
- When the mission is complete the controller will toggle the airspace booking to inactive.



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KRIC	-	01008KT	A3015	2 34 / 2	CLSD/CTAF
KRDU	V	03006KT	A3007	5R 5L / 5R 5L	TWR/127.450
KORF	-	06012G19KT	A3010	5 / 5	CLSD/CTAF
KCLT	-	10009KT	A3003	SOUTH /	CLSD/CTAF

SUA

#818T SCHEDULED

08/01/25 2230z - 08/01/25 2330z

BLK W107: | FL000 - FL400 |

- Demonstration reservation.

POC: 820279 | ZDC TEST

VIEWER CTL

WX PRD SOP PUB

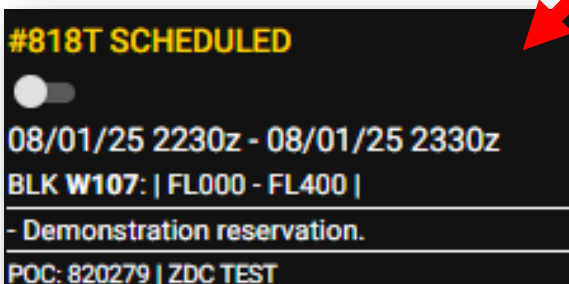
ASPC ARP/SET RDR/SET

RDR/CONSOL POS EMRG

CLR EXIT VZDC WEBSITE

ASX

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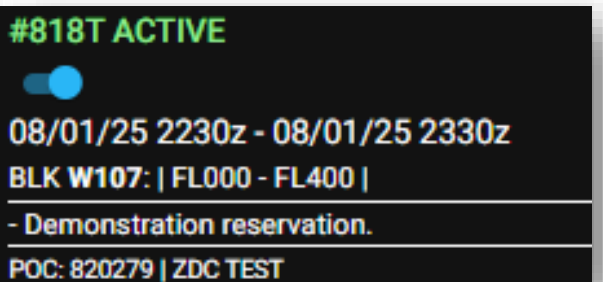
#818T SCHEDULED

08/01/25 2230z - 08/01/25 2330z

BLK W107: | FL000 - FL400 |

- Demonstration reservation.

POC: 820279 | ZDC TEST



#818T ACTIVE

08/01/25 2230z - 08/01/25 2330z

BLK W107: | FL000 - FL400 |

- Demonstration reservation.

POC: 820279 | ZDC TEST

- IDS will display scheduled SUA activity (*note: other mission types currently will **not** show as scheduled, but all other planning requirements will be met*).
- Pilots will file a flight plan (IFR with complete details, or a remark that the flight plan filled as IFR will be flown as a VFR flight). The flight plan will include:
 - Planned route to/from SUA
 - SUA to be utilized (or other training/AR route)
 - Mission Number
 - Number of aircraft in flight
 - Any other pertinent remarks
- Once a pilot calls for IFR clearance, review the flight plan for the elements above, and then clear the aircraft as filled (or amend as necessary).
- After a clearance is given, controllers may begin coordinating with ZNY/ZJX and any other facility to begin gaining release of the SUA outside of ZDC to the ZDC controller.
 - **NOTE:** IF THE CONTROLLER ISSUING THE CLEARANCE IS NOT THE CONTROLLER THAT WILL WORK THE AIRSPACE, NOTIFY THE AIRSPACE CONTROLLER THAT A CLEARANCE HAS BEEN ISSUED (EXAMPE: NTU_APP ISSUES CLEARANCE, THEN NTU_APP WILL NOTIFY ZDC A CLEARANCE HAS BEEN ISSUED SO ZDC MAY BEGIN AIRSPACE COORDINATION).
- ZDC and adjacent facilities will issue routing to non-participating aircraft to begin ensuring the airspace to be activated is cleared.

