

# The Montgomery County Airpark: Regulatory Framework and Community Impacts

## Kaitlyn Simmons Aron Trombka

Office of Legislative Oversight Montgomery County, Maryland

# The Montgomery County Airpark: Regulatory Framework and Community Impacts

## OLO Report 2022-2

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#### EXECUTIVE SUMMARY

The Montgomery County Airpark is a general aviation airport located off Airpark Road near the intersection of Woodfield Road and Snouffer School Road. A general aviation airport serves civilian aircraft but not aircraft operated by companies that transport passengers on regular routes at set rates. Airpark users include corporate and private aircraft owners, air taxi, and charter services. In addition, multiple flight schools offer pilot training using aircraft that take off and land at the Airpark.

**Airpark Ownership and Governance**: The Montgomery County Airpark is owned and operated by the Montgomery County Revenue Authority (MCRA). As defined in the County Code, the purpose of the Revenue Authority is "to construct, improve, equip, furnish, maintain, acquire, operate, and finance projects to be devoted wholly or partially for public uses, good or general welfare." The County Code authorizes the MCRA to engage in a specified list of projects including "airports and landing fields."

The MCRA is responsible for the maintenance and operation of Airpark runways, taxiways, navigation aids, and other common areas and serves as the grant sponsor for Federal aid. The MCRA leases a portion of the Airpark property to a private entity, the Montgomery County Airpark One Limited Partnership. The current lease designates 38 acres that are under the control of Montgomery County Airpark One Limited Partnership which consists of aircraft tie downs, hangars, and a fueling station located to the north of the runway and taxiways.

The term "fixed-base operator" refers to a commercial entity that is granted authority to provide aviation-related services at an airport. The Montgomery County Airpark One Limited Partnership serves as the Airpark's primary fixed-base operator under the corporate name, "DC Metro Aviation Services." DC Metro Aviation Services offers a series of aviation-related services either directly or through subleases with third party entities. The lease agreement expires in 2059.

**Airport Regulation:** The Federal Aviation Administration (FAA) retains the sole authority to regulate domestic aviation in the United States. The FAA requires that airports which have received Federal grants (including the Airpark) to abide by certain "assurances." Under these assurances, the MCRA must "make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport." As a result of Federal policy, the MCRA may not restrict the number of takeoffs and landings by air taxi, flight school, and other commercial ventures at the Airpark. Federal law and regulations explicitly preclude non-Federal entities (including state and local governments) from setting rules that directly affect aviation.

**Airpark "Operations":** The FAA tasks general aviation airport managers (MCRA, in the case of the Airpark) with the responsibility of measuring annual aircraft "operations." An aircraft takeoff or landing counts as a single operation. The Airpark manager submits annual operation counts to the Maryland Aviation Administration (MAA) for review, validation, and approval. The latest MAA approved count of Airpark operations was 67,195 for Calendar Year 2018, which amounts to less than half the number of operations in 1998 (140,557). Most Airpark operations are classified as "local" flights or flights known to be departing for, or arriving from, a 20-mile radius of the airport.

In reviewing Airpark data submitted to the MAA, OLO noted several instances of identical operation counts in successive years. This data pattern indicates that the operation counts should be considered estimates rather than precise measurements.

Environmental Regulation: The Environmental Protection Agency (EPA) is responsible for enforcing lead concentration standards in soils, air, and drinking water. The Maryland Department of the Environment oversees State Implementation Plans for air quality and the monitoring and enforcement of residential soil lead concentrations, and the Montgomery County Department of the Environment is responsible for the protection of indoor and outdoor air quality in the County.

While the EPA states that there is "no demonstrated safe concentration of lead in blood" it has set lead concentration standards for soils, air, and drinking. The concentration of lead in the air in the United States has decreased by 99% since 1973 as a result of the ban of leaded gasoline for most motor vehicles. In a 2020 report, the EPA found that leaded aviation fuel is the largest remaining aggregate source of lead emissions in air in the country. Research indicates that lead levels in air near airports where aircraft use leaded aviation gas are significantly higher than other areas. Currently, there are no lead monitors near the Airpark to confirm if lead levels are higher in the air near the Airpark compared to other areas rest of the County.

**Noise Monitoring:** The Federal Noise Control Act of 1972 granted regulatory authority to the EPA to monitor and regulate noise pollution. In 1981, the EPA determined that noise issues were best handled at the state and local levels. In Maryland, the authority of noise enforcement was transferred from the State and given to local governments in 2012. The Department of Environmental Protection administers Montgomery County's noise control program consistent with the Federally established threshold for airports. It should be noted that the DEP does not have authority to enforce noise regulations for aviation-related noise.

The Airpark and Surrounding Land Uses: State regulations prohibit an airport from operating without local land use approval. Although the MCRA is not subject to local zoning, the County Board of Appeals granted a special exception in 1959 to permit an airport at the location. When the Airpark opened in 1960, most of the surrounding land use was farmland. At that time, about 160 acres surrounding the Airpark were zoned for industrial use. Development of residential neighborhoods near the Airpark began in the 1960s.

Subsequent County land use and zoning decisions increased residential density near the Airpark. In 1983, an approved development plan found that increasing density near the Airpark will lead to an increase in complaints and annoyance based on the noise of overflights, but this factor was not sufficient by itself to reject the proposal. Similarly, the 1990 Gaithersburg Plan assumed "the continued operation of the Montgomery County Airpark at its present location and with its current general character" and recommended that the prospective development of surrounding residential and industrial areas should not detract from its continued operation. In response to this development, the County Council amended the County Code in 1974 to require that real estate agents disclose the existence of an airport within a five-mile radius of a property that is up for sale.

Community Input and Concerns: Prior to 2021, the Airpark Liaison Committee (ALC), which was established by County Council in 1990, served as the primary forum for communication among interested groups and individuals concerned with the operations of Montgomery County Airpark. In 2021, the ALC was dissolved and the MCRA assumed responsibility as the main agency for public outreach for the Airpark. Concerns frequently raised by community members include: excessive noise and low-flying planes, the lack of ongoing noise monitoring, the number of "touch and go" (a flight maneuver in which an aircraft lands on a runway and takes off again without coming to a full stop)

operations, unsafe flight practices from flight schools and other aircraft, and lead pollution in the air and soils.

**OLO Discussion Questions:** Based on the findings of this report, OLO suggests the following questions for Councilmember consideration:

- 1. Should the County Council amend the County Code to require more timely, conspicuous, and informative notification to potential buyers of residential properties in the vicinity of the Airpark? At present, the County Code requires that real estate agents disclose the existence of an airport within a five-mile radius of a property that is up for sale. However, in practice, this disclosure commonly occurs at the closing of the property sale, when buyers have already committed to the purchase and are inundated with numerous documents to sign in a short amount of time. This process allows little opportunity for a buyer to thoughtfully consider the implications of living near an airport prior to committing to the purchase. OLO suggests Councilmembers discuss whether to amend the County Code to mandate that real estate agents provide information about a residential property's proximity to an airport at an earlier stage of the process and in a more conspicuous fashion.
- 2. What are the optimal methods for channeling community concerns about Airpark activity to the Federal Aviation Administration and the Maryland Aviation Administration, the agencies that are authorized to regulate aviation activities at airports? The Federal Government has sole authority to regulate aviation in the United States and explicitly prohibits local governments and airport operators from restricting access to a general aviation airport such as the Airpark. Nonetheless, residents deserve to have their concerns heard by the entities that are authorized to regulate flights to and from the Airpark, namely the Federal Aviation Administration and, to a lesser extent, the Maryland Aviation Administration. The County could have a dialogue with the MCRA and possibly the Maryland Congressional delegation to consider additional methods to channel community concerns to the appropriate regulatory agencies.
- 3. What should be the role of the Montgomery County Government in monitoring the noise and environmental impacts of the Airpark on nearby communities? State and local governments hold the responsibility of monitoring noise and environmental standards set by the Federal government. While the County cannot enforce any law or regulation that would affect aeronautical activity, the County could engage in more robust monitoring programs to ensure compliance with Federal noise and environmental standards. The Council may wish to discuss with the Department of Environmental Protection the relative priority of expanding noise and environmental monitoring near the Airpark within the County's overall environmental monitoring program.
- **4. Do opportunities exist to more precisely estimate the number of annual Airpark take-offs and landings?** The MCRA estimates the number of annual Airpark takeoffs and landings (known as "operations") by observing general trends in airport activity. In reviewing the Airpark's operations data, OLO found recurrences of identical operation counts in successive years. This pattern indicates that these counts should be considered general estimates rather than precise measurements. Councilmembers may wish to discuss with MCRA whether opportunities exist to estimate annual Airpark operations more precisely.

#### **CHAPTER 1: REPORT INTRODUCTION AND SCOPE**

The County Council directed the Office of Legislative Oversight (OLO) to prepare a report that describes the governance, regulatory framework, and community impacts of the Montgomery County Airpark. The Council further asked OLO to present information on the number of aircraft flying in and out of the Airpark as well as the noise and environmental effects of Airpark operations on nearby communities.

#### In this report:

- Chapter 2 presents background information about the history, characteristics, role, and maintenance of the Airpark.
- Chapter 3 describes the roles of the Montgomery County Revenue Authority (MCRA) as well as private sector businesses in management of Airpark operations.
- Chapter 4 presents information on the users and aircraft that fly in and out of the Airpark, the number of takeoffs and landings, operating hours, air traffic control, flight patterns, rules, and the economic impact of Airpark operations.
- Chapter 5 provides an overview of the laws and regulations that govern aviation activity at the Airpark.
- Chapter 6 details the land use patterns, zoning, and development history of the area surrounding the Airpark.
- Chapter 7 discusses the environmental, health, and safety impacts of the Airpark on neighboring communities.
- Chapter 8 discusses the methods available to community members to share concerns with Airpark management and regulatory agencies.
- Chapter 9 summarizes OLO's major findings and presents discussion questions for Council consideration.
- Chapter 10 includes written comments from the MCRA on this report.

*OLO Report 2022-2* 

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#### CHAPTER 2: INTRODUCTION TO THE MONTGOMERY COUNTY AIRPARK

The Montgomery County Airpark is a general aviation airport located on approximately 150 acres of land off Airpark Road near the intersection of Maryland Route 124 (Woodfield Road) and Maryland Route 115 (Snouffer School Road) and about two miles northeast of the City of Gaithersburg. A general aviation facility serves small civilian (and sometimes small military) aircraft but not aircraft operated by companies that transport passengers on regularly scheduled routes.

This chapter presents background information about the history, characteristics, role, and maintenance of the Airpark.

#### A. Creation of the Montgomery County Airpark

Montgomery County's first general aviation airport, Congressional Airport in Rockville, operated from 1929 through 1957. When the Congressional Airport closed, a local developer, William Richardson, purchased a 388-acre farm northeast of Gaithersburg to serve as the location for a new general aviation airport.

Although the MCRA is not subject to local zoning, the County Board of Appeals granted a special exception in 1959 to permit an airport on the residentially zoned (R-200) land subject to two conditions: (1) that Richardson's corporation, Montgomery County Airpark, Inc., convey ownership of a portion of the property to the MCRA; and (2) that the MCRA agreed to grant Montgomery County Airpark Inc. a long-term lease to build and operate an airport at that site. The following year in 1960, Montgomery County Airpark, Inc. (now known as "Montgomery County Airpark One Limited, LLC") conveyed ownership of 115 acres of the property to the MCRA and the MCRA granted a 99-year lease to Montgomery County Airpark, Inc. <sup>1</sup>

The County approved industrial zoning (then called I-4, now called IL-1) for much of the remainder of the property. Montgomery County Airpark, Inc. funded construction of the Airpark primarily from revenue generated from the sale and lease of the industrially zoned property. In October 1960, operations began at the Airpark with aircraft taking off and landing on a 3,200-foot runway.

#### **B.** Facility Overview

The Airpark currently has a 4,200-foot-long, 75-foot-wide, asphalt runway, which was expanded by the MCRA in 1971. The runway is connected to a 36-foot-wide asphalt taxiway and is also equipped with lighting that illuminates the runway from dusk to dawn. The most recent capital improvements were in 2016 and 2018 when FAA grants were obtained to help fund taxiway repairs and improvements to refinish and relight the taxiway.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See Chapter 3 of this report for more information about the property lease.

<sup>&</sup>lt;sup>2</sup> See page 6 of this report for a list of Federally funded improvements to the Airpark.

The Airpark does not have a control tower. As detailed in Chapter 4, pilots use radio communication to report their positions relative to the Airpark to help safely direct takeoffs and landings at the Airpark.

On-site aircraft parking and storage is available for rent either in hangars or at outdoor tie-down spaces from the fixed-base operator (FBO). The Airpark houses seven conventional hangars with a combined total storage area of more than 40,000 square feet to serve aircraft of various sizes and types. In addition, the Airpark property includes 70 T-hangars for single- or small twinengine aircraft and 157 aircraft outdoor tie-down spaces on paved and grass areas.

Two above ground 12,000-gallon fuel tanks are located on-site. The FBO offers aviation fuel sales with attended fueling service daily with hours depending on the season and self-service fueling 24 hours a day.

The two-story Airpark terminal building was built in 1965 and houses a pilot lounge, a flight instruction classroom, a restaurant, restrooms, and office space.

#### C. National Plan of Integrated Airport Systems

The Montgomery County Airpark is included in the Federal Aviation Administration's National Plan of Integrated Airport Systems (NPIAS). The NPIAS is an inventory of airports and aviation infrastructure that the Federal Government considers "significant to national air transportation" and are thereby eligible to receive Federal grant funding.<sup>3</sup>

According to the NPIAS, the Airpark serves a role in the NPIAS as a "Regional" airport.<sup>4</sup> The FAA defines a Regional airport as one that "supports regional economies by connecting communities to regional and national markets. Located in metropolitan areas serving relatively large populations, Regional airports have high levels of activity with some jets and multiengine propeller aircraft." In addition, the NPIAS categorizes the Airpark as a "Reliever" airport, which is, "an airport the Secretary of Transportation designates to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community." More specifically, the FAA views the role of the Airpark to divert general aviation activity from commercial service airports (including Baltimore-Washington International Thurgood Marshall Airport and Reagan National Airport) so as to minimize congestion at these larger airports.

<sup>6</sup> *Ibid*.

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<sup>&</sup>lt;sup>3</sup> Federal Aviation Administration, Order Number 5090.5, Formulation of the NPIAS and ACIP, September 3, 2019, <a href="https://www.faa.gov/documentLibrary/media/Order/Order-5090-5-NPIAS-ACIP.pdf">https://www.faa.gov/documentLibrary/media/Order/Order-5090-5-NPIAS-ACIP.pdf</a>.

<sup>&</sup>lt;sup>4</sup> Federal Aviation Administration, List of NPIAS Airports with Activity, October 7, 2020, <a href="https://www.faa.gov/airports/planning\_capacity/npias/current/media/NPIAS-2021-2025-Appendix-A.pdf">https://www.faa.gov/airports/planning\_capacity/npias/current/media/NPIAS-2021-2025-Appendix-A.pdf</a>.

<sup>&</sup>lt;sup>5</sup> Federal Aviation Administration, Order Number 5090.5, Formulation of the NPIAS and ACIP, September 3, 2019, <a href="https://www.faa.gov/documentLibrary/media/Order/Order-5090-5-NPIAS-ACIP.pdf">https://www.faa.gov/documentLibrary/media/Order/Order-5090-5-NPIAS-ACIP.pdf</a>.

#### **D.** Federal Assistance for Facility Improvements

The Montgomery County Airpark has received multiple grants from the Federal Aviation Authority (FAA) through the Airport Improvement Program (AIP). The AIP provides grants to airport owners and operators (called "sponsors") for the planning, maintenance, and development of public-use airports that are included in the NPIAS (see above).

The FAA awards AIP grants to fund capital improvements and rehabilitation projects designed to enhance airport safety, capacity, security, environmental controls, and for projects that allow the airport to remain in compliance with Federal standards (such as for the removal of obstructions in runway approach and departure areas). AIP-funded projects must meet Federal environmental and procurement requirements. Further, all AIP grants are subject to the terms of a grant agreement between the sponsor and the FAA that obligates the sponsor to maintain the airport in accordance with statutory grant assurances (see chapter 5). For general aviation airports, an AIP grant covers between 90% and 95% of eligible costs. In some cases, the State of Maryland also contributes to AIP-funded improvements. AIP funding may not be used for airport operational costs. As shown in the table on the next page, from 2005 through 2020, the Airpark received 18 FAA AIP loans totaling \$19.6 million.

