ZDCARTCC
WASHINGTON DC

# STANDARD OPERATING PROCEDURES

# BALTIMORE ATCT



22 December 2025
vZDC-BWI-P-01H

**VIRTUAL AIR TRAFFIC SIMULATION NETWORK**
VATUSA DIVISION – WASHINGTON ARTCC

**ORDER**
**vZDC-BWI-P-01H**

**SUBJ:** vZDC-BWI-P-01H, effective Mmmm d, 20yy

This order provides direction and guidance for the day-to-day operations of the Baltimore Air Traffic Control Tower (BWI ATCT) on the Virtual Air Traffic Simulation Network (VATSIM) and prescribes air traffic control procedures and phraseology. Controllers are required to be familiar with the provisions of these procedures.

This document is only to be used in a simulated environment. This document shall not be referenced or utilized in live operations in the National Airspace System (NAS). The Virtual Washington ARTCC (vZDC), VATUSA, and VATSIM do not take any responsibility for uses of this order outside of the simulation environment.

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# RECORD OF CHANGES

Initial Publication – January 19, 2017
February 19, 2017 (1.10 Revision)
March 10, 2017 (1.20 Revision)
April 2. 2017 (1.30 Revision)
January 23, 2020 (1.40 Revision)
July 1, 2024 (F Revision)
November 13, 2025 (G version)
December 22, 2025 (H version)

# Table of Contents

# Chapter 1. General

## Section 1. Introduction

### 1–1–1. PURPOSE OF THIS ORDER

This order describes the airspace structure, procedures, and relevant control-related policy for all controllers working an operational BWI ATCT position on the VATSIM network.

### 1–1–2. AUDIENCE

This order applies to all vZDC controllers and any non-assigned (i.e., visiting) controller receiving training from the vZDC Training Department to work any facility or airspace delegated to vZDC.

### 1–1–3. WHERE TO FIND THIS ORDER

This order is available on the vZDC web site at https://www.vzdc.org/publications/downloads under the Publications tab.

### 1–1–4. WHAT THIS ORDER CANCELS

This order cancels the Baltimore Washington ATCT SOP Version G, dated 5 July 2024.

### 1–1–5. EXPLANATION OF CHANGES

This revision expands on the publications formatting standard and incorporates hyperlinked header and front-page navigation quick links table. Guidance on vTDLS usage is now provided. Incorporation of IDS Departure Release Request functionality during TMI periods has been added. All BWI SIDs are climb via and the SOP is updated to reflect this update. Tower assumed radar identification procedures are added. This change incorporates the following controller bulletins: vZDC-BWI-B-2050707, *Tower Assumed Radar Identification (BWI)*, vZDC-B-20250923A, *Tower Responsibilities during Traffic Management Initiatives,* and vZDC-BWI-B-20251207, *BWI Climb Via SID Procedure Update*.

### 1–1–6. DENOTATION OF CHANGES

Changes are indicated via the use of the shading tool. The changed text is highlighted in grey to indicate a change. No indication is made where text was removed from the document. Grammatical revisions and other changes to improve readability without changes in policy will not be marked.

***EXAMPLE –***
*Changed or added text is highlighted in grey.*

### 1–1–7. HOW TO USE THIS DOCUMENT

**a.** This document is organized by chapters. The first two chapters are general information, while subsequent chapters define procedures for each position in the cab.

**b.** The use of hyperlinks throughout this publication is configured to provide quick access to often needed pieces of information. In addition to standard document reference hyperlinks, the use of quick link “buttons” is used throughout. Boxed and/or shaded content indicates a shortcut may be linked.

**c.** The grid on page one of this document (also accessible by clicking the “BWI” box at the top left of the SOP document) is an abbreviated table of contents with hyperlinked content for quick access to commonly referenced materials.