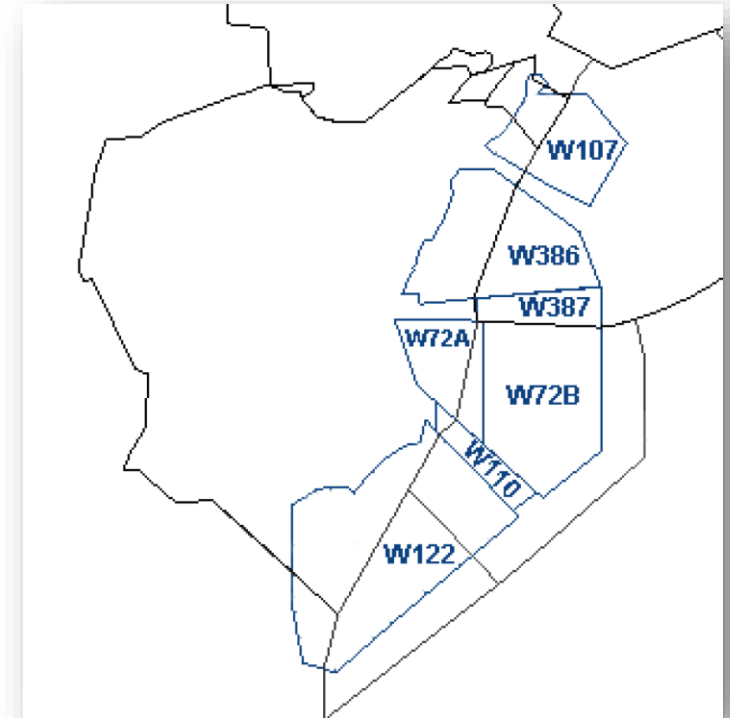
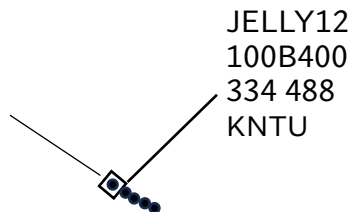
- Upon release of the departure that will activate airspace, show the SUA that will become activated as “hot” and ensure all non-participating aircraft are clear.
- If the controller releasing the aircraft for departure is not the controller working the airspace, notify the ZDC controller that will work the airspace the departure is released.
- If not already displayed, ensure the airspace map for the SUA is turned on.
 - Airspace maps are found in ERAM under alternate maps (push and hold “ALT” key to view the alternate maps list)
 - Map labels are being adjusted and may not match the below images exactly
 - Common SUA maps can be “torn off” to make easily accessible for toggling

Normal		H/O ALTS	MIA MVA	AIRPORT	VOR	J/Q AIRWAY	SHD SID	MTV SID	CHP SID	RDU STAR	N90 STAR
	NEW COMBD	APP ALTS	APP BNDRY	CNTRLN	VOR LABEL	V/T AIRWAY	SHD STAR	MTV STAR	CHP STAR	CLT STAR	PHL STAR
With “ALT”		ZDC SUA	PCT SUA	FAY SUA	GSB SUA	NHK SUA	NKT SUA	NTU SUA			
	NEW COMBD	W72	W107	W122	W386						

- ZDC maintains ownership of all airspace. ZDC *releases* airspace scheduled IAW the ZDC/USNv LOA to the party that has scheduled the airspace based on the mission number associated with the airspace reservation (4 numeric character mission numbers (i.e. 1234) are missions scheduled more than 24 hrs in advance, 3 numeric and one alpha character (i.e. 123A) mission numbers are missions scheduled less than 24 hrs in advance).
- Simplified – instead of separating from an aircraft, separation is now applied to the SUA that is made active.
- Controllers will clear aircraft to operate within their scheduled airspace using the following phraseology:

“[CALLSIGN] CLEARED INTO [SUA NAME], [BOTTOM ALTITUDE] THROUGH [TOP ALTITUDE], WORKING FREQUENCY [FREQUENCY], REPORT FIVE MINUTES PRIOR TO R-T-B ON [FREQUENCY], FREQUENCY CHANGE APPROVED.”