# Federal Aviation Authority Airport Improvement Program Grant Funds Received by the Montgomery County Airpark, Fiscal Years 2005 - 2020

Fiscal Year	Project Description	Federal Grant Funds
2005	No grants	
2006	Rehabilitate Taxiway Lighting	\$521,691
	Rehabilitate Taxiway Lighting	\$152,262
2007	Remove Obstructions from Runway Protection Zones (2 grants)	\$1,787,714
2008	Remove Obstructions from Runway Protection Zones (3 grants)	\$359,000
2009	Remove Obstructions from Runway Protection Zones	\$475,000
2010	Remove Obstructions from Runway Protection Zones	\$2,651,921
2011	Remove Obstructions from Runway Protection Zones	\$3,021,286
2012	No grants	
2013	No grants	
2014	Remove Obstructions from Runway Protection Zones	\$36,000
	Remove Obstructions from Runway Protection Zones (2 grants)	\$1,578,276
2015	Rehabilitate Taxiway	\$405,666
	Wildlife Hazard Assessments	\$48,780
2016	Rehabilitate Taxiway, Rehabilitate Taxiway Lighting	\$5,477,702
2017	Rehabilitate Taxiway, Rehabilitate Taxiway Lighting	\$2,805,588
2018	No grants	
2019	No grants	
2020	Rehabilitate Runway	\$269,390
	TOTAL	\$19,590,276

Source: Federal Aviation Administration, Airport Improvement Program Airport Grant Look Up Tool, https://www.faa.gov/airports/aip/grant histories/lookup/, accessed October 14, 2021.

#### CHAPTER 3: AIRPARK GOVERNANCE AND MANAGEMENT

Multiple public entities are involved in the governance of activities at the Montgomery County Airpark. This chapter describes the roles of the Montgomery County Revenue Authority (MCRA) as well as private sector businesses in management of Airpark operations.

#### A. Montgomery County Revenue Authority

Chapter 42 of the Montgomery County Code establishes the MCRA. As stipulated in the County Code, the purpose of the MCRA is "to construct, improve, equip, furnish, maintain, acquire, operate, and finance projects to be devoted wholly or partially for public uses, good or general welfare." The County Code authorizes the MCRA to engage in a specified list of projects including "airports and landing fields." The MCRA was created in 1957 and has owned and operated the Montgomery County Airpark since 1960.

The MCRA is governed by a six-member Board of Directors. Five members of the Board of Directors are appointed by the County Executive and confirmed by the County Council. The County Government's Chief Administrative Officer (or designee) serves as a non-voting, exofficio sixth Board member.

The MCRA is responsible for the maintenance and safe operation of Airpark runways, taxiways, navigation aids, and other common areas. The MCRA also serves as the airport sponsor for the FAA Airport Improvements Program (AIP) grants which have funded upgrades to the runway, taxiway, and surrounding areas of the Airpark.<sup>8</sup>

#### B. Lease Agreement with Montgomery County Airpark One Limited Partnership

As mentioned in Chapter 2, in 1960, the MCRA entered into a 99-year lease agreement with a private entity called Montgomery County Airpark, Inc. The MCRA entered into the original lease agreement at the time that Montgomery County Airpark, Inc. donated the Airpark property to the MCRA. The original lease granted the private entity the authority to build and operate a general aviation airport at the location.

The private operator of the Airpark accepted FAA grants to help cover the costs of maintaining the facility. By accepting the grants, the Airpark became subject to Federal regulations and assurances regarding airport ownership, access, and operations. To comply with FAA regulations for a General Aviation airport, the MCRA and Montgomery County Airpark One Limited Partnership agreed to amend the lease agreement in 2004.

Under the terms of the revised lease agreement, the MCRA assumed operational control of the Airpark. The MCRA is responsible for operating and maintaining the runways, taxiways,

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<sup>&</sup>lt;sup>7</sup> Montgomery County Code, §42-4.

<sup>&</sup>lt;sup>8</sup> See Chapter 5 for a more detailed discussion of the regulatory terms and conditions associated with AIP grants.

<sup>&</sup>lt;sup>9</sup> See Chapter 5 for a detailed discussion of Federal regulations governing the Airpark.

lighting, parking lot, and other Airpark infrastructure. The airport operating license issued by the Maryland Aviation Authority transferred from the Montgomery County Airpark One Limited Partnership to the MCRA. In addition, the MCRA became the sponsor for FAA grants.

The amended lease designates 38 acres that are under the control of Montgomery County Airpark One Limited Partnership. The leased portion of the Airpark property consists of the aircraft tie-downs, hangars, and a fueling station located to the east of the runway and taxiways. Montgomery County Airpark One Limited Partnership retains ownership of facilities and development rights within the leased area. Improvements to the leased portion of the property are not eligible for FAA grants.

A separate lease provides the Montgomery County Airpark One Limited Partnership with space in the terminal building. As per that lease agreement, the Limited Partnership also may sublease space in the terminal building to other entities (such as a flight school or restaurant).

The lease agreement includes a provision that requires the MCRA to convey the Airpark property back to the Montgomery County Airpark One Limited Partnership in the event that the Airpark ceases to operate as an airport during the term of the lease. The provision would take effect under one of two conditions: (1) the County Council approves an agreement between MCRA and the Montgomery County Airpark One Limited Partnership to cease all airport operations; and/or (2) the MCRA or other governmental entity "directly or indirectly takes some action that renders it impossible for the Airpark to function as a General Aviation airport." Should either of these conditions occur, the Montgomery County Airpark One Limited Partnership could recover the title to the property by paying a "nominal fee of \$100."

The lease agreement includes a provision for the Montgomery County Airpark One Limited Partnership to pay rent to the MCRA. The annual rent is set at an amount equal to 120% of the real estate taxes levied on the buildings plus an annual "operation and maintenance fee." For 2020, the annual rent payment from the Montgomery County Airpark One Limited Partnership was \$86,112.

The lease agreement expires in 2059.

#### C. Fixed-Base Operators

The term "fixed-base operator" refers to a commercial entity that is granted authority to provide aviation-related services at an airport. The 2004 amended lease also includes a fixed-base operator's agreement with the Montgomery County Airpark One Limited Partnership.

The fixed-base operator's agreement authorizes the Montgomery County Airpark One Limited Partnership to provide services to the general public "as permitted by zoning, environmental, and other applicable laws, and only as an adjunct to a viable and continuous use of the Airpark as an airport." The lease lists services that Montgomery County Airpark One Limited Partnership may offer at the Airpark, including:

• Repair and maintenance of aircraft;

- Sale of aircraft parts;
- Charter service;
- Pilot training;
- Aircraft rental;
- Aircraft sales and service;
- Sale of aviation fuel and aviation petroleum products; and
- Permanent storage of aircraft.

The Montgomery County Airpark One Limited Partnership serves as a fixed-base operator under the corporate name, "DC Metro Aviation Services." DC Metro Aviation Services offers all the authorized aviation-related services listed above either directly or through subleases with third party entities.

As detailed in Chapter 5, Federal grant assurances that are included in Federal grant agreements (specifically grant assurance 22 Economic Nondiscrimination) prohibit the airport sponsor (the MCRA) from restricting public access to the services listed above in an unreasonable or unjustly discriminatory way. Furthermore, the fixed-base operator agreement stipulates that Montgomery County Airpark One Limited Partnership may not limit public access to aviation services through imposition of charges or fees that are "excessive, discriminatory, or otherwise unreasonable."

The 2004 amended lease agreement removed a provision granting the Montgomery County Airpark One Limited Partnership exclusive rights as the sole fixed-base operator at the Airpark. In 2010, the MCRA entered into a separate lease agreement with an additional private entity, K&R Aviation. K&R provides flight training and "Part 135 charter service" from the Airpark. Part 135 charter service is certified by the FAA to operate as a non-scheduled air charter carrier.

#### **D. MCRA Revenues and Expenses**

For many years, the MCRA Airpark-related expenses have exceeded MCRA Airpark-related revenues (excluding one-time FAA capital improvement grants). As detailed earlier in this chapter, the MCRA receives revenue from rent payments from the property lease to the Montgomery County Airpark One Limited Partnership. In addition, the MCRA receives two other revenue streams from Airpark operations as stipulated in the fixed-base operator agreement with the Montgomery Airpark One Limited Partnership (operating as "DC Metro Aviation").

- <u>Aircraft Storage Fee</u>: The MCRA receives \$0.04 per pound (pro-rated on a 12-month basis) for each aircraft stored anywhere on the leased property; and
- <u>Fuel Flow Fee</u>: The MCRA receives \$0.10 per gallon for each gallon of aviation fuel dispensed anywhere on the leased property.

In addition, the MCRA receives revenue from the lease of seven aircraft storage tie-down spots located outside the area leased to the Montgomery Airpark Limited One Partnership.

For FY22, the MCRA Airpark-related revenues from the property leased to the Montgomery County Airpark One Limited Partnership are projected at \$326,000. The cost of MCRA operations at the Airpark are projected at \$860,000 for the same fiscal year. As such, the MCRA is anticipated to experience a net operating loss of approximately \$534,000 in FY22. Revenues from other MCRA activities subsidize annual Airpark-related operating losses.

<sup>&</sup>lt;sup>10</sup> Montgomery County Revenue Authority FY2022 Operating Budget, Accessed October 20, 2021, <a href="https://mcramd.com/wp-content/uploads/2021/04/2022-Proposed-Operating-Budget.pdf">https://mcramd.com/wp-content/uploads/2021/04/2022-Proposed-Operating-Budget.pdf</a>.

#### **CHAPTER 4: AIRPARK OPERATIONS**

The Montgomery County Airpark, also known by its International Air Transit Association code as "GAI," is utilized for a variety of purposes. This chapter presents information on the users and aircraft that fly in and out of the Airpark, the number of takeoffs and landings, operating hours, air traffic control, flight patterns, rules, and the economic impact of Airpark operations.

#### A. Airpark Users

For this report, OLO has categorized Airpark users into three broad categories: travel and recreation, pilot training, and military-related activities.

- <u>Travel and Recreation</u>: Aircraft depart from, and arrive at, the Airpark for a series of
  travel and recreational purposes. These include corporate and business travel, personal
  and tourism travel, and recreational flying. These users may fly on aircraft owned for
  private or corporate use or on aircraft intended for commercial use such as charter flights
  and air taxis. No commercial air carriers provide scheduled service into or out of the
  Airpark.
- <u>Pilot Training</u>: Multiple flight schools offer pilot training using aircraft that take off and land at the Airpark. The largest of the flight schools is Washington International Flight Academy which has 23 aircraft based on-site and have operated out of the Airpark since 1989.

These flight schools offer training for private pilot's license, commercial pilot's license, instrument rating certification, flight instruction certification, and other aircraft piloting instruction. To maximize students' experience in performing aircraft take offs and landings, flight schools regularly engage in a practice known as a "touch-and-go." A touch-and-go is a flight maneuver in which an aircraft lands on a runway and takes off again without coming to a full stop.

• <u>Military-Related</u>: The Airpark serves as the base for two organizations related to the United States military. Multiple squadrons of the Maryland Wing Civil Air Patrol operate out of the Airpark to perform search and rescue, disaster relief, and emergency service missions as tasked by the Air Force Rescue Coordination Center. In addition, the US Coast Guard Auxiliary Flotilla 24-04, an all-aviation maritime patrol, search, and rescue unit is headquartered at the Airpark.

As is common practice at public-use general aviation airports, the Airpark does not charge users a takeoff or landing fee.

#### **B.** Types of Aircraft

The operating license issued to the Montgomery County Airpark does not regulate the size or types of aircraft that may fly in and out of the facility. Rather, pilots must determine whether to

use the Airpark's runway based on aircraft performance standards from the aircraft manufacturer's Pilot Operators Handbook. This book outlines the aircraft's performance based on many factors that include the weight of the aircraft and current weather conditions. The Federal Aviation Administration (FAA) publishes design criteria runways in the 150 series of Advisory Circulars. In general, the Airpark runway is suitable for most aircraft that seat 12 or fewer passengers.

As of October 2021, the FAA reported a total of 135 based aircraft at the Airpark. The inventory on Airpark-based aircraft included 117 single engine airplanes, 12 multi-engine airplanes, five jets, and one helicopter. As shown in the table below, the number of Airpark-based aircraft has declined in the past two decades.

Number of Aircraft Based at the Montgomery County Airpark

Year	Number of Aircraft
2000	248
2005	238
2010	168
2015	147
2020	136
2021	135

Source: Maryland Aviation Administration, as cited by Montgomery County Revenue Authority, <a href="https://montgomerycountyairpark.com/wp-content/uploads/2021/08/Operations-Report-from-Maryland-Aviation-Administration-2021.pdf">https://montgomerycountyairpark.com/wp-content/uploads/2021/08/Operations-Report-from-Maryland-Aviation-Administration-2021.pdf</a>.

#### C. Operating Hours

The Montgomery County Airpark is open for public use 24 hours a day, seven days a week. The airport does not close for any holidays. Certain services, such as the attended fueling station, the pilots' lounge, and the restaurant have limited hours of access.

#### D. Number of Takeoffs and Landings

As per Federal and State procedures, a general aviation airport manager is responsible for measuring annual aircraft takeoffs and landings (also known as airport "operations"). A takeoff

<sup>&</sup>lt;sup>11</sup> For example, see Federal Aviation Administration, Advisory Circular 150/5325-4B, Runway Length Requirements for Airport Design, July 1, 2005,

https://www.faa.gov/documentLibrary/media/Advisory Circular/AC 150 5325-4B.pdf.

<sup>&</sup>lt;sup>12</sup> Federal Aviation Administration, Airport Data and Information Portal, Montgomery County Airpark (GAI), <a href="https://adip.faa.gov/agis/public/#/airportData/GAI">https://adip.faa.gov/agis/public/#/airportData/GAI</a>, accessed October 22, 2021.

or landing counts as a single operation. A touch-and-go, which is a landing and takeoff without a full stop, counts as two operations.

The Airpark manager submits to the Maryland Aviation Administration (MAA) annual operation estimates based on observed landings, fuel sales, and other trends. The MAA vets the operations data submitted by the Airpark manager by comparing the data with estimates from previous years and considering how regional and local aviation trends may have affected Airpark operations. In addition, to validate operations data, the MAA temporarily installs acoustic measurement devices on the Airpark runway for a two-week period during each of the four seasons every three to four years to estimate the number of takeoffs and landings.

The latest MAA approved count of Airpark operations was 67,195 for Calendar Year 2018. As seen in the table below, Airpark takeoffs and landings in 2018 were less than half the number of takeoffs and landings in 1998. On the years not counted by the MAA, the MCRA interviews the FBO and reviews fuel flow fees to determine if there was a significant change in operations. If there is no significant change, then the MCRA reports the most recent count from the MAA as the annual operations.

Montgomery County Airpark Operations History<sup>13</sup>

Year	Operations
1998	140,557
2003	99,774
2010	50,152
2014	48,271
2017	74,134
2018	67,195

Source: Maryland Aviation Administration, as cited by Montgomery County Revenue Authority, <a href="https://montgomerycountyairpark.com/wp-content/uploads/2021/08/Operations-Report-from-Maryland-Aviation-Administration-2021.pdf">https://montgomerycountyairpark.com/wp-content/uploads/2021/08/Operations-Report-from-Maryland-Aviation-Administration-2021.pdf</a>.

Airport operations are further classified by local or itinerant types, which is based on the proximity of aircraft operations in relation to an airport. A local operation is defined as a take-off or landing performed by an aircraft that:

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<sup>&</sup>lt;sup>13</sup> Maryland Aviation Administration data as appears on the Montgomery County Airpark website, https://montgomerycountyairpark.com/wp-content/uploads/2021/08/Operations-Report-from-Maryland-Aviation-Administration-2021.pdf. This table includes data for years in which the MAA conducted field measurements at the Airpark.

- Operates in the local traffic pattern or within sight of the airport;
- Is known to be departing for, or arriving from, flights in a local practice area located within a 20-mile radius of the airport; or
- Executes simulated instrument approaches or low passes at the airport.

An itinerant operation is defined as any aircraft operation that is not a local operation, such as a charter flight arriving from an airport outside a 20-mile radius of the airport.

OLO obtained FAA data from 1998 – 2021 on the number of local and itinerant operations at the Airpark. Note that operations data archived by the FAA originate from airport operators and State aviation administrations; the FAA does not conduct independent counts of General Aviation airport operations. The table on the following page shows the annual number and relative percentage of local and itinerant Airpark operations. The table excludes air taxi and military operations in the total operations count as these account for less than two percent of total Airpark operations. The MCRA informed OLO that the local and itinerant operations counts are an estimate based on arrivals.

The total operations at the Airpark have decreased overall, compared to its peak in 2000 – 2002. However, in 2015, there was a 33% increase in local operations compared to itinerant operations. OLO notes the recurrence of identical operation counts in successive years indicates these counts should be considered estimates rather than precise measurements. Further, OLO was informed by the MCRA that a control tower would provide more accurate counts, including more accurate counts of itinerant and local flights.

The ratio of local to itinerant operations can indicate the primary uses of an airport. Most pilot training takeoffs and landings fit the definition of a local operation. An airport with significant pilot training activity may experience far more local than itinerant operations.