***EXAMPLE –***

**BWI**

# Section 2. Terms of Reference

### 1–2–1. WORD AND TERM MEANINGS

**a.** Arrivals. Refers specifically to arriving aircraft on an IFR flight plan.

**b.** Delegated Airspace. The airspace that is assigned to a specific sector or position within an individual facility.

**c.** Departures. Refers specifically to departing aircraft on an IFR flight plan.

**d.** VFR Arrival. Refers to an aircraft arriving to the airport under VFR.

**e.** VFR Departure. Refers to an aircraft departing from the airport under VFR.

### 1–2–2. ABBREVIATIONS

As used in this order, the abbreviations listed below have the following meaning:

**a.** ATAP. Automated Terminal Proximity Alert.

**b.** AOA. At or above.

**c.** AOB. At or below.

**d.** ATCT. Air Traffic Control Tower.

**e.** ATIS. Automated Terminal Information Service.

**f.** CHP. Refers to the “Chesapeake Area” of Potomac TRACON.

**g.** CRC. Consolidated Radar Client.

**h.** FRZ. Flight Restriction Zone.

**i.** PCT. Potomac TRACON; applying to the entirety of the facility.

**j.** SFRA. Special Flight Rules Area.

**k.** SOP. Standard Operating Procedures.

**l.** STARS. Standard Terminal Automation Replacement System. STARS is the terminal control radar software component of vNAS and CRC.

**m.** TDLS. Tower Data-link System.

**n.** vNAS. Virtual National Airspace System. vNAS is the collective total of all systems and components that make up the virtual air traffic network as simulated in the US.

**o.** ZDC. Washington ARTCC.

# Chapter 2. Operations

## Section 1. Operational Positions

### 2–1–1. ALL POSITIONS AND FREQUENCIES

*TBL 2-1-1*
Positions and Frequency Chart

| Position | Position ID | STARS Handoff | Frequency |
|---|---|---|---|
| Clearance Delivery | CD | Not assigned | 118.05 |
| **Ground West** | **GC1** | **11** | **121.9** |
| Ground East | GC2 | Not assigned | 120.2 |
| **Local West** | **LC1** | **11** | **119.4** |
| Local East | LC2 | Not assigned | 123.75 |
| Controller in Charge | CIC | Not assigned | Not assigned |

***NOTE –***
*Bold text is the primary frequency. GC2 combines to GC1, LC2 combines to LC1, CD combines to GC1. GC1 combines to LC1. CIC function is performed by LC1 when not staffed.*

# Section 2. Runway Configurations

### 2–2–1. PREFERRED RUNWAY CONFIGURATION

The preferred runway configurations are listed in 2-2-2 and 2-2-3. However, the local controller may utilize non-standard runway configurations as weather and traffic conditions permit so long as:

**a.** The configuration does not negatively effect traffic flow.

**b.** The configuration is deemed necessary due to weather and traffic conditions.

**c.** Potomac Consolidated TRACON (PCT) is aware of the non-standard runway configuration.

### 2–2–2. EAST OPERATIONS

Runway 15R is the primary departure runway for all turbojet aircraft. Runway 15L is the preferred arrival and departure runway for general aviation aircraft. Runway 10 is the primary arrival runway for turbojet aircraft.

### 2–2–3. WEST OPERATIONS

Runway 28 is the primary departure runway for all turbojet aircraft. Runway 33R is the preferred arrival and departure runway for general aviation aircraft. Runway 33L is the primary arrival runway for turbojet aircraft.

***NOTE –***
*West Operations is the calm wind runway configuration. When the wind is less than 5 knots west operations should be used.*

### 2–2–4. CHANGE IN RUNWAY CONFIGURATION

The CIC must determine the need for making any active runway changes. A routine runway change occurs when traffic and/or weather conditions are such that the change can be made with little or no degradation in service. In this instance, departures are allowed to depart from the runway originally assigned. Use the following procedures to complete a routine runway change:

**a.** Provide PCT with the last departure's identification, its estimated time of departure, and the departure runway.

**b.** Once the last aircraft departs, ensure that no other aircraft departs BWI without a release from PCT.

**c.** Ensure that departures off the new runway have received the appropriate departure procedure or instructions, and departure control frequency, as needed.

