St. Mary's County Airport Advisory Board 2021 Annual Report

24 January 2022

st. mary's county REGIONAL AIRPORT

James Alexander, Chairman Robert Lightstone, Vice Chairman George Hill, Secretary Albert Babcock Bryan Barthelme Henri Sahut Robert Zaorski Gerald Meyerman, Alternate

Appointed Ex-Officio Members: Allison Swint, Deputy Director Transportation and Airport Manager LCDR Steve Palmer, NAS Patuxent River

> Assigned Technical Advisor and Staff Support: Gary B. Whipple, P.E.

MESSAGE FROM THE AIRPORT ADVISORY BOARD



Though COVID-19 remained with us, 2021 was a great improvement over the previous year. Vaccines and boosters became widely available, in-person meetings and events reappeared, and life started to return to normal. The Delta and Omicron variants brought some setbacks which we're still dealing with as of January 2022.

Lots of dirt has been moving on the west end of the airport as Phase 2 construction grading for a 1,200 foot runway extension is ongoing. Phase 3, to be completed in 2022, is paving and lighting the 1,200 foot extension and full-length parallel taxiway. On the east end, terminal building renovations to add new office space and a commercial kitchen took up the last half of the year and continue into early 2022.

The new AeroPark Innovation District, centered around the airport, was unveiled in August. The unique branding, signage, and logos serve to reinforce the identity of the District, which includes aviation, business, government, education, research, and innovation organizations. A major addition to AeroPark was the grand opening of the new Southern Maryland Autonomous Research and Technology (SMART) Building at the University System of Maryland at Southern Maryland in October. An AeroPark business association was also created in November.

As technology and society evolve, we must start planning now to further prepare for the airport's future. The tremendous growth of unmanned aircraft in the past few years shows how quickly things can change. Uses and operational regulations for unmanned aircraft continue to expand. More importantly for the airport, Advanced Air Mobility (AAM) is on the horizon. Electric Vertical Takeoff and Landing (eVTOL) aircraft will serve as air taxis to connect remote hubs to urban centers or large airports.

Vertiports will be needed for takeoff and landing locations, and small regional airports such as 2W6 are in a perfect position to capitalize on this expected demand. The airport is within a short drive of thousands of local passengers who could benefit from quick, quiet, economical, efficient travel to Washington DC, Baltimore, Reagan National Airport, BWI, Richmond, or the eastern shore. With no interstates, commercial rail, or commercial air travel in St. Mary's County, AAM would be a tremendous convenience for local businesses and residents, and a new source of revenue.

Our airport remains a unique regional asset, an important economic engine and center of academic excellence and innovation in the county, and a safe source of recreation for the general aviation community. Balancing responsible economic development with maintaining the friendly general aviation flavor of the local hometown airport is a continuous challenge. We encourage local citizens to attend scheduled meetings of the Airport Advisory Board and provide their valuable input on the future direction of this county treasure.



Advanced Air Mobility eVTOL aircraft will require vertiports at airports and urban centers.

EXECUTIVE SUMMARY

The St. Mary's County Airport Advisory Board (AAB) submits this 2021 annual report in accordance with Bylaws Article III. The report includes the following highlights:

- ✤ AECOM was selected as the new airport consultant. They will be working to update the 2002 Airport Master Plan and associated Airport Layout Plan to account for growth in the southern Maryland region and at NAS Patuxent River.
- Site preparation for the runway 11-29 extension began in mid-2021 with expected completion in early 2022. Runway paving will then begin with completion before the end of the year.
- → Terminal building renovations also began in mid-2021 with expected completion in early 2022.
- TechPort transitioned from a business incubator to a technology collaboration space for the Naval Air Warfare Center Aircraft Division (NAWCAD) and the Consortium Management Group (CMG). NAS Patuxent River now has a footprint at the airport.
- The grand opening was held for the University System of Maryland at Southern Maryland (USMSM) Southern Maryland Autonomous Research and Technology (SMART) building. This new 84,000 sq ft LEED-certified building has both an education and a research component, and complements existing facilities at USMSM and the University of Maryland.
- A branding initiative to reinforce the identity of the Airport Innovation District resulted in a new name along with logos and other creative elements the AeroPark Innovation District. An AeroPark Business Alliance was also formed with quarterly meetings planned.
- The County hired a full-time airport maintenance assistant, Mr. David Gately. He has made a tremendous difference in maintaining the appearance and functionality of the County property at the airport.
- Mr. John Deatrick, Director of the Department of Public Works and Transportation, retired after four years in the position. He was a strong advocate for the airport and his leadership was highly valued and appreciated.
- The AAB was successful in requesting an ad hoc, ex-officio Board member from NAS Patuxent River. LCDR Steven Palmer, Air Traffic Control Facility Officer, became the inaugural US Navy representative on the St. Mary's County Airport Advisory Board. This has streamlined communications and improved safety and traffic deconfliction between the two airports. A good example is the pilot forum held with Pax River Air Ops as an FAA Safety Team event.
- Continued development of airport-related facilities by S. Hunt Aero, LLC. No additional land is available to S. Hunt Aero for future development.
- Notable airport activities that advanced technology; stimulated research, development, and innovation; promoted general aviation and STEM education with local youth; and encouraged the general public to visit the airport.

- Economic Impact Based upon the State's 2018 report, business revenues exceeded \$35M with 499 direct and indirect jobs producing in excess of \$32M local income and \$6M in tax revenue. These figures have likely grown over the past few years. The State's 2021 report was delayed due to COVID, the next report is expected in 2022.
- Annual Budgeting Capital Budget Improvements remain on track with the 2002 Master Plan with major construction planned for completion within the next few years. In FY2021, the airport operated at a net gain of \$41,790 when comparing direct operational expenses and direct revenues. This is the third consecutive year of operating at a net gain.
- → Airport Activity and Capacity 2019 MAA data shows more than 40,000 operations annually, an increase of 13.1% from previous data. The next report is due in 2022. A total of 227 aircraft reside at the airport as of December 2021. The airport is currently at aircraft storage hangar capacity with 57 aircraft on the waiting list for occupancy. Outdoor tie-downs remain available.



INTRODUCTION

Purpose and Goals of the Board

The Bylaws of the St. Mary's County Airport Advisory Board, adopted January 15th, 2019, govern the purpose, composition, and procedures of the Board. The purpose of the Board is to "advise the Commissioners of St. Mary's County concerning the development and management of the St. Mary's County Regional Airport." This broad purpose encompasses airport operations, planning, economic development, responsible growth, and identification of the needs and best interests of the citizens of St. Mary's County. Specific goals of the Board are:

- \rightarrow Ensure safe and secure facilities for general aviation;
- → Promote safe ground and flight operations;
- Maintain a friendly environment for the aviation community and the general public;
- Improve economic development potential and revenue;
- Provide a restaurant, observation area, and pilot store/gift shop for the benefit of the airport community and general public;
- ✤ Complete the extension of the runway to meet or exceed Federal Aviation Administration standards for the Airport Reference Code (B-II large, aircraft less than 12,500 lbs);
- \rightarrow Protect and enhance airspace and approaches;
- Ensure that commercial, private and public development in and around the airport meets standards with respect to safety and noise;
- Promote the sustainment and growth of general aviation through local activities that showcase the airport to the general public, introduce youth to potential aviation careers, and support Science, Technology, Engineering, and Math (STEM) education;
- + Focus on identifying and resolving airport-related issues in a timely manner

The Board currently consists of eight volunteer members appointed by the Commissioners of St. Mary's County, plus one ad hoc member from Patuxent River NAS. Board officers are elected by the Board each January or as required. The Board meets on the fourth Monday of each month in the conference room of the Captain Walter F. Duke Terminal Building in California, Maryland unless otherwise indicated on the county website or a special meeting is necessary (some 2021 meetings were virtual due to COVID). The table below details the attendance record of the Board members in 2021.