Montgomery County Airpark Local and Itinerant Operations by Year

Year <sup>14</sup>	Total Local Operations	Total Itinerant Operations	Total Operations	% Local	% Itinerant
1998	61,500	38,100	99,600	61.7%	38.3%
1999	80,100	44,245	124,345	64.4%	35.6%
2000	80,100	49,295	129,395	61.9%	38.1%
2001	80,100	49,295	129,395	61.9%	38.1%
2002	80,100	49,295	129,395	61.9%	38.1%
2003	56,870	34,999	91,869	61.9%	38.1%
2004	59,714	36,749	96,463	61.9%	38.1%
2005	59,714	36,749	96,463	61.9%	38.1%
2006	59,714	36,749	96,463	61.9%	38.1%
2007	59,714	36,749	96,463	61.9%	38.1%
2008	59,714	36,749	96,463	61.9%	38.1%
2009	59,714	36,749	96,463	61.9%	38.1%
2010	59,714	36,749	96,463	61.9%	38.1%
2011	27,418	15,329	42,747	64.1%	35.9%
2012	27,418	15,329	42,747	64.1%	35.9%
2013	27,418	15,329	42,747	64.1%	35.9%
2014	27,418	15,329	42,747	64.1%	35.9%
2015	45,865	1,356	47,221	97.1%	2.9%
2016	45,865	1,356	47,221	97.1%	2.9%
2017	45,865	1,356	47,221	97.1%	2.9%
2018	45,865	1,356	47,221	97.1%	2.9%
2019	45,865	1,356	47,221	97.1%	2.9%
2020	64,206	1,898	66,104	97.1%	2.9%
2021	64,206	1,898	66,104	97.1%	2.9%

Source: Federal Aviation Administration

<sup>&</sup>lt;sup>14</sup> Operation counts are reported by year starting in May. For example, all the operations for the period from May 1997-1998 is reported as 1998.

#### E. Air Traffic Control

The Airpark does not have a control tower. The FAA regulates the Airpark as an "uncontrolled facility." The FAA establishes standards for air traffic at uncontrolled airports in the Federal Aviation Regulations and Aeronautical Information Manual (FAR/AIM). Control towers are required at airports with high aircraft traffic both in the air and on the ground. According to an FAA spokesperson, the number of operations (takeoffs and landings) at the Airpark may not meet the FAA threshold for a control tower.<sup>15</sup>

The FAA established "traffic advisory practices" for airports without a control tower. For example, the FAR/AIM specifies that "when two or more aircraft are approaching an airport for the purpose of landing, the pilot of the aircraft at the lower altitude has the right-of-way over the pilot of the aircraft at the higher altitude." <sup>16</sup>

When flying into or out of the Airpark, pilots use radio communications to alert other pilots of their location and flight intentions. The Airpark has a common traffic advisory frequency (CTAF) with a single radio frequency for all pilots operating around GAI to use. During business hours, this same frequency serves as a Universal Communication (UNICOM) which is manned by the FBO staff. As stated by the FAA, "there is no substitute for alertness while in the vicinity of an airport. It is essential that pilots be alert and look for other traffic and exchange traffic information when approaching or departing an airport without an operating control tower." <sup>17</sup>

#### F. Flight Patterns and Rules

The FAA establishes standard traffic patterns and approach procedures for airports, including General Aviation airports without a control tower, such as the Airpark. The FAA publishes these air traffic rules in the FAR/AIM and pilots are required to comply with those procedures. For example, FAA procedures for airports without a control tower state that "unless otherwise indicated", all turns in the traffic pattern must be made to the left."<sup>18</sup>

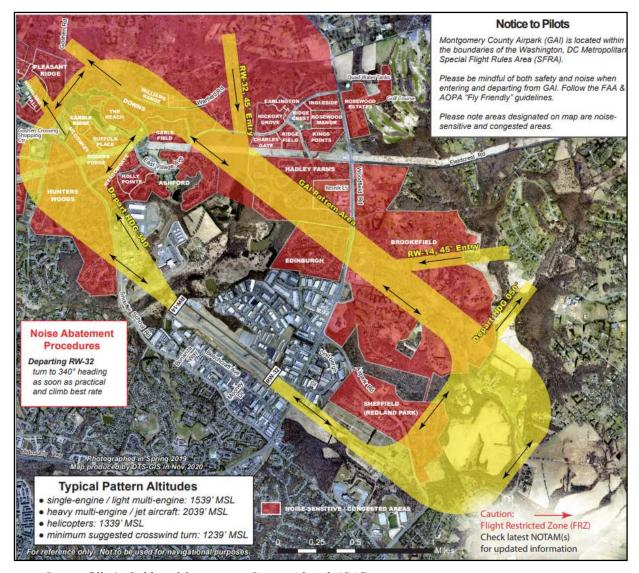
The FAA may approve specific flight patterns for a particular airport. In 1973, the FAA approved a modified flight pattern for the Airpark. The revised flight pattern shifted all air traffic over less densely populated areas to the east of the Airpark. In addition, the 1973 flight pattern called for air traffic to take right turns (instead of the standard left turn pattern) when approaching to land on the northbound runway to minimize activity directly above residential neighborhoods. Aircraft will make left turns when landing on the southbound runway. The turns in the Airpark flight patterns, which are published in the FAA's Airport Facility Directory, have remained unchanged since 1973. A map of the Airpark's flight patterns appears on the following page. The red areas highlight the noise sensitive and dense residential areas while the yellow area highlights the flight pattern.

<sup>&</sup>lt;sup>15</sup> FAA Presentation, Montgomery County Airpark Virtual Public Meeting, June 23, 2021

<sup>&</sup>lt;sup>16</sup> Federal Aviation Administration, Aeronautical Information Manual, Section 4-3-4, June 17, 2021, https://www.faa.gov/air\_traffic/publications/atpubs/aim\_html/chap4\_section\_1.html.

<sup>&</sup>lt;sup>17</sup> *Ibid.*, Section 4-1-9.

<sup>&</sup>lt;sup>18</sup> *Ibid.*, Section 4-3-3.



Source: Pilot's Guide to Montgomery County Airpark (GAI), <a href="https://montgomerycountyairpark.com/wp-content/uploads/2020/11/Pilots-Guide-2020.pdf">https://montgomerycountyairpark.com/wp-content/uploads/2020/11/Pilots-Guide-2020.pdf</a>

In the aftermath of the September 11, 2001, terrorist attack, the FAA established a "Special Flight Rules Area (SFRA)" for air travel within 30 nautical miles (about 35 land miles) around Washington, D.C. The Airpark falls within the SFRA. Requirements for aircraft flying within the SFRA include that:

- Pilots must obtain an advanced clearance from FAA air traffic control to fly within, into, or out of the SFRA.
- Aircraft flying within the SFRA must have an altitude-encoding transponder and it must be operating.
- FAA air traffic control must assign a four-digit number that identifies the aircraft by call sign or registration number when it gives a pilot clearance to fly in the SFRA.

• While flying within the SFRA, the pilot must be in direct contact with air traffic control unless cleared to the local airport traffic advisory frequency. 19

#### **G.** Economic Impact

The Maryland Aviation Administration (MAA) periodically retains the services of a consulting firm to measure the economic impact of aviation activity statewide as well as for each of the 35 public-use airports located in Maryland. The consulting firm estimates the economic impact of airports using a model that incorporates data on flight operations and local business activity, as reported by airport owners. The model produces an estimate of "business revenue," that is, revenue received by the firms providing the services to general aviation aircraft. In 2018, the MAA, based on the consulting firm's calculations, estimated the Airpark generated \$5.75 million in business revenue. In addition, according to the MAA, Airpark activity generated 193 jobs as well as \$1.47 million in State and local tax revenue.<sup>20</sup>

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<sup>&</sup>lt;sup>19</sup> Federal Aviation Administration, Restricted Areas, Special Flight Rules Area (SFRA), March 10, 2021, <a href="https://www.faa.gov/newsroom/restricted-airspace-0">https://www.faa.gov/newsroom/restricted-airspace-0</a>

<sup>&</sup>lt;sup>20</sup> Maryland Aviation Administration, Maryland Economic Impact of Airports, Montgomery County Airpark (GAI), December 2018, <a href="https://marylandregionalaviation.aero/wp-content/uploads/2020/05/GAI%20Montgomery%20County%20Airpark%20Brochure%202018.pdf">https://marylandregionalaviation.aero/wp-content/uploads/2020/05/GAI%20Montgomery%20County%20Airpark%20Brochure%202018.pdf</a>

#### **CHAPTER 5: REGULATORY FRAMEWORK**

This chapter provides an overview of the laws and regulations that govern aviation activity at the Montgomery County Airpark.<sup>21</sup>

#### A. Overview of Federal Regulations

The Federal Aviation Administration's (FAA) enabling statute authorizes the FAA to create, administer, and enforce Federal regulations to govern aviation activities in the United States. In addition, the FAA has the authority to award grants to airports and in doing so obligates general aviation airports who have received Federal grants to buy land or develop and/or improve the airport to comply with grant assurances that are required by statute. The Montgomery County Airpark has received multiple Federal capital improvement grants, and so, is subject to these Grant Assurances. In general, the FAR and Grant Assurances govern the following aspects of aviation activity:

- <u>Aircraft</u>: The FAR regulate aircraft specifications and conditions including aircraft design, production, and airworthiness for any aircraft that operate out of any airport in the United States.<sup>22</sup>
- <u>Aircraft Operators</u>: FAR regulations set rules for training and certification of pilots, including student, recreational, private, and commercial pilots who fly out of any airport in the United States.<sup>23</sup>
- <u>Airport Operations</u>: Under the FAA's Airport Compliance Program, airport sponsors of Federally obligated airports agree to certain obligations regarding airport operations and hours when they accept Federal funds, which are described in the Airport Compliance Program.<sup>24</sup>
- Federal Aid for Airports: The FAR establish the process for the distribution of Federal funds to airports. Federal regulations establish specific operational and facility requirements for an airport seeking Federal aid to construct or improve infrastructure such as runways.<sup>25</sup> The principal Federal aid program for airport infrastructure is the Airport Improvement Program.<sup>26</sup> For a list of general Federal requirements that apply to the grant assurances that are not related to aviation, see Appendix A.

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<sup>&</sup>lt;sup>21</sup> See Chapter 7 for information on the regulations related to non-aviation matters including noise control and environmental protection.

<sup>&</sup>lt;sup>22</sup> Code of Federal Regulations, 14 CFR Part 21, Certification Procedures for Products and Articles, October 16, 2009, <a href="https://www.ecfr.gov/current/title-14/chapter-I/subchapter-C/part-21/subpart-A">https://www.ecfr.gov/current/title-14/chapter-I/subchapter-C/part-21/subpart-A</a>

<sup>&</sup>lt;sup>23</sup> Code of Federal Regulations, 14 CFR Part 60, Certification: Pilots, Flight Instructors, and Ground Instructors, April 4, 1997, <a href="https://www.ecfr.gov/current/title-14/chapter-I/subchapter-D">https://www.ecfr.gov/current/title-14/chapter-I/subchapter-D</a>

<sup>&</sup>lt;sup>24</sup> Code of Federal Regulations, 14 CFR Part 16, Rules of Practice for Federally-Assisted Airport Enforcement Proceedings, <a href="https://www.ecfr.gov/current/title-14/chapter-I/subchapter-B/part-16">https://www.ecfr.gov/current/title-14/chapter-I/subchapter-B/part-16</a>

<sup>&</sup>lt;sup>25</sup> Code of Federal Regulations, 14 CFR Part 151, Federal Aid to Airports, December 13, 1962, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-151

<sup>&</sup>lt;sup>26</sup> Federal Aviation Administration, Overview: What is AIP?, https://www.faa.gov/airports/aip/overview/.

 <u>Aviation Noise</u>: The Federal Government controls aircraft noise through various methods, most notably through regulations that manage air traffic and navigable airspace in ways "that minimize noise impact on residential areas, consistent with the highest standards of safety and efficiency." <sup>27</sup> In addition, the FAA controls noise through aircraft certification requirements.

#### **B.** Effect of Federal Regulations on Airpark Operations

The FAA's regulatory framework greatly influences activity at the Montgomery County Airpark. The following paragraphs highlight how FAA rules and regulations affect access to, and use of, the Airpark by licensed pilots.

The Federal Government does not control the number of takeoffs and landings at general aviation airports, nor does it permit an airport operator (in the case of the Airpark, the MCRA) from restricting public access. In particular, the FAA requires airport sponsors (such as the MCRA) that have received an Airport Improvement Program grant to provide certain assurances as a condition of receiving Federal funding. One of the assurances requires that the airport engage in "economic nondiscrimination" practices. Under this provision, MCRA must "make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport." 28 According to the FAA, the term "commercial aeronautical activities" includes "general and corporate aviation, air taxi and charter operations, scheduled and nonscheduled air carrier operations, pilot training, aircraft rental and sightseeing, ... aircraft sales and services, aircraft storage, sale of aviation petroleum products, repair and maintenance of aircraft, sale of aircraft parts, ... and any other activities that ... can appropriately be regarded as aeronautical activities."<sup>29</sup> As a result of this Federal policy, the MCRA may not restrict the number of takeoffs and landings by air taxi, flight school, and other commercial ventures at the Airpark. The FAA policy also requires MCRA to make the Airpark available to U.S. Government aircraft. <sup>30</sup>

Under very limited circumstances, the FAA allows a general aviation airport manager to temporarily restrict aircraft operations or to revise approach patterns. For example, an airport

<sup>&</sup>lt;sup>27</sup> Federal Aviation Administration, *FAA Airport Compliance Manual* — *Order 5190.6B*, Chapter 13, Section 13.2, September 30, 2009,

https://www.faa.gov/airports/resources/publications/orders/compliance 5190 6/media/5190 6b chap13.pdf

28 Federal Aviation Administration, *Airport Improvement Program Assurances for Airport Sponsors, February 2020 (updated)*, Section 22, <a href="https://www.faa.gov/airports/aip/grant\_assurances/media/airport-sponsor-assurances-aip-2020.pdf">https://www.faa.gov/airports/aip/grant\_assurances/media/airport-sponsor-assurances-aip-2020.pdf</a>.

<sup>&</sup>lt;sup>29</sup> Federal Aviation Administration, Advisory Circular 150/5190-7, Minimum Standards for Commercial Aeronautical Activities, August 28, 2006, <a href="https://www.faa.gov/documentlibrary/media/advisory\_circular/150-5190-7/150">https://www.faa.gov/documentlibrary/media/advisory\_circular/150-5190-7/150</a> 5190 7.pdf

<sup>&</sup>lt;sup>30</sup> Federal Aviation Administration, *Airport Improvement Program Assurances for Airport Sponsors, February 2020 (updated)*, Section 22, <a href="https://www.faa.gov/airports/aip/grant\_assurances/media/airport-sponsor-assurances-aip-2020.pdf">https://www.faa.gov/airports/aip/grant\_assurances/media/airport-sponsor-assurances-aip-2020.pdf</a>.

manager may put in place temporary operational restrictions and modifications for safety purposes during construction to improve runways and related airport infrastructure.<sup>31</sup>

#### C. State of Maryland

Maryland law authorizes the Maryland Aviation Administration (MAA), a unit of the Maryland Department of Transportation, to administer aeronautical regulations in the state. Maryland law directs the MAA to promote aviation activity through a minimalist approach to regulation by "establishing only those regulatory provisions that are essential, so that persons may engage in any aspect of aeronautics with the least possible restriction, consistent with the safety, health, welfare, and the rights of others." The MAA enforces the following areas of airport and aircraft regulation.

- <u>Airport Licensing:</u> The MAA retains regulatory authority over "landing areas" (that is, airports and helipads) in the State. The MAA licenses airports found to be compliant with State standards. State regulations set standards for runway length, width, lighting, visibility, and markings as well requirements for other airport infrastructure such as wind direction indicators. In addition, State regulations require that any airport with a runway length greater than 3,200 feet long comply with Federal standards established by the FAA, which applies to the Airpark.<sup>33</sup>
- <u>Airport Inspections</u>: State regulations authorize the MAA to conduct inspections at airports in the State to ensure compliance that they are meeting the minimum standards. The MAA also has the authority to "order the closing of any airport or landing field or order any air school, air beacon or other air navigation facility to stop operating until the requirements of the [Maryland Aviation] Administration are met."<sup>34</sup>
- <u>Airport Operations</u>: State regulations require that the manager of a licensed airport operate and maintain the airport in compliance with all State safety standards. The regulations further mandate the airport manager "prominently display the airport traffic pattern, ground traffic rules, noise abatement procedures, and any special orders relating to the airport and its operation at a prominent location on the airport."<sup>35</sup>
- <u>Aircraft Operations</u>: State regulations specify that "except in emergency situations, a person<sup>36</sup> may not conduct any aircraft operations at a licensed airport other than those in

<sup>&</sup>lt;sup>31</sup> Federal Aviation Administration, Advisory Circular 150/5370-2G, *Operational Safety on Airports During Construction*, December 13, 2017, Section 1.2.3, https://www.faa.gov/documentLibrary/media/Advisory Circular/150-5370-2G.pdf

<sup>&</sup>lt;sup>32</sup> Annotated Code of Maryland, Transportation Article, §5-202.

<sup>&</sup>lt;sup>33</sup> Code of Maryland Regulations, Sec. 11.03.04.07.

<sup>&</sup>lt;sup>34</sup> Code of Maryland Regulations, Sec. 11.03.04.12.

<sup>&</sup>lt;sup>35</sup> Code of Maryland Regulations, Sec. 11.03.04.07.