**d.** PCT shall inform the CIC when the sector reconfiguration has been completed.

**e.** Ensure the ATIS has been updated and reflects the proper status.

# Section 3. Airport Surface Detection Equipment (ASDE-X)

### 2–3–1. REQUIREMENTS

Ground Control and Local Control shall ensure all aircraft operating in a movement area have transponders on with Mode C.

### 2–3–2. PROCEDURES

**a.** Controllers will review FAAO 7110.65, Chapter 3, Section 6, *Airport Surface Detection Procedures*, for general procedural guidance in use of ASDE.

**b.** Configure the safety logic in ASDE-X for either EAST or WEST operations.

**c.** When an arrival aircraft (still airborne, prior to the landing threshold) activates a warning alert, the controller must issue go-around instructions.

**d.** When two arrival aircraft, or an arrival aircraft and a departing aircraft activate an alert, the controller will issue go-around instructions or take appropriate action to ensure intersecting runway separation is maintained.

**e.** For other safety logic system alerts, issue instructions/clearances based on good judgment and evaluation of the situation at hand.

# Section 4. DC SFRA Procedures

## 2–4–1. PROCEDURES

DC SFRA procedures are simulated on the VATSIM network using a modified procedure. VFR departures are expected to file a DC SFRA flight plan. However, the FRZ does not impose higher requirements for operations within. Therefore, normal VFR operations, including pattern work, shall be allowed if workload permits.

***REFERENCE –***
*VATSIM DC SFRA Procedures – vzdc.org/publications/downloads*
*VATSIM DC SFRA Pilot Guide – vzdc.org/publications/downloads*
*vZDC-PCT-P-01G, Ch 2, Sec 8, Special Flight Rules Area*

# Chapter 3. Clearance Delivery

## Section 1. Duties

### 3–1–1. RESPONSIBILITIES

Clearance Delivery must:

**a.** Formulate and issue IFR and VFR clearances to aircraft departing BWI.

**b.** Review proposed flight plan information received and verify for accuracy and amend routings and altitudes, as necessary, in accordance with appropriate LOA's.

**c.** For aircraft departing to a constrained airport (airport subject to a traffic management initative such as EDCT or Call for Release) CD will:

**1.** Coordinate with the pilot to determine their expected pushback or planned taxi time.

**2.** Submit a departure release request through IDS.

**3.** Ensure the pilot is advised of the anticipated wheels up time.

**4.** Ensure GC and LC are aware of the aircraft's wheels up time. This may be considered coordinated when the correct release time is displayed in the IDS released aircraft list within IDS.

### 3–1–2. IFR DEPARTURE INSTRUCTIONS

All IFR departures should be assigned a departure and transition consistent with their direction of flight. If an aircraft is unable to fly a SID, they shall be assigned radar vectors to their initial fix. Climb via SID shall be used for all aircraft on a SID. All other aircraft shall be issued an initial altitude of 4,000 feet, and to expect their filed cruise altitude ten minutes after departure.

### 3–1–3. TOWER DATA-LINK SERVICES (VTDLS)

BWI is equipped with vTDLS to issue Pre-Departure Clearances (PDCs) to IFR aircraft. TDLS shall be utilized for all eligible aircraft unless in the controller's judgment a voice delivered clearance is more operationally advantageous.

***REFERENCE –***
*vZDC-A-01F, para 4-1-4, Virtual Tower Data Link System (vTDLS)*

### 3–1–4. VFR DEPARTURE INSTRUCTIONS

**a.** VFR aircraft requesting flight following shall have the following in their VFR flight plan prior to departure:

**1.** Destination airport

**2.** Aircraft type

**3.** Requested VFR altitude

**b.** VFR aircraft remaining in the pattern will be assigned a VFR code. All VFR departures shall receive a class B clearance with a restriction to maintain VFR at or below:

**1.** Turboprop and Turbojet Aircraft – 3,500

**2.** Propeller and Helicopter Aircraft – 2,000

**c.** Use of the STARS VFR flight plan entry function is encouraged.

***NOTE –***
*VFR aircraft remaining in the pattern do not require an altitude restriction.*

### 3–1–5. DEPARTURE FREQUENCY ASSIGNMENT

Assign departure frequencies in accordance with an aircraft's SID, departure gate, or direction of flight.

