



TENANT DIRECTIVE

Tenant Directive No.: BWI 501.1

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Approved by: *Suzanne W. Solek*
Director, Office of Airport Operations

Date: 10/7/2021

BALTIMORE/WASHINGTON INTERNATIONAL THURGOOD MARSHALL (BWI MARSHALL) AIRPORT NOISE ABATEMENT PROCEDURES

Purpose

The purpose of this Directive is to ensure awareness of the aircraft noise abatement procedures associated with BWI Marshall Airport's Noise Abatement Plan, which is designed to minimize noise impacts to the noise-sensitive communities surrounding BWI Marshall Airport.

Reference(s)

- A. Transportation Article Sections 5-805, 5-806, and 5-819, Annotated Code of Maryland
- B. 2020 BWI Marshall Airport Noise Zone Update, available at <https://marylandaviation.com/environmental/environmental-compliance-sustainability/bwi-marshall-airport-noise-zone/>
- C. COMAR 11.03.01.12C, Certified Baltimore/Washington International Thurgood Marshall Airport (BWI) Noise Zone, BWI Noise Abatement Plan
- D. BWI Marshall Airport Tenant Directive 203.1, Aircraft Pushback Procedures
- E. Final Environmental Impact Statement (FEIS), Baltimore/Washington International Airport, Extension of Runway 15L/33R, US Department of Transportation-Federal Aviation Administration, Maryland DOT-SAA, January 1989
- F. 14 CFR Part 36 Noise Standards: Aircraft Type and Airworthiness Certification
- G. FAA Advisory Circular AC 36-1H Noise Levels for U.S. Certificated and Foreign Aircraft
- H. Aircraft Restricted from Use of Runway 15L/33R

Scope

This Tenant Directive is applicable to all parties conducting aircraft activities at BWI Marshall Airport facilities. This Directive supersedes BWI Airport Tenant Directive 501.1, dated July 21, 1998.

Definitions

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Responsible Party:

Manager, Noise Section
Office of Environmental Compliance and Sustainability

DIRECTIVE

I. Directive Statement

1. The BWI Marshall Airport Noise Abatement Plan is established pursuant to the Maryland Environmental Noise Act of 1974 (Transportation Article Sections 5-805, 5-806, and 5-819, Annotated Code of Maryland & COMAR 11.03.01.12C).
2. Compliance with this Directive, which includes the provisions of the BWI Marshall Airport Noise Abatement Plan, is mandatory for all parties conducting any activities at BWI Marshall Airport facilities.
3. The BWI Marshall Airport Noise Abatement Plan is formulated to address impacted land used in neighboring communities while maintaining efficient Airport operations.

II. Definitions

For the purposes of this Directive, the following words have the following meanings:

- A. DME means distance measuring equipment.
- B. Effective Perceived Noise Level (EPNL, expressed in units of EPNdB) means a measure of the relative noisiness of an individual aircraft pass-by event. It is used for aircraft noise certification and applies to an individual aircraft, not the noise exposure from an airport.
- C. IFR means Instrument Flight Rules; the scenario in which aircraft operate in instrument meteorological conditions, typically cloudy or otherwise adverse weather conditions.
- D. VFR means Visual Flight Rules; the scenario in which aircraft operate in visual meteorological conditions (i.e. clear weather).
- E. VORTAC means the BWI VHF Omni-directional Range Tactical Air Navigation equipment from which a distance can be measured.

III. Procedures

A. The following procedures apply to aircraft arriving, departing, or conducting ground operations at BWI Marshall Airport.

1. Aircraft Noise Abatement Departure Procedures

- a. Unless otherwise instructed by air traffic control or deviation is necessary to maintain operational safety or comply with published departure flight procedures, aircraft are to follow the noise abatement departure procedures detailed below:
 - i. Jet aircraft should commence departure turns for noise abatement utilizing specific distances based on either Distance Measuring Equipment (DME) from the BWI VHF Omni-directional Range Tactical Air Navigation (VORTAC), if equipped, or a distance from the departure end of the runway to reduce overflights over noise sensitive areas:
 - ii. Runway 15R - Two (2) DME or 1.7 nautical miles (Nm) from the departure end of the runway when turning left, and one (1) DME or 0.7 Nm from the departure end of the runway when turning right.
 - iii. Runway 28 - Three (3) DME or 1.7 Nm from the departure end of the runway for all turns.
 - iv. Runway 10 - Two (2) DME or 1.6 Nm from the departure end of the runway for all turns.
 - v. Jet aircraft departures from Runway 33L will begin turns immediately upon becoming safely airborne, but not below 300 feet Above Ground Level (AGL) during Visual Flight Rules (VFR) conditions and not below 400 feet AGL during Instrument Flight Rules (IFR) conditions.
 - vi. All aircraft departing Runway 33R to the north or east will maintain runway heading until one (1) Nm from the departure end of the runway before turning.
 - vii. Multi-engine aircraft departing Runway 15L will maintain runway heading until 0.5 Nm from the departure end of the runway before turning.