<sup>&</sup>lt;sup>36</sup> The Code of Maryland Regulations (Sec. 11.03.04.02) defines "person" as "any: (1) County, municipal corporation, or other political subdivision of the Sate or any of their units; (2) Individual receiver, trustee, guardian, executor, administrator, fiduciary, or representative of any kind; or (3) Partnership, firm, association, public or private corporation, or any other entity."

conformity with the airport traffic pattern, ground traffic rules, and noise abatement procedures developed by the airport manager."<sup>37</sup>

• <u>Public Safety</u>: As stipulated in State regulations, the MAA "may not issue or renew an airport license ... if operations conducted at the airport seriously impair public safety." Of note, the regulations do not define the types of operation that would be deemed to "impair public safety."

#### **D.** Montgomery County

State aeronautical regulations state that "a person<sup>39</sup> may not operate an airport without land use approval from the local governing body if that body has an airport zoning ordinance." The Montgomery County Airpark has such an approval. As detailed in Chapter 2, the County Board of Appeals granted a special exception in 1959 to permit an airport at the current location of the Airpark.<sup>41</sup>

As with any other property, the Airpark must comply with applicable County laws and regulations. However, a County law or regulation would not be enforceable to the Airpark if that law or regulation affected aeronautical activity. Federal regulations do not allow for State and local governments to impose restrictions on aviation activities or airport operations. The Federal Government explicitly precludes non-Federal entities from setting rules that directly affect aviation. As stated in the FAA Airport Compliance Manual, "state and local governments may protect their citizens through land use controls and other police power measures not affecting airspace management or aircraft operations." Moreover, the FAA Manual directs state and local governments and planning agencies to accommodate airport activity and to "provide for land use planning and development, zoning, and housing regulations that are compatible with airport operations." \*\*

In addition, neither the County nor the MCRA has the authority to re-designate the Airpark property for non-aviation use. Under FAA regulations, an airport that has received Federal grant assistance must maintain its aviation infrastructure and may not cease or suspend operations unless the FAA determines that the "airport facilities are no longer needed for civil aviation requirements." <sup>44</sup> The FAA Airport Compliance Manual further states that "it is unlikely that an

<sup>&</sup>lt;sup>37</sup> Code of Maryland Regulations, Sec. 11.03.04.04.

<sup>&</sup>lt;sup>38</sup> Code of Maryland Regulations, Sec. 11.03.04.06.

<sup>&</sup>lt;sup>39</sup> See footnote 35.

<sup>&</sup>lt;sup>40</sup> Code of Maryland Regulations, Sec. 11.03.04.06.

<sup>&</sup>lt;sup>41</sup> See Chapter 6 for a discussion of the land use and zoning for areas surrounding the Airpark.

<sup>&</sup>lt;sup>42</sup> Federal Aviation Administration, *FAA Airport Compliance Manual — Order 5190.6B*, Chapter 13, Section 13.2, September 30, 2009,

https://www.faa.gov/airports/resources/publications/orders/compliance\_5190\_6/media/5190\_6b\_chap13.pdf 43 *Ibid*.

<sup>&</sup>lt;sup>44</sup> Federal Aviation Administration, *FAA Airport Compliance Manual — Order 5190.6B*, Chapter 22, Section 22.7, September 30, 2009,

https://www.faa.gov/airports/resources/publications/orders/compliance 5190 6/media/5190 6b chap22.pdf.

airport would be released from its maintenance obligation". <sup>45</sup> The mandate to maintain the use and operation of infrastructure improved by a Federally funded project remains in effect "throughout the useful life of the facilities developed under the project, but not to exceed 20 years." <sup>46</sup> The Airpark received its latest Federal funding in 2020 to rehabilitate its runway.

<sup>&</sup>lt;sup>45</sup> Federal Aviation Administration, *FAA Airport Compliance Manual — Order 5190.6B*, Chapter 22, Section 22.7, September 30, 2009,

https://www.faa.gov/airports/resources/publications/orders/compliance 5190 6/media/5190 6b chap22.pdf.

<sup>&</sup>lt;sup>46</sup> Federal Aviation Administration, *FAA Airport Compliance Manual — Order 5190.6B*, Chapter 4, Section 4.3, September 30, 2009,

https://www.faa.gov/airports/resources/publications/orders/compliance 5190 6/media/5190 6b chap4.pdf.

#### CHAPTER 6: LAND USE OF SURROUNDING AREAS

This chapter details the land use patterns, zoning, and development history of the area surrounding the Montgomery County Airpark.

#### A. Historical Airpark Area Land Use and Zoning Policies

When the Airpark opened in 1960, most of the surrounding land use was farmland. At that time, about 160 acres surrounding the Airpark were zoned for industrial use (see Chapter 2). Development of residential neighborhoods near the Airpark began in the 1960s. In response to this development, the County Council amended the County Code in 1974 to require that real estate agents disclose the existence of an airport or heliport within a five-mile radius of a property that is up for sale. The full text of this County Code provision appears in the box below.

#### Sec. 40-11. Disclosure of location of airport or heliport within five-mile radius of property.

It shall be the duty of the property owner's agent when selling either unimproved or improved real property located in the county, whether or not in a subdivision, or in the event an agent is not employed, it shall be the duty of the property owner, to disclose to the prospective purchaser, or if more than one (1) purchaser, to at least one (1) of the purchasers, prior to the entering into of a contract for sale of such property, the relative location of any airport or heliport, as defined in the county zoning ordinance, existing within a five-mile radius of the property.

Subsequent County land use decisions added to development in the vicinity of the Airpark. Some key decisions include:

- Development of Montgomery Village East, which is located northwest of the Airpark, was approved through multiple zoning map amendments between 1979 and 1987.<sup>47</sup>
- In 1983, the Council approved Development Plan Amendment (DPA) 82-1 that shifted approximately 1,600 residential units from the Montgomery Village commercial core to an area east of Snouffer School Road near the Airpark. DPA 82-1 found that with increasing density [near the Airpark] will come an increase in complaints and annoyance based on the noise of overflights, but this factor is not sufficient by itself to generate a negative response to this proposal.<sup>48</sup>
- In 1988, an amendment to the Gaithersburg Vicinity Plan recommended optional method Planned Neighborhood development for more than 300 townhouse and garden apartment units on vacant property near the Airpark.<sup>49</sup>
- The most recent master plan for the area, the 1990 Gaithersburg Vicinity Master Plan, assumes "the continued operation of the Montgomery County Airpark at its present location and with its current general character" and recommends that "prospective"

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<sup>&</sup>lt;sup>47</sup> Zoning map amendments G-24, G-240, G-467, and G-468.

<sup>&</sup>lt;sup>48</sup> County Council Resolution 10-99 adopted March 1, 1983.

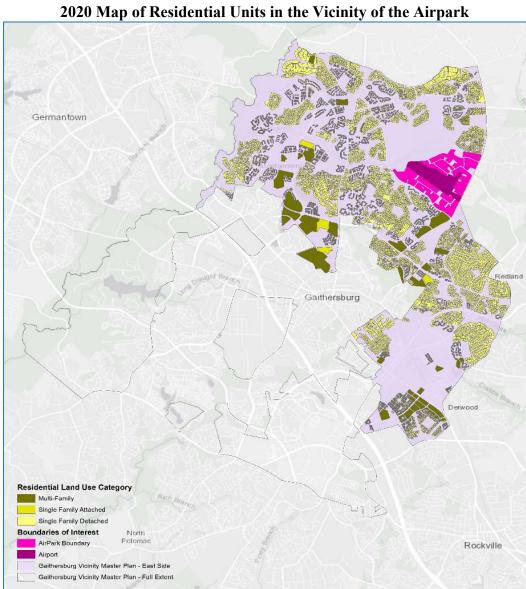
<sup>&</sup>lt;sup>49</sup> Approved and Adopted Gaithersburg Vicinity Plan, Amended May 1988, Amended July 1990, page 47, <a href="https://montgomeryplanning.org/wp-content/uploads/2016/09/GaithersburgVicinityMasterPlan1990ocr300.pdf">https://montgomeryplanning.org/wp-content/uploads/2016/09/GaithersburgVicinityMasterPlan1990ocr300.pdf</a>

development of surrounding residential and industrial areas should not detract from its continued operation."  $^{50}$ 

#### B. History of Development in the Airpark Area

The Montgomery County Planning Department provided OLO with historical data of the number of residential units in the vicinity of the Airpark within the Gaithersburg and Vicinity Planning Area (pictured on the next page) by decade from 1960 - 2020. The units are designated by type: multi-family, single family attached, and single family detached in the table on the page 27.

<sup>&</sup>lt;sup>50</sup> *Ibid.*, page <u>3.</u>



Source: Montgomery County Planning Department

YEAR	UNIT TYPE	<b># OF UNITS ADDED</b>
		(BY DECADE)
PRE-1960	Multi Family	802
	Single Family Attached	1
	Single Family Detached	108
	Total	911
1960 – 1969	Multi Family	107
	Single Family Attached	285
	Single Family Detached	1229
	Total	1,621
1970 – 1979	Multi Family	2655
	Single Family Attached	4446
	Single Family Detached	1647
1000 1000	Total	8,748
1980 – 1989	Multi Family	1400
	Single Family Attached	4910
	Single Family Detached	3614
1000 1000	Total	9,924
1990 – 1999	Multi Family	1241
	Single Family Attached	1434
	Single Family Detached	1216
2000 – 2009	Total	<b>3,891</b> 1725
2000 – 2009	Multi Family	995
	Single Family Attached Single Family Detached	405
	Total	3,125
2010 - 2019	Multi Family	1534
2010 - 2017	Single Family Attached	348
	Single Family Detached	56
	Total	1,938
2020 - 2021	Multi Family	0
	Single Family Attached	83
	Single Family Detached	4
	Total	87
ALL YEARS	Grand Total	30,245
		)

Source: Montgomery County Planning Department

OLO reviewed historical aerial photos available through Montgomery County's geographic information system (GIS) database.<sup>51</sup> The photos below show the progression of development over time in the area surrounding the Airpark. The blue marker in each photo denotes the center of the Airpark. The number of housing units and a discussion of any significant information is included for each aerial photo.



#### Aerial Photo of the Airpark Area in 1951

Source: Montgomery County GIS

YEAR	UNITS	
PRE-1960	Multi Family	802
	Single Family Attached	1
	Single Family Detached	108
	Total	911

The photo above shows the Airpark area prior to the construction of the Airpark. In 1951, most of the land around the current Airpark was farmland. However, at the time the Board of Appeals approved a special exception to build the Airpark in 1959, the Council rezoned 160 acres of land surrounding the Airpark for industrial uses.

<sup>&</sup>lt;sup>51</sup> Montgomery County Government, Montgomery County GIS Data, Accessed 10/20/21, <a href="https://www.montgomerycountymd.gov/gis/data.html">https://www.montgomerycountymd.gov/gis/data.html</a>





Source: Montgomery County GIS

YEAR	UNITS	
1960 - 1969	Multi Family	107
	Single Family Attached	285
	Single Family Detached	1229
	Total	1,621

The aerial from 1970 shows the area surrounding the Airpark was still mostly rural with a small amount of residential development.



#### Aerial Photo of the Airpark Area in 1993

Source: Montgomery County GIS

YEAR	UNITS	
1970 – 1979	Multi Family	2655
	Single Family Attached	4446
	Single Family Detached	1647
	Total	8,748
1980 - 1989	Multi Family	1400
	Single Family Attached	4910
	Single Family Detached	3614
	Total	9,924

The aerial photo above shows residential development around the Airpark significantly increased between 1970 and 1993. Noise complaints about aircraft operations from residents living near the Airpark began in the mid-1980s, which led the Council to create the Airpark Assessment Task Force in 1985 to determine the future of air traffic in the County and make recommendations about the future of the Airpark and the possibility of building other airports. <sup>52</sup> The County did not adopt any of the Task Force recommendations.

<sup>&</sup>lt;sup>52</sup> Washington Post, A Fight in the Wind Over Airport Plan, March 24, 1986, <a href="https://www.washingtonpost.com/archive/local/1986/03/24/a-fight-in-the-wind-over-airport-plan/815f31ba-7468-4f4b-9462-5abffbe19d51/">https://www.washingtonpost.com/archive/local/1986/03/24/a-fight-in-the-wind-over-airport-plan/815f31ba-7468-4f4b-9462-5abffbe19d51/</a>





Source: Montgomery County GIS

YEAR	UNITS	
1990 - 1999	Multi Family	1241
	Single Family Attached	1434
	Single Family Detached	1216
	Total	3,891
2000 - 2009	Multi Family	1725
	Single Family Attached	995
	Single Family Detached	405
	Total	3,125

Residential development continued in the 1990s and 2000s, although at a rate of fewer than half the number of units per decade compared to the 1970s and 1980s.





Source: Montgomery County GIS

YEAR	UNITS	
2010 - 2019	Multi Family	1534
	Single Family Attached	348
	Single Family Detached	56
	Total	1,938

The most notable change from the 2012 and 2019 aerial maps is the development of the non-residential property northwest of the Airpark which is the current location of the County's Public Safety Training Academy and Montgomery County Public Schools Division of Maintenance facility. An additional 1,938 housing units were added in 2010-2019.

#### C. Present Airpark Area Land Use and Zoning

The Airpark is surrounded by multiple residential communities, which include: 53

- Flower Hill
- Hunters Woods
- East Village area of Montgomery Village
- Eastgate area of Montgomery Village
- Hadley Farms
- Edinburg Village
- Goshen Estates

After speaking to Planning Department staff as well as the MCRA, OLO found that the communities within a two-mile radius are the most likely to be impacted by noise pollution and other quality of life impacts from the Airpark. The following section provides an overview of the communities within the two-mile radius of the Airpark.

According to GIS data received from the Planning Department, there are 13,562 residential parcels within a two-mile radius of the Airpark.<sup>54</sup> Of these, 6,521 are single family detached, 7,016 are single family attached, and 25 are multi family. OLO identified 27 census tract block groups that are included within the two-mile radius of the Airpark, illustrated in the map on the next page.<sup>55</sup> The block group data indicate the income and demographic characteristics of the residents living near the Airpark do not differ significantly from those of the County population as a whole.

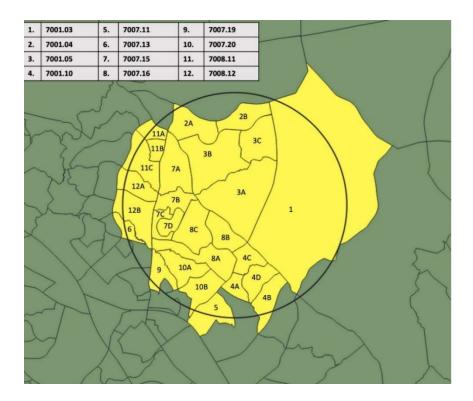
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<sup>&</sup>lt;sup>53</sup> Montgomery County Airpark, Airpark Community Info, Accessed October 24, 2021, https://montgomerycountyairpark.com/airpark-community-info/

<sup>&</sup>lt;sup>54</sup> The geographical center of the Airpark was used as the center of the 2-mile radius

<sup>&</sup>lt;sup>55</sup> See Appendix D for full list of census tract block groups. The map only shows the census tracts included in the analysis, and block groups for census tracts are denoted by letters (i.e., 3A denotes 7001.05 Block Group 1)



The following tables summarize the median household incomes and racial demographics of the block groups. The averages of median household incomes and racial demographics for the block groups included in the analysis are not significantly different than the County averages.

Average Household Income of Selected Block Groups	\$107,881
Average County Household Income	\$110,389

Source: 2019 ACS 1 Year Estimates (US. Census)

	% White	% Black or African American	% Asian	% American Indian or Alaska Native	% Native Hawaiian or Pacific Islander	% Some Other Race	% Two or more Races
Selected Block Groups Average	50.5%	20.2%	13.8%	0.2%	0.1%	10.1%	5.1%
County Average	51.1%	19%	15%	.04%	.02%	10.2%	4.3%

Source: 2019 ACS 1 Year Estimates (US Census)

#### CHAPTER 7: ENVIRONMENTAL, HEALTH AND SAFETY IMPACTS OF AIRPARK

There is a growing body of research investigating the environmental, health, and safety issues of living near an airport. While these health concerns could affect anyone residing near an airport, children below age five and the elderly (over 65 years of age) are especially susceptible.<sup>56</sup>

OLO reviewed relevant environmental regulations, conducted interviews with the Montgomery County Revenue Authority (MCRA), Department of Environmental Protection (DEP), the Federal Aviation Administration (FAA), and the Maryland Aviation Administration (MAA), and performed document reviews on research regarding environmental, health, and safety issues for communities near airports. This chapter summarizes relevant research and findings and discusses these issues locally, where relevant.

#### A. Regulatory Overview of Noise Pollution

In 1972, Congress passed the Federal Noise Control Act of 1972, which granted regulatory authority to the Environmental Protection Agency (EPA) to monitor and regulate noise pollution. In 1981, the EPA determined that noise issues were best handled at the State and local levels. However, the EPA retained the authority to investigate and study noise and its effects, respond to inquiries on matters related to noise, and evaluate the effectiveness of existing regulations for protecting the public health and welfare, pursuant to the Noise Control Act of 1972 and Quiet Communities Act of 1978.<sup>57</sup>

In Maryland, as of 2012, the Maryland Department of the Environment transferred the authority of noise enforcement to local governments.<sup>58</sup> The Department of Environmental Protection (DEP) administers Montgomery County's noise control program, as described in Chapter 31B of the County Code.<sup>59</sup> The noise control program sets forth the following maximum decibel restrictions as summarized in the table on the next page.<sup>60</sup> OLO notes that the DEP does not have the authority to enforce noise restrictions for aviation-related activity.