**a.** East/Southeast – GRACO/1G (124.55)

**b.** Southwest/West/North – WOOLY/1W (128.7)

# Section 2. Restrictions

### 3–2–1. ALTITUDE RESTRICTIONS

IFR aircraft will be assigned an expected final cruise altitude in accordance with the table below when destined to destination airports included in the table below. Pilots may make a request for higher with PCT or ZDC once airborne and it may be approved as an operational request at that time.

*TBL 3-2-1*

IFR Departure Altitude Restrictions

| Destination | Turbojet | Turboprop/Propeller |
|---|---|---|
| DCA, IAD, HEF | 4,000 | 4,000 |
| EWR, TEB, LGA | FL210 | N/A |
| JFK | 17,000 | N/A |
| MTN | 3,000 | 3,000 |
| ORF | 14,000 | N/A |
| PHL | 11,000 | 7,000 |
| RIC | 14,000 | 10,000 |

# Section 3. Departure Gates

## 3–3–1. GENERAL

To standardize departure flows and ensure proper and expeditious routing of traffic, PCT uses departure exit gates for IFR Departures to destinations outside of PCT airspace. Every IFR aircraft leaving BWI must leave PCT airspace bound for one of these gates, unless coordinated otherwise.

## 3–3–2. HIGH ALTITUDE DEPARTURE GATES

High altitude departure gates should be utilized for aircraft filed above 10,000 feet.

***REFERENCE –***
*vZDC-PCT-P-01G, para 6-4-11, Potomac TRACON Departure Gates chart*

***NOTE –***
*Prop and turboprop aircraft may be routed via a low altitude gate regardless of altitude.*

*TBL 3-3-2*
BWI High Altitude Departure Gates

| Gate | Routing/Direction |
|---|---|
| BUFFR | NW |
| CLTCH | SW |
| DAILY/COLIN | S/SE |
| JERES | N/NW |
| JDUBB | SW |
| OTTTO | W |
| PALEO | NE |
| RAMAY | W |
| SCRAM | SW |
| SWANN | NE |
| WOOLY | NE |

## 3–3–3. LOW ALTITUDE DEPARTURE GATES

Low altitude departure gates should be utilized for aircraft filed at or below 10,000 feet.

***NOTE –***
Low altitude aircraft may receive vectors to join any low altitude airway.

*TBL 3-3-3*
BWI Low Altitude Departure Gates

| Gate | Routing/Direction |
|---|---|
| CSN | W/SW |
| EMI | N/NE |
| GVE | S/SW |
| MRB | N/NW |
| PXT | SE |

# Chapter 4. Ground Control

## Section 1. Duties

### 4–1–1. RESPONSIBILITIES

Ground Control must:

**a.** Sequence aircraft that have the same first fix or direction of departure with other aircraft.

**b.** Keep runway exits clear for landing aircraft.

### 4–1–2. RUNWAY CROSSINGS

Blanket crossings are not approved at BWI. Ground control must verbally coordinate with local control for any aircraft that require a runway crossing.

### 4–1–3. RUNWAY ASSIGNMENT

**a.** In East operation, assign runways to departure aircraft as follows:

**1.** Turbojets – Runway 15R

**2.** Props – Runway 15L

**b.** In West operation, assign runways to departure aircraft as follows:

**1.** Turbojets – Runway 28

**2.** Props – Runway 33R

***NOTE –***
*Assigning an aircraft a non-standard runway requires coordination with local control via verbal or nonverbal methods.*

# Section 2. Taxiway Utilization

### 4–2–1. GROUND EAST

Ground East is responsible for movement areas east of Pier C as depicted in Appendix A.

**a.** When in West operation, Ground East shall utilize taxiways Bravo and Charlie for runway 28 departures.

**b.** When in East operation, Ground East shall instruct aircraft to hold short of taxiway Uniform on taxiway Tango or hold short of taxiway Tango on taxiway Alpha for runway 15R departures. Once holding short, Ground East shall transfer aircraft to Ground West.