Last Name	First Name	JAN 1/25	FEB 2/22	MAR 3/22	APR 4/26	MAY ***	JUN 6/7*	JUN 6/28	JUL ***	AUG 8/23	SEP 9/27	OCT 10/25	NOV ***	DEC 12/6
Officers:														
Alexander	James	Р	Р	Р	Р		Р	Р		Р	Р	Р		Р
Lightstone	Robert	Р	Р	Р	Р		Р	Р		Р	Α	Р		Р
Hill	George	Р	Α	Р	Р		Р	Р		Р	Р	Р		Р
Members:	_													
Babcock	Albert	Р	Α	Р	Р		Α	Р		Α	Р	Α		Р
Barthelme	Bryan	Р	Р	Р	Р		Α	Р		Α	Р	Α		Α
Sahut	C.T.	Р	Р	Α	Р		Α	Р		Α	Α	Р		Α
Zaorski	Bob	Р	Р	Р	Р		Р	Р		Р	Α	Р		Р
Alternates														
Meyerman	Gerald	Α	Р	Α	Α		Р	Α		Α	Р	Р		Α
Р	Present					By-Laws S	Section 6	lf any appo	inted mem	ber fails to	attend thre	e (3) conse	cutive regi	ular
Α	Absent					meetings, with or without reasonable cause, or is absent from 50% of the regularly scheduled meetings during any calendar year, the Chairperson shall notify the County Administrator of the								
R	Resigned													
X	Place holde	r, new boa	ard position			absences.		1	· ·					
	Meeting Cancelled				1									
	Not on Board													
*	Special Mee	etina												

The Airport Operations Division of the Department of Public Works & Transportation (DPW&T) provides administrative staff support and valuable technical input to the Airport Advisory Board. The Airport Manager, Allison Swint, serves as an ex-officio member of the Board. The St. Mary's County Building Services Division assists the Airport Manager by providing facilities maintenance services. A Private-Public relationship for airfield operations was established via the 2005 Operating Agreement with the primary Fixed Base Operator (AIRtec, Inc.), who provides daily operational support. Some services provided by the FBO have been or will be transitioned to the County.

Hail, Farewell, and Thank You

The Board would like to recognize and thank Mr. John Deatrick, Director of Public Works and Transportation, for his support of the airport over the past four years. Mr. Deatrick retired at the end of 2021. The Board looks forward to working with the new Acting Director, Mr. Gary Whipple. Day-today airport operations are managed by Allison Swint with the assistance of Mr. David Gately. The Board wishes to extend its recognition of the County Highways & Building Services Divisions of the DPW&T, Department of Recreation & Parks (snowplowing), Department of Economic Development (DED), Department of Land Use & Growth Management (LUGM), Department of Finance, Civil Air Patrol (CAP), Experimental Aircraft Association (EAA), and fixed-based tenants on the airfield for their continued assistance over the past year. Finally, we wish to recognize the outstanding leadership provided by Mr. James Alexander as Board Chairman.

MISSION STATEMENT

"To satisfy aviation demand and promote airport development that both integrates with the community and serves the region's general aviation needs."



HIGHLIGHTED ACTIVITIES AND ACCOMPLISHMENTS FOR 2021

AeroPark Airport Innovation District

The Airport Innovation District Master Plan was released in January 2020, but COVID forced a delay in further efforts. In 2021, Airport Advisory Board representatives were part of the Steering Committee to determine branding for the Airport Innovation District, led by the St. Mary's County Department of Economic Development (DED). The Steering Committee met virtually on May 24th to provide initial thoughts to Arnett-Muldrow, the firm hired to create the branding concepts to reinforce the District identity. This was followed by several in-person roundtable discussions between Arnett-Muldrow and various stakeholder groups on June 7th and 8th, including a special meeting of the AAB on June 7th. The Steering Committee reconvened on June 9th to get the outbrief from Arnett-Muldrow. The initial brand concepts were well-received.