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<sup>&</sup>lt;sup>56</sup> Environmental Health 20, 10, Bendsten, K.M., Bengsten E., Saber, A.T. et al., A review of health effects associated with exposure to jet engine emissions in and around airports, February 6, 2021, https://ehjournal.biomedcentral.com/articles/10.1186/s12940-020-00690-y

<sup>&</sup>lt;sup>57</sup> Environmental Protection Agency, Clean Air Act Title IV – Noise Pollution, Accessed November 3, 2021, https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution

Maryland Department of the Environment, Noise Enforcement Authority Has Been Transferred to Local Jurisdictions, 2012, <a href="https://mde.maryland.gov/programs/marylander/publichealth/pages/noise.aspx">https://mde.maryland.gov/programs/marylander/publichealth/pages/noise.aspx</a>

<sup>&</sup>lt;sup>59</sup> Montgomery County Code, Section 31B-1.

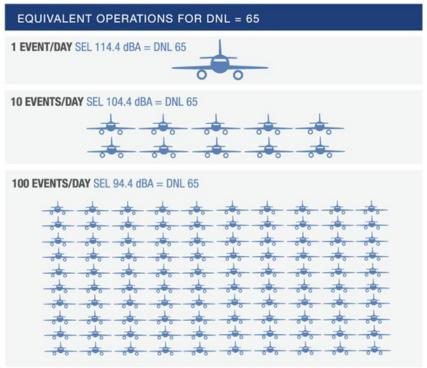
<sup>&</sup>lt;sup>60</sup> Noise is measured in decibels, which is a unit used to measure the intensity of a sound and corresponds to the way human ears interpret sound pressures.

Maximum Allowable Noise Levels (dBA) for Receiving Noise Areas<sup>61</sup>

	Daytime	Nighttime
Non-residential Noise Area	67	62
Residential Noise Area	65	55

Source: Montgomery County Code, Section 31B-5

The FAA uses the Day-Night Average Sound Level (DNL) to measure a person's cumulative exposure to sound, in decibels, over a 24-hour period. The FAA then estimates annual aircraft operations (that is takeoffs and landings), to find the daily average noise level that a community experience. Operations that occur between 10 PM and 7 AM are weighted more heavily as people are generally more sensitive to night-time noise. Because of these factors, different numbers of operations at different times of the day can produce the same DNL. For example, small numbers of relatively loud operations can result in the same DNL as large numbers of relatively quiet operations.<sup>62</sup> The next chart displays examples using the sound exposure level metric (SEL) of different aircraft noise events. The SEL metric represents the total sound pressure of an individual noise event.



Source: Federal Aviation Administration

<sup>&</sup>lt;sup>61</sup> "Receiving" means any real property where people live or work and where noise is heard, such as apartments and office buildings.

<sup>&</sup>lt;sup>62</sup> Federal Aviation Administration, Fundamentals of Noise and Sound, Updated July 30, 2020, <a href="https://www.faa.gov/regulations-policies/policy-guidance/noise/basics/">https://www.faa.gov/regulations-policies/policy-guidance/noise/basics/</a>

#### Criticisms of the 65 DNL Threshold

It should be noted there has been criticism of the FAA setting the 65 DNL threshold as compatible for residential land use. The 65 DNL threshold is based on the Schultz Curve, which was developed from data from surveys conducted in the 1960s and 1970s for transportation noise sources, including aircraft and airports. While the Schultz Curve was re-validated in 1992 by the Federal Interagency Commission on Noise, many critics deem it outdated.<sup>63</sup> On January 13, 2021, the FAA published the results of the Neighborhood Environmental Survey in the Federal Register, which is to inform FAA noise policy by reevaluating community annoyance to noise exposure from airport operations.<sup>64</sup> The initial findings suggest tolerances towards noise has changed significantly as survey results indicate over 60% of the population is highly annoyed at noise exposures of 65 DNL, compared to the surveys conducted in the 1960s and 1970s that reported only 12.3% of the population as highly annoyed at that same exposure.<sup>65</sup> The FAA has stated they plan to use these findings to reevaluate their noise policies.

The FAA identifies the 65 DNL noise contour as both the level at which most land uses are compatible with airport noise and the threshold of eligibility for Federal funding. <sup>66</sup> According to the Airpark Layout Plan, which is approved by the FAA, the Airpark complies with this threshold. <sup>67</sup> The noise contour for the Airpark illustrates the noise levels on the next page.

<sup>&</sup>lt;sup>63</sup> Federal Register, Overview of FAA Aircraft Noise Policy and Research Efforts: Request for Input on Research Activities to Inform Aircraft Noise Policy, January 13, 2021,

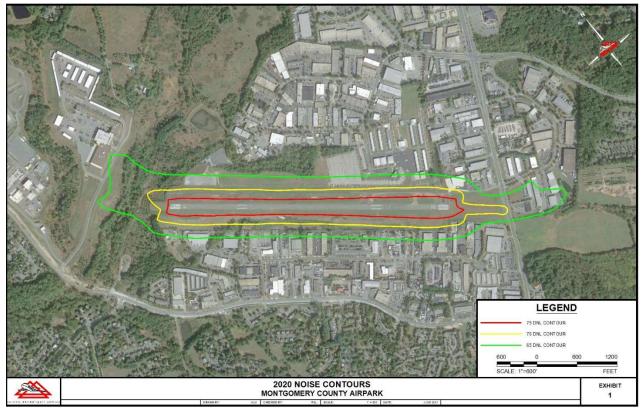
 $<sup>\</sup>frac{https://www.Federalregister.gov/documents/2021/01/13/2021-00564/overview-of-faa-aircraft-noise-policy-and-research-efforts-request-for-input-on-research-activities}$ 

<sup>&</sup>lt;sup>64</sup> Ibid.

<sup>65</sup> Ibid.

<sup>&</sup>lt;sup>66</sup> Federal Aviation Administration, FAA History of Noise, Updated February 9, 2018, https://www.faa.gov/regulations\_policies/policy\_guidance/noise/history/

<sup>&</sup>lt;sup>67</sup> Delta Airport Consultants, INC., Montgomery County Airpark Airport Layout Plan Update – Final Report, July 2002.



Source: MCRA

#### **B.** Noise Pollution in the Surrounding Communities

As long as residential communities have been built near the Airpark, there have been concerns about the compatibility of the Airpark with residential areas. In 1990, the Council created the Airpark Liaison Committee (ALC) to respond to community complaints regarding Airpark operations. The Council resolution establishing the Liaison Committee references "community efforts to limit the hours of operation, revise flight patterns, and generally place greater restrictions on Airpark operations" and cites the need for "increased communication among the community, the County, Airpark users and the Airpark operator."

In 1991, the MCRA in conjunction with the FAA conducted a "Part 150 Noise Study" for the Airpark. A Part 150 study is a voluntary study prepared by an airport to define the five-year vision of compatibility between an airport and the surrounding communities, which entails identifying areas where aircraft noise is present and encouraging compatible land uses in those areas. <sup>69</sup> At that time, the MCRA, the Part 150 Technical Advisory Committee, and the ALC expressed concern over the continuing development of residential areas within the noise affected areas of the Airpark. <sup>70</sup> Specific concerns raised at the time included:

<sup>&</sup>lt;sup>68</sup> County Council Resolution No. 11-1826, Establishment of Montgomery County Airpark Liaison Committee, January 23, 1990.

<sup>&</sup>lt;sup>69</sup> Code of Federal Regulations, CFR Title 14, Chapter 1, Subchapter 1, Part 150.

<sup>&</sup>lt;sup>70</sup> Memorandum from the MCRA to Montgomery County Planning Board, October 1<sup>st</sup>, 1991

- Approaching and departing aircraft frequently created noise levels that distract human activity. However, these single event incidents were not in violation of FAA rules, regulations, or standards.
- The preliminary results of the Noise Study show there is no apparent way to gain FAA approval of mandatory restrictions on the number of flights, aircraft based at the Airpark, or hours of operation.
- The continued policy of residential growth within the flight paths would create additional citizen complaints.

These concerns were further elaborated by the following statement: "The MCRA recognizes that planning, zoning, and permitting are outside of its purview but considers it of paramount importance to bring to your attention, again, the seriousness of the continuing and growing problem of residential development near the Airpark. Unless mitigation measures are undertaken, such as condemnation of affected real property or the employment of strict soundproofing in the construction of homes in the affected area, the MCRA is concerned that an entire new segment of the county's population will be subjected to undesirable noise levels by virtue of purchasing new homes in the developments near the Airpark."<sup>71</sup>

Since the Part 150 Study in 1991, residential development has continued near the Airpark (see Chapter 6). Subsequently, other events occurred relating to noise pollution and complaints, including:

- In 2009, the MCRA and Airpark Liaison Committee reviewed the noise abatement controls and recommended no changes.
- In 2019, the Airpark partnered with the FAA to set up an online portal for residents to submit noise complaints.<sup>72</sup>
  - o In 2019, there were 27 complaints submitted to the Airpark via the online portal.
  - o In 2020, there were 191 complaints made by 11 unique households.
  - o In 2021, there were 2,835 complaints made by 35 unique households.<sup>73</sup>

#### C. Overview and Risks of Lead Pollution

Lead is a naturally occurring element that can be toxic to humans and animals. The EPA states that there is "no demonstrated safe concentration of lead in blood."<sup>74</sup> However, the EPA has

<sup>72</sup> Prior to the portal, there was no one mechanism to lodge noise complaints. Complaints were channeled towards the ALC, FAA, and other agencies. Due to this, OLO was unable to find a complete and comprehensive list of complaints lodged prior to 2019.

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<sup>&</sup>lt;sup>71</sup> *Ibid*.

<sup>&</sup>lt;sup>73</sup> Montgomery County Airpark Virtual Public Meeting held on June 23, 2021, https://montgomerycountyairpark.com/community-info/

<sup>&</sup>lt;sup>74</sup> Environmental Protection Agency, Learn about Lead, Accessed November 4, 2021, <a href="https://www.epa.gov/lead/learn-about-lead">https://www.epa.gov/lead/learn-about-lead</a>

established standards for lead concentrations in soils, water, and air as measured by the concentration of the contaminant present in a substance such as water, air, or soils.

- For bare soils in residential areas classified as play areas <sup>75</sup> 400 parts per million (ppm) by weight.
- For bare soils in residential areas classified as non-play areas 1200 ppm by weight.
- For drinking water The maximum contaminant level goal is 0, however if 10% of taps sampled are at or above 15 parts per billion (ppb), the drinking water system must undertake actions to decrease the levels of lead.
- For air Not to exceed .15 micrograms per cubic meter ( $\mu g/m^3$ ).

The EPA has regulatory authority for enforcing lead concentration standards in soils, air, and drinking water. However, monitoring of these standards are conducted by various state and local governmental organizations. The Federal Lead and Copper Rule of 1991 requires that operators of drinking water systems monitor lead levels in drinking water supplies. For soils, the Maryland Department of the Environment (MDE) enforces stricter residential soil concentrations at 200 mg/kg, which is 100% lower than the EPA's standard for lead in bare soil in play areas. As of 2010, the EPA requires state and local air quality agencies to monitor airports with estimated emissions of 1.0 ton or more of lead per year. The MDE oversees State Implementation Plans for air quality and the Montgomery County Department of the Environment (DEP) is responsible for the protection of indoor and outdoor air quality in the County, according to County Code<sup>80</sup>

Lead can contaminate air, water, and soils when leaded fuel is burned in an engine. When lead becomes airborne, which can occur from the burning of leaded fuel in an engine, it can be inhaled by people in communities near airports.<sup>81</sup>

Further, airborne lead can be deposited into soils. Past emissions from aircraft fueled by leaded fuel can lead to present-day lead exposures in soils within and near airports. 82 Children and adults can be exposed to lead contamination in soils by:

<sup>&</sup>lt;sup>75</sup> Refers to areas of the yard where children play.

<sup>&</sup>lt;sup>76</sup> Centers for Disease Control and Prevention, Safety Standards – Lead Toxicity, June 12, 2019, https://www.atsdr.cdc.gov/csem/leadtoxicity/safety\_standards.html

<sup>&</sup>lt;sup>77</sup> Environmental Protection Agency, Basic Information about Lead in Drinking Water, Accessed November 5, 2021, <a href="https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#regs">https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#regs</a>

<sup>&</sup>lt;sup>78</sup> Maryland Department of the Environment, Lead (Pb) Soil Screening Update, July 1, 2020, <a href="https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Documents/Lead%20Soil%20Standards%20">https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Documents/Lead%20Soil%20Standards%20</a> Update%20FINAL.pdf

<sup>&</sup>lt;sup>79</sup> Environmental Protection Agency, Monitoring the Air for Lead Near the McClellan-Palomar Airport and Gillespie Field, June 2013, <a href="https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100YQ1Y.txt">https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100YQ1Y.txt</a>

<sup>80</sup> Montgomery County Code, Chapter 3. Air Quality Control,

https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco md/0-0-0-2491

<sup>&</sup>lt;sup>81</sup> National Academies of Sciences, Engineering, and Medicine, Options for Reducing Lead Emissions from Piston-Engine Aircraft, 2021. <a href="https://doi.org/10.17226/26050">https://doi.org/10.17226/26050</a>.

<sup>82</sup> *Ibid*.

- Touching, breathing, eating, or playing in lead-contaminated soil.
- Lead-contaminated soil can be brought inside on shoes, clothes, or pets.
- Eating fruits or vegetables grown in or near lead-contaminated soil.

Lead may leach from soils into surface water or groundwater, depending on the characteristics of the soil and the type of lead compound. Large amounts of precipitation can increase the chance of lead leaching from soils into water.<sup>83</sup>

#### D. Lead Pollution from Airports and Aircrafts

In the United States, lead emissions in the air have decreased significantly in the past several decades. From 1980-2018, air lead concentrations have decreased by 99%, in part because of phaseouts and an eventual ban on leaded gasoline in most motor vehicles which started in 1973.<sup>84</sup>

However, piston-engine aircraft still operate on leaded aviation fuel (commonly referred to as "avgas"). <sup>85</sup> In a 2020 report, the EPA found that aviation fuel is the largest remaining aggregate source of lead emissions in air in the country. <sup>86</sup> Further, research indicates that lead levels in air near airports where aircraft use leaded avgas are significantly higher than background levels and may pose health risks. <sup>87</sup> OLO notes that these studies measured mixed emissions from various airport operations, such as other sources outside of aircraft operations.

Research shows that people who live and attend school near airports are potentially exposed to lead in air from piston-engine aircraft operations at airports. <sup>88</sup> One study, whose scope included multiple airports in North Carolina that used leaded avgas, reported a statistically significant increase in children's blood lead for living within 1,000 meters of an airport. <sup>89</sup> This means that those living within 1,000 meters, or 0.62 miles, of an airport are most at risk for being exposed to lead.

<sup>83</sup> Ibid

<sup>&</sup>lt;sup>84</sup> Environmental Protection Agency, EPA Take Final Step in Phaseout of Leaded Gasoline, January 29, 1996, https://archive.epa.gov/epa/aboutepa/epa-takes-final-step-phaseout-leaded-gasoline.html

<sup>&</sup>lt;sup>85</sup> There are three grades of aviation gas (avgas): low lead (LL), very low lead (VLL), and unleaded (UL). Almost all avgas sold in the United States is low lead avgas, which piston engine aircraft use. Jet and turbine-powered aircraft use kerosene-like fuel, which does not contain a lead additive.