### 4–2–2. GROUND WEST

Ground West is responsible for movement areas west of Pier C as depicted in Appendix A.

**a.** When in West operation, Ground West shall utilize taxiway Uniform for runway 28 departures. For aircraft requesting runway 33R, Ground West shall instruct aircraft to hold short of taxiway Uniform on taxiway Tango. Once holding short, Ground West shall transfer aircraft to Ground East.

**b.** When in East operation, Ground West will receive aircraft from Ground East on taxiways Tango and Alpha assigned to runway 15R. Ground West shall continue taxing these aircraft to runway 15R. For aircraft requesting runway 15L, Ground West shall instruct aircraft to hold short of taxiway Uniform on taxiway Papa. Once holding short, Ground West shall transfer aircraft to Ground East.

### 4–2–3. PUSHBACK PROCEDURES

**a.** Ground will approve pushbacks onto taxiways A and T. Tail direction shall be specified.

***PHRASEOLOGY:***
*PUSHBACK ON ALPHA APPROVED, TAIL WEST.*

**b.** During periods of high volume, such as events, Ground Control may approve pushbacks for aircraft that would pushback into a non-movement area. If Traffic Management Initiatives (TMI) are in effect, Ground Control shall instruct aircraft affected by the TMI to advise ready for pushback.

**c.** Ground West shall assume responsibility for approving pushbacks into the non-movement area between pier B and C.

# Chapter 5. Local Control

## Section 1. Airspace Utilization

### 5–1–1. AIRSPACE

Local Control assumes responsibility for the airspace within 5 NM of BAL at and below 3,000 feet and between 5 NM – 7NM of BAL below 1,500 feet.

### 5–1–2. LOCAL EAST

Local East is responsible for the airspace depicted in Appendix B and C and runway 15L/33R.

### 5–1–3. LOCAL WEST

Local West is responsible for the airspace depicted in Appendix B and C and runways 15R/33L and 10/28.

# Section 2. Departure Procedures

## 5–2–1. DEPARTURE INSTRUCTIONS

Assign an initial heading to fly for departure aircraft that are *not* cleared via a SID. Aircraft cleared via a SID shall not be issued a departure heading unless necessary for traffic and coordinated with PCT prior to the aircraft being cleared for takeoff.

*TBL 5-2-1a*
Departure Headings (East Operations)

| East Operation | | |
|---|---|---|
| Aircraft Type | Departure Sector | |
| | WOOLY | GRACO |
| Turbojets | 330 | 120 – 150 |
| Props | 040 – 120 | 100 – 120 |

*TBL 5-2-1b*
Departure Headings (West Operations)

| West Operation | | |
|---|---|---|
| Aircraft Type | Departure Sector | |
| | WOOLY | GRACO |
| Turbojets | 270 – 290 | 150 |
| Props | 310 – 330 | 360 – 030 |

## 5–2–2. LINE UP AND WAIT (LUAW)

**a.** LUAW Procedures are authorized at BWI.

**b.** Use LUAW when it is expected the aircraft will depart after conflicting traffic is clear of the runway/ intersection.

**c.** Utilize good operating practices and memory aids as needed when using LUAW procedures.

**d.** Landing clearances need not be withheld for traffic holding in position.

## 5–2–3. DEPARTURE RELEASES

**a.** Automatic departures are authorized. Aircraft subject to a Traffic Management Initiative (TMI) such as an EDCT or call for release program must depart within their designated release validity period. Automatic departures will be suspended until PCT restores automatic departures when any of the following occur:

**1.** The previous arrival conducts an unplanned go around and automatic departure releases are not granted on initial go around coordination from PCT.