The final brand statement and creative elements were unveiled at the Commissioners of St. Mary's County meeting on August 17th, 2021. Arnett-Muldrow then shared the brand implementation strategy with all stakeholders who participated in the branding initiative that afternoon, followed by a public release from DED on August 18th. AeroPark is official!

AeroPark combines business, industry, education, and research centered around the St. Mary's County Regional Airport. Per the Department of Economic Development, "This effort provides a unique opportunity to strengthen and expand the local economy, deliver education and employment opportunities, and create a world-class research and innovation hub."

To follow on, DED facilitated a meeting at the airport on November 4th to determine interest in forming an AeroPark business association. Such an association would allow networking, information exchange, and collaborative planning. The meeting was successful and quarterly AeroPark Business Alliance meetings are planned, the next one being January 20th, 2022. First topic of discussion will be plans for development of about 30 acres of land on the west end of the airport, adjacent to the runway extension.

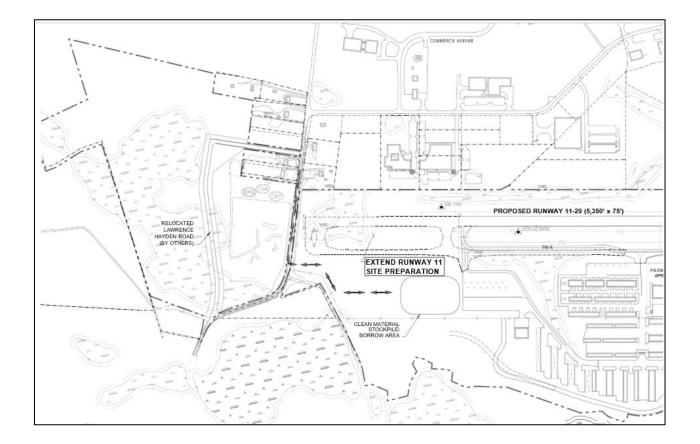
The Airport Advisory Board looks forward to future developments with AeroPark, including creation of a gateway sign marking the entrance to the airport on Three Notch Rd.

Aviation is in the DNA of St. Mary's County, and it is rooted even deeper in the history of this place where exploration and discovery form the foundation of Maryland itself. It is here that military and civil aviation launch dynamic collaborations. Today, the connection between Naval Aviation PAX River, our centralized and modern airport, and our strategic location in the state and nation position us to take flight in ways never before imagined.

Airport Construction

In 2021, Penn Ave Construction, LLC was issued a Notice to Proceed, effective May 11, 2021, with a Contract Completion Date of November 6, 2021, for Phase II Site Prep of the runway 11-29 extension. There were several weather days added to the end of the contract. Trash was also found in the construction site, it turns out the airport was built atop a landfill. The County is working with Maryland Department of the Environment (MDE) and the Maryland Environmental Service (MES) on a plan to remove the trash and continue the project. The County is hopeful Phase III, runway paving, will start on time in the Spring of 2022.

The County budgeted \$500,000 for terminal renovations to convert unused space into additional office space and install a kitchen for food service. Construction started in July 2021 with an expected completion date of December 2021. Due to some delays, completion is now expected in March 2022. Grant funding was used to procure the kitchen equipment and to pay the impact fees for the addition of the kitchen. A static display of a former University of Maryland unmanned aircraft will be added inside the terminal building sometime later in 2022.



S. Hunt Aero, LLC

S. Hunt Aero, LLC is a private entrepreneur development company with a vested market-driven approach to excellence in developing aviation-related facilities at St. Mary's County airport. 2021 airport activity included the following.

On Airport:

- Completed Hangar AA, an 11,990 SF storage/commercial hangar now occupied by AIRtec's fleet and also used for aircraft modifications.
- Foundation for Hangar Z is poured but further construction is on hold due to the near doubling of the steel package cost. This is the last hangar currently planned for the airport.

Adjacent Airport:

- Building 8 (12,000 SF), now partially occupied (8,000 SF) with offices (6,000 SF) and flex space (2,000 SF) for Alion Science and Technologies.
- Alion was acquired by Huntington Ingalls Industries (HII) in 2021.