Summary of the Aircraft Noise Abatement Departure Procedures:

Aircraft Noise Abatement Departure Procedures				
Runway	Aircraft	Turns	Distance	Notes
15R	Jet	Right	2 DME or 1.7 NM from Rwy End	
15R	Jet	Left	1 DME or 0.7 NM from Rwy End	
28	Jet	All	3 DME or 1.7 NM from Rwy End	
10	Jet	All	2 DME or 1.6 NM from Rwy End	
33L	Jet	ALL	Immediate Turns	VFR - Not below 300' AGL; IFR Not below 400' AGL
33R	All	North or East	Runway heading to 1 NM from departure end	
15L	Multi-Engine		Runway heading to 0.5 NM from departure end	

2. Aircraft Noise Abatement Arrival Procedures

- a. Unless instructed otherwise by air traffic control or deviation is necessary to maintain operational safety or comply with published arrival flight procedures, aircraft are to follow the noise abatement arrival procedures detailed below:
 - i. Jet aircraft conducting visual approaches will turn onto final approach a minimum of four (4) Nm from the approach end of the runway.
 - ii. All jet aircraft conducting visual approaches are expected to maintain 3,000 feet or above until 10 DME from the BWI VORTAC and, to the maximum extent possible, should remain at or above the Instrument Landing System (ILS) or Visual Approach Slope Indicator (VASI) for the landing runway, consistent with safe flight procedures.
 - iii. When authorized by Air Traffic Control, the Interstate Visual Runway 33L procedure is to be used by jet aircraft arriving on visual approaches from the south/southwest to Runway 33L. (This procedure provides aircraft a visual approach over I-97 and Route 3.)

3. Preferential Runway Use System

- a. West operations, which concentrate jet departures on Runway 28, are preferred for noise abatement.
- b. Runways 28 and 33L are the preferred runways for noise abatement between the hours of 2300 and 0500 local time. Traffic and weather permitting, aircraft should depart Runway 28 and arrive Runway 33L.



- c. Runway 33R should not be assigned to departing aircraft from 2300 to 0500 local time. During these hours, Runway 15L should not be assigned to arriving aircraft except for unusual weather conditions, emergencies, or medical flights requiring its use.
 - d. No touch-and-go and/or practice approaches are permitted on all runways by jet or turboprop aircraft between 2200 and 0700 local time unless approved by BWI Marshall Airport Operations staff.
 - e. Noise Rule for Runway 15L/33R: Aircraft having an average Takeoff (TO) and Sideline (SL) certification level that exceed 87 EPNdB, based on 14 CFR Part 36 Noise Standards: Aircraft Type and Airworthiness Certification and FAA Advisory Circular AC 36-1H, Noise Levels for U.S. Certificated and Foreign Aircraft, or international equivalents are restricted from use of Runway 15L/33R, except for emergencies or medical flights. Prohibited aircraft are permitted and encouraged to use Runway 10/28 or 15R/33L.
4. Control of Ground Based Noise Sources
- a. Power-back Restrictions: Reverse-thrust power-back operations are limited to military aircraft on remote parking spots and are approved on a case-by-case basis by Airport Operations consistent with Tenant Directive 203.1.
 - b. Engine Maintenance Runup Restrictions: Maintenance engine run-up reporting procedures, locations, durations, and prohibitions are restricted as follows:

Summary of engine maintenance runup restrictions:

Engine Maintenance Runup Restrictions		
Location	Heading	Duration
RWY 10 Hold Block	190 - 220 Degrees	60 Seconds or Less
RWY 33L Hold Block	140 – 160 Degrees	60 Seconds or Less
Exempted run-ups must not exceed a total of five (5) minutes duration in intervals of 60 seconds or less and unless specifically exempted, run-ups are not authorized between 2300 and 0700.		

- c. Prior permission must be obtained from the BWI Marshall Airport Operations Center which shall be denied unless it can be shown that failure to conduct the runup will delay departure of a scheduled passenger flight.

ADDITIONAL INFORMATION

Contact Information

Manager, Noise Section
410-859-7813