**2.** PCT cancels automatic releases.

**3.** An aircraft is departing a non-standard (non ATIS advertised) departure runway.

**b.** While automatic departures are suspended, Local Control must call PCT for release stating the following information:

**1.** Callsign.

**2.** Runway departing.

**3.** SID and transition, initial fix, or heading to be assigned on departure.

**4.** Departure releases are valid for 5 minutes unless otherwise coordinated at time of release with PCT.

## 5–2–4. TOWER ASSUMED RADAR IDENTIFICATION PROCEDURES

**a.** Prior to frequency change to departure, the BWI local controller must observe the departing aircraft acquire on the STARS TDW within one mile of departure end of runway. Once this track acquisition occurs, and assuming correct acquisition, then the aircraft may be switched to departure.

**b.** If acquisition does not occur, then the local controller must notify the PCT departure controller *before* frequency change to departure occurs and provide the callsign of the aircraft and its SID or assigned heading.

**c.** The primary sector performing departure service will utilize autotrack for all BWI departures.

# Section 3. Arrival Procedures

### 5–3–1. MISSED APPROACH / GO AROUND PROCEDURES

Local Control shall immediately coordinate with PCT when an IFR aircraft conducts a missed approach/go around. Unless otherwise coordinated, issue the aircraft instructions per table 5-3-2 “Missed Approach/Go Around Instructions.”

**a.** After a missed approach/go around automatic releases are suspended until released by PCT.

**b.** Tower may re-sequence props providing the Tower ensures separation between the go around and all other pertinent traffic and does not affect the sequence of other IFR arrivals sequenced by PCT.

*TBL 5-3-2*
Missed Approach/Go Around Instructions

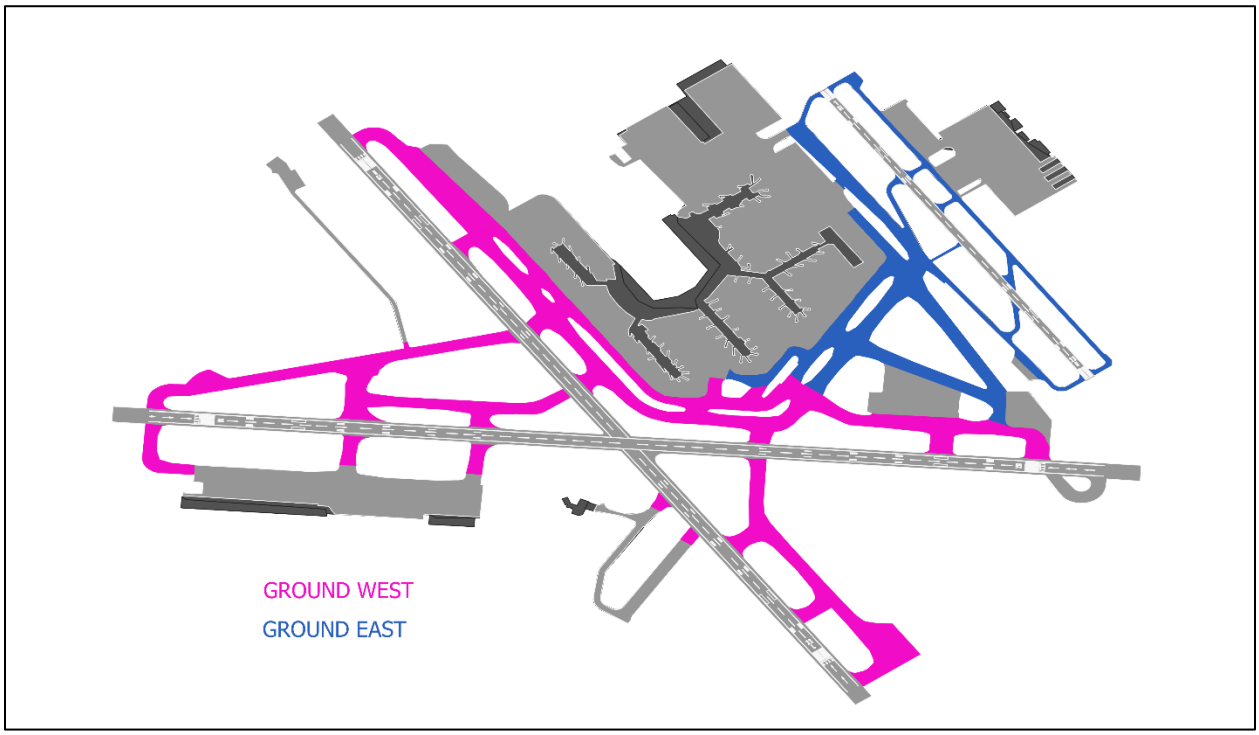
| Runway | Altitude | Heading |
|---|---|---|
| 10/33L | 2,000 | 200 |
| 15L/33R | | 060 |
| Other | | Runway Heading |