<sup>&</sup>lt;sup>86</sup> Environmental Protection Agency, Technical Update: Reports on the Impact of Lead Emissions from Piston-Engine Aircraft on Air Quality Near U.S. Airports, February 2020, <a href="https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100YG46.pdf">https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100YG46.pdf</a>

<sup>&</sup>lt;sup>87</sup> Environmental Health Perspectives, Volume 119 Number 10, Miranda, M. L., Anthopolos, R., and Hastings D., A Geospatial Analysis of the Effects of Aviation Gasoline on Childhood Blood Lead Levels, July 13, 2011, <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3230438/pdf/ehp.1003231.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3230438/pdf/ehp.1003231.pdf</a>

<sup>&</sup>lt;sup>88</sup> Environmental Protection Agency, National Analysis of the Populations Residing Near or Attending School Near U.S. Airports, February 2020, <u>EPA's Data and Analysis of Piston-engine Aircraft Emissions of Lead at U.S. Airports | US EPA.</u>

<sup>&</sup>lt;sup>89</sup> Environmental Health Perspectives, Volume 119 Number 10, Miranda, M. L., Anthopolos, R., and Hastings D., A Geospatial Analysis of the Effects of Aviation Gasoline on Childhood Blood Lead Levels, July 13, 2011, <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3230438/pdf/ehp.1003231.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3230438/pdf/ehp.1003231.pdf</a>

On January 12, 2022, the Environmental Protection Agency responded to concerns raised about lead emissions from piston-engine aircraft. The EPA intends to develop a proposal under the Clean Air Act (CAA section 231 (a)(2)(A)) to determine if lead emissions from piston-engine aircraft cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, which they refer to as the "endangerment finding." The EPA plans to issue a proposed endangerment finding in 2022 and issue a final endangerment finding in 2023. <sup>90</sup>

#### The Future of Leaded Aviation Gasoline

On September 9, 2021, President Biden released a statement regarding a proposal for the Sustainable Aviation Fuel Tax credit as part of his Build Back Better Agenda. One of the key announcements made alongside this proposal was the launching of the Sustainable Aviation Fuel Grand Challenge across the Federal Government, which includes efforts to "improving air traffic and airport efficiency to reduce fuel use, eliminate lead exposure, and ensure cleaner air in and around airports." To do so, the EPA and FAA will be working together to address the local environmental impacts of aviation, including lead emissions from piston-engine aircraft, identifying ways to reduce exposure to lead emissions, and to reduce or eliminate lead from aviation gasoline. 92

#### E. Lead Pollution in the Surrounding Communities

Currently, there are no lead monitors at the Montgomery County Airpark. Further, after speaking to County staff, OLO is unaware of any monitoring downstream of the Airpark that tests for lead in the water and DEP does not collect any lead or other heavy metal data in the vicinity of the Airpark.<sup>93</sup>

In September 2021, the Maryland Department of the Environment (MDE) responded to a Council request for lead monitoring equipment to assess ambient lead concentrations at the Airpark and its surrounding area. In sum, the EPA approved for the MDE to discontinue the one remaining lead monitoring site in Maryland as levels were consistently below the analytical method's detection limit and the MDE no longer conducts lead monitoring. Further, the most recent National Emissions Inventory (NEI) reported emissions for the Airpark was 0.125 tons/year for 2017, which falls below the EPA requirement for state air quality agencies to monitor airports that emit at least 1.0 tons/year. For a copy of the full letter, see Appendix C.

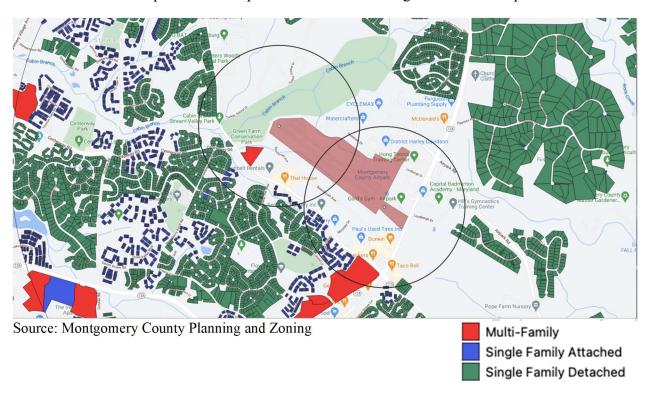
<sup>&</sup>lt;sup>90</sup> Environmental Protection Agency, EPA Response Memorandum, January 12, 2022, <a href="https://www.epa.gov/regulations-emissions-vehicles-and-engines/petitions-and-epa-response-memorandums-related-lead">https://www.epa.gov/regulations-emissions-vehicles-and-engines/petitions-and-epa-response-memorandums-related-lead</a>

<sup>&</sup>lt;sup>91</sup> The White House, Fact Sheet: Biden Administration Advances the Future of Sustainable Fuels in American Aviation, September 9, 2021, <a href="https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/09/fact-sheet-biden-administration-advances-the-future-of-sustainable-fuels-in-american-aviation/">https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/09/fact-sheet-biden-administration-advances-the-future-of-sustainable-fuels-in-american-aviation/</a>
<sup>92</sup> Ihid

<sup>93</sup> Stakeholder Meeting

For airborne lead pollution, the MCRA, as the Airpark operator, is required to apply all reasonable measures to mitigate the air quality impacts from implementing any improvements that are Federally funded, according to the Federal Airport and Airway Improvement Act of 1982. As detailed in Chapter 2, the Airpark has received multiple grants from the FAA. For each grant, the MCRA has complied with the standards set forth in the grant agreements.

This map created in QGIS shows the potential airborne lead contamination in the surrounding areas of the Airpark. OLO used the 1,000-meter radius of potential exposure to airborne lead identified by the study in the previous section, which was measured from the center of two points at both ends of the Airpark runway. OLO notes this is a rough estimation as the EPA identified 1,000 meters as the furthest distance for lead exposure and these studies are based on airports that may have differing operating levels. Further studies and analyses should be conducted to understand the full impact of lead exposure in the surrounding areas of the Airpark.



#### F. Safety

OLO reviewed safety reports of the Montgomery County Airpark from the National Transportation Safety Board (NTSB). There have been 35 accidents at the Airpark dating back to 1983. Generally, these accidents have been minor and due to pilot error.

<sup>&</sup>lt;sup>94</sup> Both ends of the runways are utilized for takeoffs, depending on weather conditions

<sup>&</sup>lt;sup>95</sup> National Transportation Safety Board, Query for Investigations at GAI, Accessed 10/25/2021, <a href="https://data.ntsb.gov/carol-main-public/query-builder">https://data.ntsb.gov/carol-main-public/query-builder</a>

However, seven accidents at the Airpark have been fatal, with the most recent occurring on December 8, 2014. A jet attempting to land at the Airpark, crashed on its approach and impacted three houses about M mile from the end of the east end of the runway. One of the houses impacted caught fire and the pilot, two passengers, and three occupants of the house that caught fire, died as a result of the accident. The NTSB determined the probable cause of this accident was an aerodynamic stall caused by ice accumulation on the wings and pilot error.

The NTSB report on the December 8<sup>th</sup>, 2014, accident is the only accident report for the Airpark that included safety recommendations. The report recommended: (1) that the FAA and the General Aviation Manufacturers Association work together to develop a system that alerts pilots when ice protection systems should be activated on similar models of airplanes to the one involved in the crash; and (2) that the National Business Aviation Association develop enhanced pilot training guidelines for risk management in winter weather conditions.

Following the 2014 crash, the MCRA also took multiple steps to make the Airpark safer for nearby residents including:

- Conducting meetings with pilots to discuss the accident.
- Meeting with the Aircraft Owners and Pilots Association (AOPA) to review Airpark procedures and the AOPA's "fly friendly" recommendations intended to reduce noise and other impacts of General Aviation flights.
- Working with the fixed-based operator, DC Metro Aviation, to promote fly friendly recommendations.
- Reviewing airport signage with pilots and implementing recommendations to improve signage.
- Conducting pilot seminars to educate and emphasize safety and noise mitigation polices.
- Requiring that a flight instructor to be in the aircraft when student pilots conduct touch and go operations.

#### **G.** Mitigation Efforts

The Airpark has undertaken efforts to mitigate adverse impacts on the surrounding communities. The following section describes the steps the Airpark has taken to reduce its impact on nearby communities. Among other things, the Airpark has:

• Changed flight patterns in 1973 to fly over less noise sensitive areas as well as increasing altitudes. 99

<sup>&</sup>lt;sup>96</sup> National Transportation Safety Board, Aerodynamic Stall and Loss of Control During Approach Embraer EMB-500/Phenom 100, Gaithersburg, MD, December 8, 2014,

https://www.ntsb.gov/investigations/AccidentReports/Reports/AAR1601.pdf

<sup>&</sup>lt;sup>97</sup> *Ibid*.

<sup>&</sup>lt;sup>98</sup> *Ibid*.

<sup>&</sup>lt;sup>99</sup> MCRA, Stakeholder Meeting, October 13, 2021.

- Arranged with flight schools to voluntarily reduce their operating hours.
- Communicated with pilots about "Flying Neighborly" and added signage about noise abatement guidelines.
- Requested that the FAA change the designation of the surrounding communities to "congested area" on all charts and maps. 101

Montgomery County Airpark is one of two airports in Maryland (the other being Baltimore Washington International Airport) that has conducted a Part 150 Noise Compatibility Study and the only general aviation airport to do so. This is a voluntary study prepared by an airport that defines the five-year vision of compatibility between an airport and the surrounding communities. The Part 150 study for the Airpark was conducted in 1991 and approved February 1994.

The Montgomery County Airpark has also entered into the Partnering Airports program, offered through the FAA's Eastern Office of the Regional Administrator. <sup>102</sup> For states served under the Eastern Office, which includes Maryland, <sup>103</sup> airports can coordinate noise complaints and inquiry responses with the FAA to better serve the public and avoid duplication of efforts. Partnering Airports respond to aircraft noise complaints or inquiries within a predefined area from their airport and the FAA and these airports coordinate responses, as well as share noise-related information. <sup>104</sup> To date, the only two airports that participate in the program are Buffalo Niagara International Airport, that responds to complaints within four miles of the airport, and Montgomery County Airpark, that responds to complaints within six miles of the airport.

<sup>&</sup>lt;sup>100</sup> The FAA denotes areas of high residential density as "congested areas" on all charts and maps published, so that pilots are aware of noise sensitive areas. The FAA notes that the denotation of a congested area does not change flight operations.

<sup>&</sup>lt;sup>101</sup> Airpark Liaison Committee, Meeting Minutes, January 28, 2015, https://www.montgomerycountymd.gov/council/airpark/agenda-minutes.html

https://www.montgomerycountymd.gov/council/airpark/agenda-minutes.ntml

102 Federal Aviation Administration, Eastern Region, Accessed October 24, 2021,

https://www.faa.gov/about/office\_org/headquarters\_offices/arc/eastern/#ra

<sup>&</sup>lt;sup>103</sup> The Eastern Region serves Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, Washington, DC, and West Virginia.

<sup>&</sup>lt;sup>104</sup> Federal Aviation Administration, Eastern Region Aircraft Noise and Community Involvement Information, Accessed October 24, 2021.

https://www.faa.gov/about/office\_org/headquarters\_offices/arc/eastern/noise\_complaint/

#### CHAPTER 8: COMMUNITY ENGAGEMENT AND FEEDBACK

The Federal Aviation Administration encourages strong community engagement, to inform and involve the public and to consider community concerns regarding aviation decisions. <sup>105</sup>

This chapter provides an overview of how the MCRA interacts with residents of the communities surrounding the Airpark and summarizes community feedback regarding the Montgomery County Airpark from 2000 through 2021.

#### A. MCRA Interactions with Community Members

OLO found there were multiple channels available for the public to communicate airpark concerns, questions, and comments to the MCRA and the Montgomery County Government, including via:

- MCRA public meetings, open houses, and online complaint portals;
- Communications with the Upcounty Citizens' Advisory Board;
- Calls to MC311; and
- Communications with the offices of County Executive and Councilmembers.

From 1990 through 2020, the Airport Liaison Committee (ALC) provided a forum for the public to express concerns about the Airpark. In 2020, the Council decided to not renew the committee. The history of the ALC is summarized on the next page.

The Airport Liaison Committee was established by a County Council resolution on January 23, 1990. The ALC consisted of 13 members appointed by the Council 106 and was "established solely to provide a forum for communication among interested groups and individuals concerned with the operations of Montgomery County Airpark." The responsibilities of the Committee, as specified in the resolution, included:

1. Staying abreast of activities that occur in connection with the airpark including leasing arrangements, flight activities, grant requests, and capital improvements.

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<sup>&</sup>lt;sup>105</sup> Federal Aviation Administration, FAA Community Engagement, November 19, 2021, https://www.faa.gov/air\_traffic/community\_engagement/

<sup>&</sup>lt;sup>106</sup> The ALC consisted of 13 members: five representatives of residents in the geographic area of the airpark operations who reflect the different views of the community, one executive branch representative, one MCRA representative, one County Council representative, one Montgomery County Planning Board representative, one Montgomery County Airpark developer/leaseholder representative, one Montgomery County Airpark Users Association representative, one representative of commercial interests affects by airpark's operations, and one representative from the Upcounty Citizens' Advisory Board.

<sup>&</sup>lt;sup>107</sup>Montgomery County Council, Establishment of Montgomery County Airpark Liaison Committee, January 23, 1990, <a href="https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/airpark/resolution/1990%20Resolution%2011-1826.pdf">https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/airpark/resolution/1990%20Resolution%2011-1826.pdf</a>

- 2. Holding regular meetings to address substantive complaints regarding flight operations, noise impacts, safety, and airpark operations. Attempts should be made to resolve disagreements.
- 3. Advising the County Council on a regular basis concerning the activities at the airpark and recommendations for improvement. If recommendations are made to the County Council, all points of view are to be represented. 108

As of 2021, the MCRA had taken over as the primary agency for public communications regarding the Airpark. On June 23, 2021, the MCRA held a virtual town hall for the Airpark. The MCRA informed OLO that they are developing a set and consistent schedule of public outreach activities, which will include public meetings and other forms of outreach. <sup>109</sup> The MCRA uses the following methods to communicate with the public:

- Email
- Public meetings
- Montgomery County Airpark website, which includes links to the noise and safety complaint portal
- Attendance at community association meetings
- Airport user meetings
- Annual Open Houses at the Airpark

#### **B.** Community Member Feedback

Residents living near the Airpark have raised concerns about the airport's operations for decades. As detailed above, the Council created the Airpark Liaison Committee (ALC) in 1990 to serve as a forum for resident concerns about noise, safety, and other issues. OLO obtained the minutes for the ALC's meetings and summarized the concerns of constituents that were discussed by the committee throughout the years. Generally, the committee met once a year unless more meetings were needed, and minutes were made publicly available on the committee's website. This section summarizes the resident concerns discussed at ALC meetings from 2000 through 2020. The summary also notes any follow-up items as recorded in the minutes. OLO notes that not every meeting had records of resident concerns.

#### Noise-related complaints

- Residents of the Eastgate neighborhood complained about excessive airpark noise. Doug McNeely, the Airpark manager at the time, was on record saying he was working with the neighborhood to resolve the issue.
- Residents from East Montgomery Village shared their concerns about excessive noise and low-flying planes. They suggested that the flight path be altered so that fewer planes would fly low over the area.

<sup>&</sup>lt;sup>108</sup> *Ibid*.

<sup>&</sup>lt;sup>109</sup> Another virtual public meeting for the Montgomery County Airpark was held on December 14, 2021.

- The ALC representative for East Montgomery Village called for an update to the part 150 study in 2009.
- There were concerns raised that there were no permanent noise monitoring systems at the Airpark. However, it was noted that the installation of a permanent noise monitoring system at the Airpark was considered in the original part 150 study, but the study concluded that the size of the Airpark and resulting noise levels were too low to warrant funding a permanent noise monitoring system.
- Touch and go operations were called out as creating excessive noise for East Montgomery Village
- Multiple complaints were made about aircraft departures before 6 AM.
- Complaints were lodged about increased air traffic over homes, low flights, and late-night flights in the area.

#### Safety-related complaints

- Residents from East Montgomery Village shared concerns about low-flying planes and suggested altering the flight path so that fewer planes would fly low over the area.
- After the fatal jet crash in 2014, residents sought out ways to limit the use of the Airpark for jets, such as removing the Airpark's status as a reliever airport or reducing the number of approved flight paths around the Airpark. These solutions were not feasible.
- There were complaints from some residents about unsafe operations occurring and attributed it to the flight school. The FAA investigated later and found no evidence of unsafe operations.

#### C. Public Feedback from the Virtual Public Meeting

The following section discusses issues raised by constituents who attended the Montgomery County Airpark virtual public meeting held by the MCRA on June 23, 2021. Keith Miller, the CEO of the MCRA and the Airport Manager led the meeting. It was moderated by Dale Tibbitts, Special Assistant to the County Executive. The MCRA invited staff from multiple agencies that presented and answered questions which included:

- Federal Administration Agency (FAA)
- Aircraft Owners and Pilots Association (AOPA)
- Maryland Aviation Administration (MAA)
- National Business Aviation Administration (NBAA)

Questions were submitted prior to the virtual meeting and attendees were able to communicate through the chat function on Zoom. The main topics discussed were:

- Noise complaints the number of complaints and specifics of those complaints.
- Operations what constitutes an operation and how has the amount and type of operations changed over time, especially regarding the flight school.
- Low-flying aircraft pilot compliance with the Airpark's designated flight patterns.
- Safety concerns concerns over community safety, especially pilots in training.
- Environmental concerns concerns over lead pollution in the air and soils, in addition to noise pollution.
- Economic Impacts of the Airpark how much revenue the Airpark brings into the County.

#### Noise

Similar to issues raised in the past, some attendees were concerned about a perceived increase in operations, especially flight school operations. Some constituents cited "touch and go's" as the main source of nuisance noise in the areas surrounding the Airpark, which are generally conducted during training operations. However, the MCRA does not have the authority to regulate the operations of flight schools that operate within the Airpark. The flight schools may voluntarily change their operations, whether restricting their operations to certain times, limiting touch and go's, or conducting their training elsewhere. 110

There was also concern that a noise study has not been conducted since the early 1990s. Some attendees called for an updated noise study as residential density and aircraft operations have changed since then.