- *BACON ONE ONE, CLEARED INTO WHISKEY SEVENTY-TWO ALPHA, FLIGHT LEVEL TWO ZERO ZERO THROUGH FLIGHT LEVEL SIX ZERO ZERO, WORKING FREQUENCY ONE TWO NINER POINT SIX FIVE, REPORT FIVE MINUTES PRIOR TO R-T-B ON THIS FREQUENCY, FREQUENCY CHANGE APPROVED."*
- *TOAST FIVE ONE, CLEARED INTO WHISKEY THREE EIGHT SIX, SURFACE THROUGH FLIGHT LEVEL THREE ZERO ZERO, WORKING FREQUENCY ONE TWO NINER POINT SIX FIVE, REPORT FIVE MINUTES PRIOR TO R-T-B ON THIS FREQUENCY, USE CAUTION JELLY TWO TWO IN AIRSPACE, FREQUENCY CHANGE APPROVED.*
- **Recommended Practice:** Current ERAM limitations do not permit adding generic text. It is recommended that a block altitude be assigned on the aircraft datablock that encompasses the airspace altitude clearance.
 - Command: QZ {FLOOR}B{CEILING}[CID]



- Frequencies and associated transmitters are configured for each warning area.
- When clearing an aircraft into a scheduled warning area, assign the working frequency associated with the designated warning area
- Controllers do *not* need to monitor the working frequency continuously. The frequency assignment is made so that if the *controller* needs to contact the pilot there is a means to do so while providing pilots the ability to communicate with each other and avoid excess ATC communications

Note: *These assignments will be documented in a controller bulletin until published/incorporated into vZDC-ZDC-P-01.*



The screenshot shows a 'Voice Switch' window with a close button (X) in the top right corner. At the top, there are two buttons: 'Extend Primary Freq' and 'Add Secondary Freq'. Below these are five rows, each representing a frequency assignment for a specific warning area. Each row contains a frequency (in green text), a label, and a set of buttons for TX, RX, SPKR, XC, and XCA. A red trash icon is present at the end of each row.

Frequency	Label	TX	RX	SPKR	XC	XCA	Trash
133.725	ZDC - Gordonsville 32						
135.725	ZDC - Warn 107						
135.875	ZDC - Warn 122						
132.150	ZDC - Warn 386						
118.125	ZDC - Warn 72						

- Controllers will receive a report from the pilot on the controller's frequency 5 minutes prior to the aircraft's planned return to base time. This is to give the controller time to prepare for any coordination and otherwise be ready to clear the aircraft from the airspace back to its destination.
- A new IFR clearance does not need to be given unless there is a change from what was initially cleared (i.e. change of destination, etc.).
- Once the aircraft have resumed their flight plan the controller may show the airspace cold (reference SUA status control in IDS).
- ZDC Controllers must return the airspace released to ZDC to the owning agency (ZNY, ZJX, etc.).

- VATSIM doesn't support formation flight modifiers in the aircraft type field. For formations, VSOA pilots will include their formation count in the remarks.
- **Standard Formations.** Standard formation aircraft will consist of no more than 4 aircraft and will remain within 1 mile laterally and longitudinally and within 100 feet vertically of the flight leader.
 - Separation requirement: Add 1 mile to the appropriate radar separation minima.
 - *Example:* If a single aircraft would have needed 3 miles, for a standard formation, apply 4 miles.
 - Separate two standard formation flights by adding 2 miles to the minima.
 - Only the lead aircraft will squawk. Other aircraft in flight will squawk standby.
- **Non Standard Formations.** Non standard formations are when the flight is unable to meet standard requirements.
 - Pilot Procedures: The lead aircraft will squawk the assigned beacon code for the flight plan. The trailing aircraft will squawk the nondiscrete subset of the lead (i.e. Lead squawking 4322, the trailing aircraft will squawk 4300). All other aircraft in flight will squawk standby.
 - Separation requirement: Apply the appropriate separation minima to the perimeter of the airspace encompassing the nonstandard formation or from the outmost aircraft.

- This presentation is meant to focus on the immediately anticipated VSOA activities with ZDC. The LOA, however, is intended to serve the broader VSOA community and thus includes other operational areas.
- Additional operations covered via this LOA:
 - Aerial Refueling
 - Aircraft Interception
 - Carrier Operations
 - VSOA Provided Air Traffic Services (ATC within ZDC AOR)
- While these operations are not addressed in this briefing, controllers should be familiar with them as described in the LOA.

- As with any significant publication revision, errors are anticipated.
- Submit feedback via the Publications Feedback tool at vzdc.org (click your name in the top right then select “Profile” and the link for pubs feedback is in the quick links list.