### 5–3–2. RUNWAY EXITING PROCEDURES

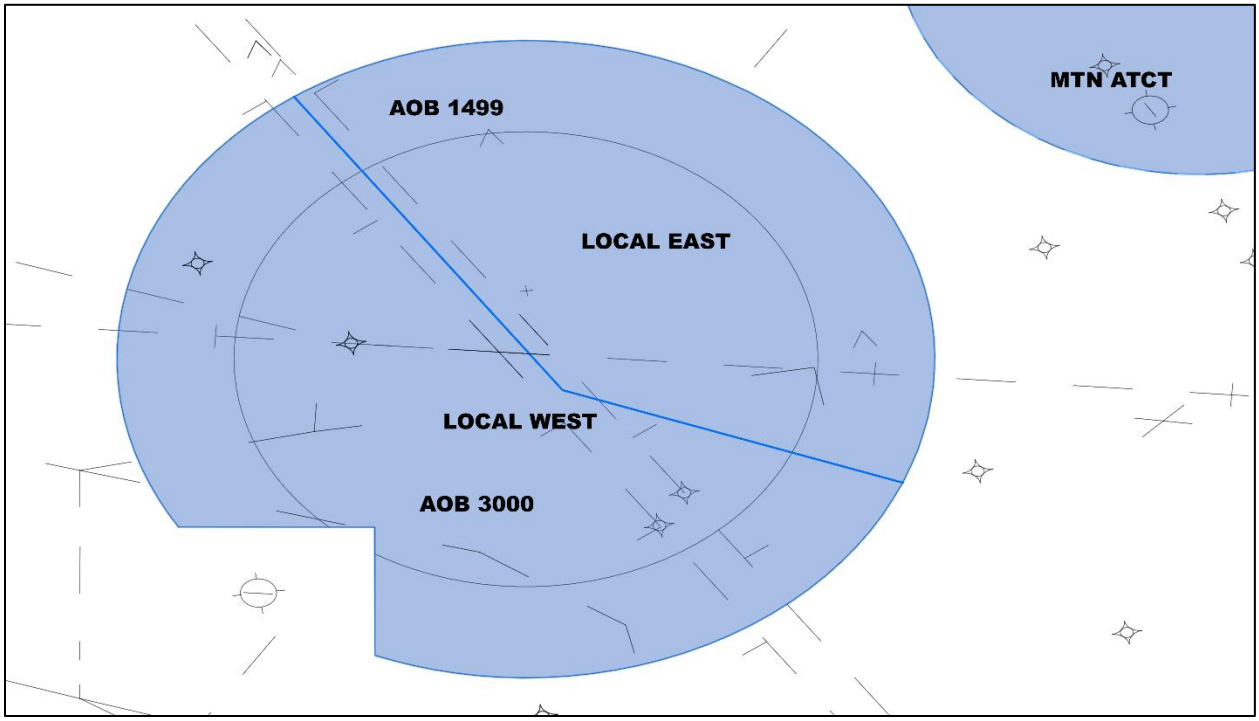
Once aircraft are clear of the runway, they shall be transferred to ground control unless otherwise coordinated.

# INDEX

# APPENDIX A. GROUND CONTROL SPLIT



# APPENDIX B. LOCAL CONTROL SPLIT – EAST OPERATION



# APPENDIX C. LOCAL CONTROL SPLIT – WEST OPERATION