#### **Safety**

Some attendees raised concerns about how there seems to be an increase in planes flying at low altitude and in loops, which they believe is causing excessive noise. Some also brought up safety concerns of these low-flying airplanes, which they attribute to student pilots.

Other attendees were concerned about "inexperienced student pilots" conducting operations near residential areas as they feel it is unsafe.

There was also a discussion on installing a tower at the Airpark as some attendees believe this would increase the safety of operations at the Airpark. It was suggested to investigate the feasibility of funding and installing a tower.

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<sup>&</sup>lt;sup>110</sup> MCRA, Stakeholder Meeting, October 13, 2021

#### Environmental

Some attendees brought up concerns about the level of lead in the air and soils surrounding the Airpark. Because many of the aircraft operating at the Airpark run on leaded aviation gas, these attendees were concerned that lead could be released when the gas is burned.

Further, it was discussed that there are no lead monitors present surrounding the Airpark and there was no study of lead levels in the area. It was suggested to request an EPA evaluation of the lead levels of the areas surrounding the Airpark. The County Council and County Executive made the request for lead monitoring equipment to monitor the areas around the Airpark to the Maryland Department of the Environment (MDE). The response letter from the MDE is included in Appendix C.

#### **Economic Impact**

Some attendees cited that the Airpark is a public good. They explained that it provides a valuable service as it is a space to train future commercial pilots and is also a part of the economic engine of Montgomery County.

#### **CHAPTER 9: FINDINGS AND DISCUSSION ITEMS**

The Montgomery County Airpark opened in 1960 and is owned and operated by the Montgomery County Revenue Authority (MCRA). This Office of Legislative Oversight (OLO) report responds to the Council's request for information on the Airpark's operations, the MCRA's oversight of the Airpark, the regulatory framework in which the Airpark operates in, community engagement, and noise and other environmental factors that are impacting the surrounding communities.

This chapter summarizes OLO's findings and presents discussion questions for Council consideration on the Montgomery County Airpark.

#### A. Summary of Major Findings

#### Finding #1. The Montgomery County Airpark serves a variety of aviation users.

Airpark users fall into three broad categories: travel and recreation, pilot training, and military-related activities. Travel and recreation users include corporate and business, personal, and tourism related flights. Multiple flight schools offer pilot training using aircraft that take off and land at the Airpark. The Airpark also serves as the base for two organizations related to the United States military: squadrons of the Maryland Wing Civil Air Patrol and the US Coast Guard Auxiliary Flotilla 24-04.

# Finding #2. The Montgomery County Revenue Authority (MCRA) operates the Airpark. However, a significant portion of the Airpark is leased to a private entity.

The MCRA is responsible for the maintenance and operation of Airpark runways, taxiways, navigation aids, and other common areas. The MCRA also serves as the grant sponsor for Federal aid. The MCRA leases a portion of the Airpark property to a private entity, the Montgomery County Airpark One Limited Partnership. The current lease designates 38 acres that are under the control of Montgomery County Airpark One Limited Partnership. The leased portion of the Airpark property consists of the aircraft tie down, hangars, and a fueling station located to the north of the runway and taxiways.

The term "fixed-base operator" refers to a commercial entity that is granted authority to provide aviation-related services at an airport. The Montgomery County Airpark One Limited Partnership serves as the Airpark's primary fixed-base operator under the corporate name, "DC Metro Aviation Services." DC Metro Aviation Services offers a series of aviation-related services either directly or through subleases with third party entities, including: repair and maintenance of aircraft charter services, pilot training, sale of aviation fuel and aviation petroleum products, and aircraft storage. The lease agreement expires in 2059.

### Finding #3. The Federal Aviation Administration (FAA) regulates aviation activity in the United States.

The FAA retains the sole authority to regulate domestic aviation. Federal regulations govern aircraft specifications and conditions, training and certification of pilots, airport operations, and aviation noise.

### Finding #4. The Federal Government does not permit the MCRA to restrict access to or control the number of takeoffs and landings at the Airpark.

The FAA requires airports that have received Federal grants (including the Airpark) to abide by certain "grant assurances." Under the "economic nondiscrimination" assurance, the MCRA must "make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport." As a result of Federal policy, the MCRA may not restrict the number of takeoffs and landings by air taxi, flight school, and other commercial ventures at the Airpark.

# Finding #5. Federal Regulations do not allow for state and local governments to impose restrictions on aviation activities or airport operations

The Federal Government explicitly precludes non-Federal entities from setting rules that directly affect aviation. Moreover, the FAA Manual directs state and local governments and planning agencies to accommodate airport activity and to "provide for land use planning and development, zoning, and housing regulations that are compatible with airport operations."

# Finding #6. Reported Airpark takeoffs and landings, also known as "operations", have decreased substantially over the past two decades. However, operations data should be considered estimates rather than precise measurements.

As per Federal and State procedures, a General Aviation airport manager (MCRA, in the case of the Airpark) is responsible for measuring annual aircraft "operations." An aircraft takeoff or landing counts as a single operation. The Airpark manager submits annual operation counts to the Maryland Aviation Administration (MAA) for review, validation, and approval. The latest MAA approved count of Airpark operations was 67,195 for Calendar Year 2018, a level less than half the number of operations in 1998 (140,557). Most Airpark operations are classified as "local" flights or flights known to be departing for, or arriving from, a 20-mile radius of the airport. The predominance of local flights is evidence of significant pilot training activity.

In reviewing Airpark data submitted to the MAA, OLO noted several instances of identical operation counts in successive years. This data pattern indicates the operation counts should be considered estimates rather than precise measurements.

# Finding #7. The Airpark does not have a control tower. When flying into or out of the Airpark, pilots use radio communications to alert the airport operator and other aircraft of their location and flight status.

The Airpark does not have a control tower and would have to apply to the FAA for consideration. For airports without a control tower, the FAA established "traffic advisory practices" for airports. When flying into or out of the Airpark, pilots use radio communications to alert the airport operator and other aircraft of their location and flight status. The has a CTAF (common traffic advisory frequency) with a single radio frequency for pilots' use.

### Finding #8. Since 1983, there have been 35 accidents at the Airpark. Generally, these accidents have been minor and due to pilot error.

According to safety reports from the National Transportation Safety Board (NTSB), there have been 35 accidents at the Airpark since 1983. While most of these accidents are minor and due to pilot error, seven accidents at the Airpark have been fatal, with the most recent fatal accident occurring on December 8, 2014.

# Finding #9. The EPA has regulatory authority for enforcing lead concentration standards in soils, air, and drinking water. Monitoring of these standards are conducted at the State and local level.

While the EPA states there is "no demonstrated safe concentration of lead in blood" it has set lead concentration standards for soils, air, and drinking water and holds regulatory authority for enforcing these standards. However, monitoring these standards are conducted at the State and local level, which are described in detail below.

- <u>Drinking water:</u> The Federal Lead and Copper Rule of 1991 requires that operators of drinking water systems monitor lead levels in drinking water supplies.
- <u>Soils:</u> The Maryland Department of the Environment (MDE) monitors and enforces stricter residential soil concentrations compared to Federal standards.
- <u>Air:</u> The Maryland Department of the Environment oversees State Implementation Plans for air quality and the Montgomery County Department of Environmental Protection (DEP) is responsible for the protection of indoor and outdoor air quality in the County, according to County Code.

# Finding #10. From 1980 – 2018, air lead concentrations have decreased by 99%. However in 2020, the EPA found that leaded aviation fuel is the largest remaining aggregate source of air lead concentrations in the country.

Due to the phasing out and banning of leaded gasoline for most motor vehicles which began in 1973, the concentration of lead in the air has decreased by 99%. In a 2020 report by the EPA, it was found that aviation fuel is the largest remaining aggregate source of lead emissions in air in the country. Further, research indicates that lead levels in air near airports where aircraft use

leaded aviation gas are significantly higher than other areas. Currently, there are no lead monitors to confirm if lead levels are higher in the air near the Airpark compared to the rest of the County. However, the Maryland Department of the Environment confirmed that the most recent National Emission Inventory conducted in 2017 reported emissions for the Airpark was below the National Ambient Air Quality Standard for lead.

# Finding #11. Noise pollution is monitored by State and local governments; however, the FAA sets the noise threshold level at which most land uses are compatible with airport noise and as the eligibility for Federal funding.

The Federal Noise Control Act of 1972 granted regulatory authority to the EPA to monitor and regulate noise pollution. In 1981, the EPA determined noise issues were best handled at the state and local levels. In Maryland, the authority of noise enforcement was transferred from the State and given to local governments in 2012. The Department of Environmental Protection administers Montgomery County's noise control program. However, the FAA sets the noise threshold for airports and their surrounding areas at the 65 DNL threshold, which measures an area's cumulative noise exposure over a 24-hour period. This threshold determines both eligibility for Federal funding and for which most land uses are compatible with airport noise, including residential uses.

#### Finding #12. The Montgomery County Airpark has received County land use approval.

State regulations prohibit an airport from operating without local land use approval. Although the MCRA is not subject to local zoning, the County Board of Appeals granted a special exception in 1959 to permit an airport at the current location of the Airpark on two conditions: (1) that Montgomery County Airpark, Inc. - the Airpark developer's corporation, convey ownership of a portion of the property to the MCRA; and (2) that the MCRA agree to grant Montgomery County Airpark, Inc. a long-term lease to build and operate an airport at that site. In 1960, Montgomery County Airpark, Inc. conveyed ownership of 115 acres of the property to the MCRA and the MCRA granted a 99-year lease to Montgomery County Airpark, Inc. The County then approved industrial zoning (then called I-4, now called IL-1) for most of the property.

# Finding #13. While County land use and zoning decisions from the 1970s to now have led to increased residential density near the Airpark, the County has assumed the continued operation of the Airpark at its present location and with its current general character.

When the Airpark was first opened in 1960, most of the land surrounding it was farmland. From the 1970s to now, subsequent zoning decisions increased residential density while acknowledging the Airpark's operations. In 1983, an approved development plan found that with increasing density near the Airpark will come an increase in complaints and annoyance based on the noise of overflights, but this factor was not sufficient by itself to reject the proposal. Similarly, the 1990 Gaithersburg Plan assumed "the continued operation of the Montgomery County Airpark at its present location and with its current general character" and recommended

that the prospective development of surrounding residential and industrial areas should not detract from its continued operation.

# Finding #14. The County Code requires that real estate agents disclose the existence of an airport or heliport within a five-mile radius of a property.

When the Airpark opened in 1960, most of the surrounding land use was farmland. Development of residential neighborhoods near the Airpark began in the 1960s. In response to this development, the County Council amended the County Code in 1974 to require that real estate agents disclose the existence of an airport or heliport within a five-mile radius of a property that is up for sale.

# Finding #15. Members of the public have employed multiple channels to communicate concerns, questions, and comment about the Airpark. As of 2021, the MCRA is the main agency for public outreach regarding the Airpark.

Prior to 2021, the Airpark Liaison Committee (ALC), which was established by the County Council in 1990, served as the primary forum for communication among interested groups and individuals concerned with the operations of the Airpark. In addition to the ALC, members of the public also communicate through the Upcounty Citizens' Advisory Board and the offices of the County Executive and Councilmembers. In 2020, the ALC was dissolved and the MCRA assumed responsibility in 2021 as the main agency for public outreach for the Airpark.

# Finding #16. The Airpark has undertaken multiple efforts to mitigate its impact on the surrounding communities, including the changing of flight patterns, noise abatement guidelines, and partnering with the FAA to streamline and respond to all complaints.

The Montgomery County Airpark has taken multiple steps to mitigate its impact on nearby communities, including:

- Changing the flight patterns in 1973 to fly over less noise sensitive areas as well as increasing altitudes.
- Created an agreement with the flight schools to voluntarily reduce their operating hours.
- Communicated with pilots about "flying neighborly" and adding signage and guidance about local noise abatement guidelines.

Montgomery County Airpark is one of two airports in Maryland that has conducted a part 150 Noise Compatibility Study, which is a voluntary study prepared by an airport to define the compatibly between an airport and the surrounding communities. Further, the Airpark entered into a program with the FAA to coordinate noise complaints and inquiry responses with the FAA to better service the public and avoid duplication of efforts.

### Finding #17. Neither the County nor the MCRA has the authority to re-designate the Airpark property for non-aviation use.

Under FAA regulations, an airport that has received Federal grant assistance must maintain its aviation infrastructure and may not cease or suspend operations unless the FAA determines that the "airport facilities are no longer needed for civil aviation requirements." The Airpark is included in the Federal National Plan of Integrated Airport Systems (NPIAS), an inventory of airports and aviation infrastructure that the Federal Government considers "significant to national air transportation"

#### **B.** Discussion Questions

Based on the findings of this report, OLO suggests the following questions for Councilmember consideration:

1. Should the County Council amend the County Code to require more timely, conspicuous, and informative notification to potential buyers of residential properties in the vicinity of the Airpark?

As Federal Government is unlikely to impose any restrictions on aviation activity at the Airpark, individuals who consider residing near the Airpark should be fully aware that the facility certainly will continue to operate for the foreseeable future. At present, the County Code requires real estate agents disclose the existence of an airport or heliport within a five-mile radius of a property that is up for sale. However, in practice, this disclosure commonly occurs at the closing of the property sale, when buyers have already committed to the purchase and are inundated with numerous documents to sign in a short amount of time. This process allows little opportunity for a buyer to thoughtfully consider the implications of living near an airport prior to committing to the purchase.

OLO suggests Councilmembers discuss whether to amend Section 40-11 of the County Code to mandate that real estate agents provide information about a residential property's proximity to an airport at an earlier stage of the process and in a more conspicuous fashion. Should the Council elect to amend the Code, OLO further suggests the notification explicitly state that neither the airport operator nor the County Government have the authority to regulate the number or type of aircraft that use the airport.

2. What are the optimal methods for channeling community concerns about Airpark activity to the Federal Aviation Administration and the Maryland Aviation Administration, the agencies that are authorized to regulate aviation activities at airports?

Residents who have concerns about the community impacts of Airpark activities frequently contact the County Government and the MCRA to register complaints and to request corrective actions. As detailed in this report, the Federal Government has sole authority to regulate aviation in the United States and explicitly prohibits local governments and airport operators from

restricting access to a General Aviation airport such as the Airpark. Nonetheless, residents deserve to have their concerns heard by the entities that are authorized to regulate flights to and from the Airpark, namely the Federal Aviation Administration and, to a lesser extent, the Maryland Aviation Administration. The MCRA has made some advances toward this goal, most notably, through the development of an online portal to channel certain Airpark noise complaints to the MCRA. The County could have a dialogue with the MCRA and possibly the Maryland Congressional Delegation to consider additional methods to channel community concerns to the appropriate regulatory agencies.

# 3. What should the role of the Montgomery County Government be in monitoring the noise and environmental impacts of the Airpark on nearby communities?

As discussed in this OLO report, State and local governments hold the responsibility of monitoring noise and environmental standards set by the Federal Government. While the County cannot enforce any law or regulation that would affect aeronautical activity, the County could engage in more robust monitoring programs to ensure compliance with Federal noise and environmental standards.

The Council may wish to discuss with the Department of Environmental Protection the relative priority of expanding noise and environmental monitoring near the Airpark within the County's overall environmental monitoring program. Some points for discussion may include:

- The feasibility of more regular noise reporting for communities near the Airpark, such as the quarterly noise report at BWI Marshall Airport;
- An assessment of the risk of lead exposure in communities near the Airpark; and
- The costs and availability of resources to expand monitoring programs for noise and environmental standards in the Airpark area.

### 4. Do opportunities exist to precisely estimate the number of annual Airpark take-offs and landings?

The MCRA estimates the number of annual takeoffs and landings (also known as "operations") at the Airpark by observing general trends in airport activity. No automated system is in place to count the actual number of takeoffs and landings. Every three to four years, the Maryland Aviation Administration temporarily installs acoustic measurement devices on the Airpark runway for a two-week period during each of the four seasons to estimate the number of takeoffs and landings. In reviewing the Airpark's operations data, OLO found recurrences of identical operation counts in successive years. This pattern indicates these counts should be considered general estimates rather than precise measurements. Although neither the MCRA nor the County Government are authorized to take any action to modify the number of Airpark operations, OLO suggests that the community would benefit from more precise estimates of the number of annual takeoffs and landings. Councilmembers may wish to discuss with the MCRA whether any opportunities exist to precisely estimate annual Airpark operations.

#### **CHAPTER 10: AGENCY COMMENTS**

The Office of Legislative Oversight (OLO) shared final drafts of this report with staff from the Montgomery County Revenue Authority (MCRA). OLO appreciates the time taken by the MCRA to review the draft report and to provide technical feedback. This final report incorporates technical corrections and feedback received from MCRA and their legal counsel.

The written comments received from the MCRA Executive Director are attached in their entirety on the following pages.



January 14, 2022

To: Chris Cihlar, Director

Office of Legislative Oversight

From: Keith Miller, CEO

Justin Bollum, Airport Manager

Subject: Draft OLO Report: Montgomery County Airpark – Regulatory Framework and Community Impacts

The Montgomery County Revenue Authority (MCRA) appreciates the opportunity to comment on the Office of Legislative Oversight draft report regarding the Montgomery County Airpark. The MCRA is committed to continuing the dialogue with all stakeholders and improving the operations at the Airpark. Included in the OLO draft report were discussion questions that the MCRA feels are a good starting point for continued dialogue.

Question #1: Should the County Council amend the County Code to require more timely, conspicuous, and informative notification of potential buyers of residential properties in the vicinity of the Airpark?

New homeowners in the vicinity of the Airpark often contact the MCRA because they were not aware the Airpark is nearby. Therefore, we agree with the staff's suggestion to mandate that real estate agents provide the information earlier and more conspicuously. Further, the disclosure could include the type of aeronautical facility (General Aviation Airport, Heliport, or Commercial Service Airport), typical flight paths, or pattern, of aircraft arriving at or departing from the facility, and a brief description of how the FAA regulates all noise generated from aeronautical activities.

Question #2: What are the optimal methods for channeling community concerns about the Airpark activity to the Federal Aviation Administration and the Maryland Aviation Administration, the agencies that are authorized to regulate aviation activities at airports?

The Montgomery County Airpark (<a href="www.montgomerycountyairpark.com">www.montgomerycountyairpark.com</a>) website allows the community to submit complaints online. Additionally, it provides links to the governing agencies' complaint websites. The Montgomery County Airpark is one of two airports in the Eastern United States that has partnered with the FAA on a noise program, and it is the only general aviation airport.

Question #3: What should be the role of the Montgomery County Government in monitoring the noise and environmental impacts of the Airpark on nearby communities?

The MCRA agrees with a discussion regarding the County's engagement in monitoring noise and environmental standards to ensure compliance.

Question #4: Do opportunities exist to more precisely estimate the number of annual Airpark take-offs and landings?

The MCRA believes that the MAA's method of conducting the traffic count is sufficient for a general aviation facility. We agree with staff that these numbers should be categorized as estimates. Considering the number of operations cannot be limited, we believe the estimated figures are adequate.

### Appendices

A.	Select pages from the FAA Grant Assurances document provided by the MCRA	62
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C.	Letter from the Maryland Department of the Environment regarding lead monitoring	67
D.	List of census tract block groups within a two-mile radius of the Airpark	70

#### **Appendix A:**

Select pages from the FAA Grant Assurances document provided by the MCRA which includes regulations not related to aviation activities (Begins on next page)

#### MASTER AGREEMENT TERMS AND CONDITIONS OF ACCEPTING AIRPORT IMPROVEMENT PROGRAM GRANTS

#### III. ASSURANCES (Dated 9/99)

#### A. General.

- These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
- 2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
- Upon acceptance of the grant offer by the sponsor, these assurances are incorporated in and become part of the grant agreement.

#### B. Duration and Applicability.

- Airport development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor. The terms, conditions and assurances of the grant agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.
- 2. Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor. The preceding paragraph 1 also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.
- Airport Planning Undertaken by a Sponsor. Unless otherwise specified in the grant agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 30, 32, 33, and 34 in section C apply to planning projects. The terms, conditions, and assurances of the grant agreement shall remain in full force and effect during the life of the project.
- C. Sponsor Certification. The sponsor hereby assures and certifies, with respect to this grant that:
  - General Federal Requirements. It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance and use of Federal funds for this project including but not limited to the following:

#### Federal Legislation

- Title 49, U.S.C., subtitle VII, as amended.
- Davis-Bacon Act 40 U.S.C. 276(a), et seq.<sup>1</sup>
- c. Federal Fair Labor Standards Act 29 U.S.C. 201, et seq.
- d. Hatch Act 5 U.S.C. 1501, et seq.<sup>2</sup>
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 Title 42 U.S.C. 4601, et seq.<sup>12</sup>
- f. National Historic Preservation Act of 1966 Section 106 16 U.S.C. 470(f).<sup>1</sup>

Master Agreement (10/1/99)

#### MASTER AGREEMENT TERMS AND CONDITIONS OF ACCEPTING AIRPORT IMPROVEMENT PROGRAM GRANTS

- g. Archeological and Historic Preservation Act of 1974 16 U.S.C. 469 through 469c.<sup>1</sup>
- h. Native Americans Grave Repatriation Act 25 U.S.C. Section 3001, et seq.
- Clean Air Act, P.L. 90-148, as amended.
- Coastal Zone Management Act, P.L. 93-205, as amended.
- k. Flood Disaster Protection Act of 1973 Section 102(a) 42 U.S.C. 4012a.1
- Title 49 ,U.S.C., Section 303, (formerly known as Section 4(f))
- m. Rehabilitation Act of 1973 29 U.S.C. 794.
- n. Civil Rights Act of 1964 Title VI 42 U.S.C. 2000d through d-4.
- o. Age Discrimination Act of 1975 42 U.S.C. 6101, et seq.
- American Indian Religious Freedom Act, P.L. 95-341, as amended.
- Architectural Barriers Act of 1968 -42 U.S.C. 4151, et seq.
- r. Power plant and Industrial Fuel Use Act of 1978 Section 403- 2 U.S.C. 8373.1
- s. Contract Work Hours and Safety Standards Act 40 U.S.C. 327, et seq. 1
- t. Copeland Antikickback Act 18 U.S.C. 874.1
- u. National Environmental Policy Act of 1969 42 U.S.C. 4321, et seq. 1
- v. Wild and Scenic Rivers Act, P.L. 90-542, as amended.
- w. Single Audit Act of 1984 31 U.S.C. 7501, et seq.<sup>2</sup>
- x. Drug-Free Workplace Act of 1988 41 U.S.C. 702 through 706.

#### Executive Orders

- Executive Order 11246 Equal Employment Opportunity1
- Executive Order 11990 Protection of Wetlands
- Executive Order 11998 Flood Plain Management
- Executive Order 12372 Intergovernmental Review of Federal Programs.
- Executive Order 12699 Seismic Safety of Federal and Federally Assisted New
  - Building Construction<sup>1</sup>
- Executive Order 12898 Environmental Justice

#### Federal Regulations

- a. 14 CFR Part 13 Investigative and Enforcement Procedures.
- b. 14 CFR Part 16 Rules of Practice For Federally Assisted Airport

#### Enforcement Proceedings.

- 14 CFR Part 150 Airport noise compatibility planning.
- d. 29 CFR Part 1 Procedures for predetermination of wage rates.
- e. 29 CFR Part 3 Contractors and subcontractors on public building or public work financed in whole or part by loans or grants from the United States.<sup>1</sup>
- f. 29 CFR Part 5 Labor standards provisions applicable to contracts covering federally financed and assisted construction (also labor standards provisions applicable to non-construction contracts subject to the Contract Work Hours and Safety Standards Act).<sup>1</sup>
- g. 41 CFR Part 60 Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and federally assisted contracting requirements).<sup>1</sup>
- 49 CFR Part 18 Uniform administrative requirements for grants and
- cooperative agreements to state and local governments.3
- 49 CFR Part 20 New restrictions on lobbying.
- 49 CFR Part 21 Nondiscrimination in federally-assisted programs of the Department of Transportation - effectuation of Title VI of the Civil Rights Act of 1964.

Master Agreement (10/1/99)

#### MASTER AGREEMENT TERMS AND CONDITIONS OF ACCEPTING AIRPORT IMPROVEMENT PROGRAM GRANTS

- 49 CFR Part 23 Participation by Disadvantage Business Enterprise in Airport Concessions.
- 49 CFR Part 24 Uniform relocation assistance and real property acquisition for Federal and federally assisted programs.<sup>1 2</sup>
   49 CFR Part 26 – Participation By Disadvantaged Business Enterprises in
- 49 CFR Part 26 Participation By Disadvantaged Business Enterprises in Department of Transportation Programs.
- n. 49 CFR Part 27 Nondiscrimination on the basis of handicap in programs and activities receiving or benefiting from Federal financial assistance.
- 49 CFR Part 29 Government wide debarment and suspension (nonprocurement) and government wide requirements for drug-free workplace (grants).
- 49 CFR Part 30 Denial of public works contracts to suppliers of goods and services of countries that deny procurement market access to U.S. contractors.
- q. 49 CFR Part 41 Seismic safety of Federal and federally assisted or regulated new building construction.<sup>1</sup>

#### Office of Management and Budget Circulars

- A-87 Cost Principles Applicable to Grants and Contracts with State and Local Governments.
- A-133 Audits of States, Local Governments, and Non-Profit Organizations
- ¹ These laws do not apply to airport planning sponsors.
- <sup>2</sup> These laws do not apply to private sponsors.
  - <sup>3</sup> 49 CFR Part 18 and OMB Circular A-87 contain requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation and circular shall also be applicable to private sponsors receiving Federal assistance under Title 49, United States Code.

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in the grant agreement.

- Responsibility and Authority of the Sponsor.
  - a. Public Agency Sponsor: It has legal authority to apply for the grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.
  - b. Private Sponsor: It has legal authority to apply for the grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this grant agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.
- Sponsor Fund Availability. It has sufficient funds available for that portion of the project costs
  which are not to be paid by the United States. It has sufficient funds available to assure

Master Agreement (10/1/99)

#### Appendix B:

#### **Lease Agreements for the Montgomery County Airpark**

#### Original Airpark Lease Agreement (1968)

https://www.montgomerycountymd.gov/OLO/Resources/Files/2022 reports/MCRA-MontgomeryCountyAirparkIncPremisesLease.pdf

#### **Amended Airpark Lease Agreement (2004)**

 $\frac{https://www.montgomerycountymd.gov/OLO/Resources/Files/2022\_reports/MCRA-MCAOL-AmendedLeaseFBOAgr.pdf}$ 

#### **Appendix C:**

Letter from the MDE to the Council regarding lead monitoring (Begins on next page)



Larry Hogan, Governor Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary Horacio Tablada, Deputy Secretary

September 13, 2021

Montgomery County Council Stella B. Werner Office Building 100 Maryland Avenue Rockville, Maryland 20850

Dear Councilmembers:

Thank you for your recent letter requesting lead monitoring equipment for the Montgomery County Airpark to assess ambient lead concentrations and the impact on surrounding neighborhood communities.

In 2017, with the EPA's approval, the Department discontinued the one remaining lead monitoring site in Maryland due to levels consistently below the analytical method's detection limit. The Department no longer has the capability to conduct lead monitoring. A list of potential contractors is enclosed if the Council would like to hire a private company to purchase equipment or to perform lead monitoring at the Airpark. The Department would be happy to assist in review of any proposals if the Council wishes to proceed with such an action. I have also provided additional background information on this issue below, that may be useful to the Council as this issue is further discussed.

When the National Ambient Air Quality Standard (NAAQS) for lead was last revised in 2008, the Environmental Protection Agency (EPA) substantially strengthened this standard by an order of magnitude, revising the level downward from 1.5 micrograms per cubic meter (µg/m3), to 0.15 µg/m3. The EPA also required that state air quality agencies measure the maximum lead concentration at each airport source that emits 1.0 ton or more per year based on either the most recent National Emission Inventory (NEI) or other scientifically justifiable methods and data (such as improved emissions factors or site-specific data) taking into account logistics and the potential for population exposure. There were no airports in Maryland that exceeded this threshold. The most recent NEI reported emissions for the Montgomery County Airpark was 0.125 tons/year for 2017.

1800 Washington Boulevard | Baltimore, MD 21230 | 1-800-633-6101 | 410-537-3000 | TTY Users 1-800-735-2258 www.mde.maryland.gov

Montgomery County Council Page 2 of 2

In addition to the above, the EPA required that some state air quality agencies conduct a one-year lead monitoring study at fifteen airports that had estimated lead emissions between 0.5 and 1.0 ton per year in an effort to better understand how these emissions affect the air at and near airports. Airports for this one-year monitoring study were selected based on factors such as the level of piston-engine aircraft activity and the predominant use of one runway due to wind patterns, to help evaluate airport characteristics that could lead to ambient lead concentrations that approach or exceed the lead NAAQS. There was no airport in Maryland that made the list. Upon completion of the one-year study, only two airports exceeded the lead NAAQS with measured levels at 0.33 ug/m3 and 0.17 ug/m3, and monitoring continued at those locations.

In February 2020, the EPA issued a technical update on two reports regarding the impacts of lead emissions from piston-engine aircraft on air quality near U.S. airports. The following is an excerpt from this document:

"EPA's modeling and monitoring data indicate that lead concentrations at and near airports are typically well below the National Ambient Air Quality Standard for lead (lead NAAQS). Among the more active airports in the United States, there are a few where lead concentrations may be above the lead NAAQS, in very close proximity to where aircraft conduct pre-fight engine checks. For the vast majority of airports, these small areas with lead concentrations potentially above the air standard are within the fence line of the airport and not accessible to the public, in all but a few instances. Lead levels dissipate quickly with distance from piston-engine aircraft exhaust. Thus, within 50 meters of the high concentration area, lead levels were uniformly below the lead air standard."

The reports summarized in the technical update document can be found here: <a href="https://www.epa.gov/regulations-emissions-vehicles-and-engines/epas-data-and-analysis-pistonengine-aircraft-emissions">https://www.epa.gov/regulations-emissions-vehicles-and-engines/epas-data-and-analysis-pistonengine-aircraft-emissions</a>.

Should you have any questions or require further information, please contact David Krask, Manager of the Air Monitoring Program, at 410-537-3756 or by email at <a href="mailto:david.krask@maryland.gov">david.krask@maryland.gov</a>.

Sincerely,

George S. (Tad) Aburn, Jr., Director Air and Radiation Administration

Enclosure: Listing of Consultants and Industrial Hygiene Firms

Appendix D: Full list of census tract block groups within a two-mile radius of the Airpark

Census Tract Block Groups	Household Income	% White	% Black or African American	% Asian	% American Indian or Alaska Native	% Native Hawaiian or Pacific Islander	% Some other race	% Two or more Races
7001.03 BG3	\$113,910	60.6%	11.1%	19.9%	0.0%	0.0%	4.4%	4.0%
7001.04 BG1	\$118,594	54.6%	19.8%	15.8%	0.0%	0.0%	2.9%	7.0%
7001.04 BG3	\$174,688	65.4%	18.7%	11.7%	0.0%	0.0%	1.5%	2.7%
7001.05 BG1	\$50,885	54.2%	24.6%	16.7%	0.0%	0.7%	0.0%	3.8%
7001.05 BG2	\$130,914	56.6%	32.3%	10.1%	0.0%	0.0%	0.5%	0.5%
7001.05 BG3	\$114,583	46.5%	36.2%	11.5%	0.0%	0.0%	0.0%	5.8%
7007.10 BG1	\$97,137	51.6%	20.6%	20.6%	0.0%	0.0%	4.5%	2.8%
7007.10 BG2	\$121,118	53.4%	15.3%	26.4%	0.6%	0.0%	0.8%	3.5%
7007.10 BG4	\$66,907	46.9%	5.6%	6.3%	0.0%	0.0%	33.7%	7.5%
7007.10 BG5	\$160,967	73.0%	0.0%	17.2%	0.0%	0.0%	3.1%	6.7%
7007.11 BG3	\$113,799	71.4%	20.9%	6.2%	0.0%	0.0%	0.0%	1.4%
7007.13 BG1	\$80,554	45.6%	38.2%	10.1%	1.1%	0.0%	3.7%	1.3%
7007.15 BG1	\$96,618	71.5%	10.0%	10.8%	3.1%	0.0%	2.3%	2.2%
7007.15 BG2	\$93,015	38.1%	25.0%	19.7%	0.0%	0.0%	12.9%	4.3%
7007.15 BG3	\$176,538	40.1%	42.2%	3.5%	2.0%	0.0%	12.2%	0.0%
7007.15 BG4	\$103,819	24.3%	16.0%	4.0%	0.0%	0.7%	46.3%	8.7%
7007.16 BG1	\$105,179	44.7%	16.6%	26.8%	0.0%	0.0%	3.2%	8.7%
7007.16 BG2	\$84,778	50.3%	29.5%	10.0%	0.0%	0.0%	3.6%	6.7%
7007.16 BG3	\$163,250	51.3%	34.0%	7.6%	0.0%	0.1%	5.8%	1.3%
7007.19 BG2	\$76,324	53.2%	12.0%	10.1%	0.0%	0.0%	20.3%	4.3%

The Montgomery County Airpark: Regulatory Framework and Community Impacts

7007.20	\$104,038	37.7%	18.0%	31.8%	0.0%	0.0%	0.0%	12.6%
BG1								
7007.20	\$112,050	54.2%	21.8%	6.8%	0.0%	0.0%	11.5%	5.7%
BG2								
7008.11	\$81,250	30.4%	13.0%	22.9%	0.0%	0.0%	24.2%	9.5%
BG1								
7008.11	\$64,861	29.2%	17.0%	12.7%	0.0%	0.0%	37.4%	3.7%
BG2								
7008.11	\$66,250	51.0%	17.0%	9.1%	0.9%	1.3%	14.5%	6.2%
BG3								
7008.12	\$64,018	45.4%	14.8%	16.7%	0.0%	0.0%	17.9%	5.3%
BG1								
7008.12	\$176,750	68.5%	12.6%	12.2%	0.0%	0.0%	3.7%	2.9%
BG2								