Land for additional airport construction by the County or other developers is available at the west end but is subject to engineering and clearing by the County.



University of Maryland Unmanned Aircraft Systems (UAS) Test Site



Despite COVID-19 remaining with us into 2021, the UMD UAS Test Site had a busy year. The feasibility study report for the proposed Chesapeake UAS Route Network (CURN) was completed in January. CURN is envisioned to allow routine transit of civil, public (i.e. government), and military UAS between various location in the Chesapeake Bay region in non-segregated airspace, fully integrated with crewed aircraft in the National Airspace System. The feasibility study, with the participation of more than 50 stakeholders, concluded that establishing and implementing such a network is highly viable operationally, technologically, and economically. UMD recently hired a CURN Project Manager to turn this vision into reality.

Spring brought new FAA drone regulations, including flights over people and flights at night without waivers, and remote identification. It also brought receipt of the Golden Hour Award to UMD, presented by the Helicopter Association International in recognition of the world's first delivery by UAS of a human organ for transplantation in 2019. The Test Site also flew inspections inside highway culverts with a specialized drone for the Maryland Department of Transportation, proving that such inspections were more efficient, timely, and cost effective than traditional inspections. With the availability of COVID vaccines, all Test Site staff were able to return to work in person on July 6th. The situation also allowed resumption of the summer intern program.

Other research included continued testing of a solar-powered Puma and a specialty design UAS, initial flights for a NOAA sea ice study, a UAS engineering study in support of the Navy, and design/manufacture of a moving beacon test kit for UAS and Unmanned Surface Vehicles (USV) in support of the NASA Search and Rescue (SAR) program. In addition, SAR beacon flights were conducted locally and in Florida for NASA/NOAA to validate data for ground station commissioning of a new generation international SAR satellite system. The Test Site also had an active social media campaign during the FAA's annual National Drone Safety Awareness Week in September.

The Test Site hosted visits in the latter half of the year from Governor Hogan's staff, Maryland House Speaker Adrienne Jones, and several state and local elected officials. All were interested in the tremendous business growth at the AeroPark Innovation District, anchored by research and innovation by UMD and the University System of Maryland at Southern Maryland (USMSM).

On October 15th, the grand opening was held for USMSM's third building, known as the Southern Maryland Autonomous Research and Technology (SMART) building. The facility supports education through various shops, labs, and classrooms, as well as research through the Maryland Autonomous Technology Research and Innovation Xploration (MATRIX) Lab. The SMART building will officially open in early 2022, and the UMD UAS Test Site will become a key part of this research enterprise focused on unmanned and autonomous systems technologies across domains.







TechPort Business Incubator



The TechPort transition from an incubator to a technology collaboration space for the Naval Air Warfare Center Aircraft Division (NAWCAD) and the Consortium Management Group (CMG) was successfully completed in July 2021. The TechPort facility will foster an innovation ecosystem between government, industry and academia to rapidly spin-in technologies and capabilities to Naval Aviation. The key organizations at TechPort include the NavalX Southern Maryland Tech Bridge, the Naval Aviation Systems Consortium (NASC), IMPAX, NAWCAD Technology Transfer Office (ITO), and NAWCAD AirWorks. These organizations will support the innovation pipeline enabling stakeholders to source, curate, scan, incubate, prototype, validate, field and sustain critical technologies to address Naval Aviation capability gaps more timely and cost effectively.



St. Mary's Composite Squadron, Civil Air Patrol

The Walter F. Duke Terminal Building at St. Mary's County Regional Airport is home to one of the largest Civil Air Patrol (CAP) squadrons in the State of Maryland. Since 2002, the cadets of the St. Mary's Squadron have used the terminal building to host aerospace classes, learn survival skills, teach military-style drill, and become young leaders in their community. Due to the ongoing Covid-19 pandemic, cadets were unable to meet in the terminal building until May of this past year. Since then, CAP has hosted 32 of their weekly meetings there, providing instruction for a large audience of cadets, ages 12-21. The CAP blended Vision-Mission Statement is "Volunteers



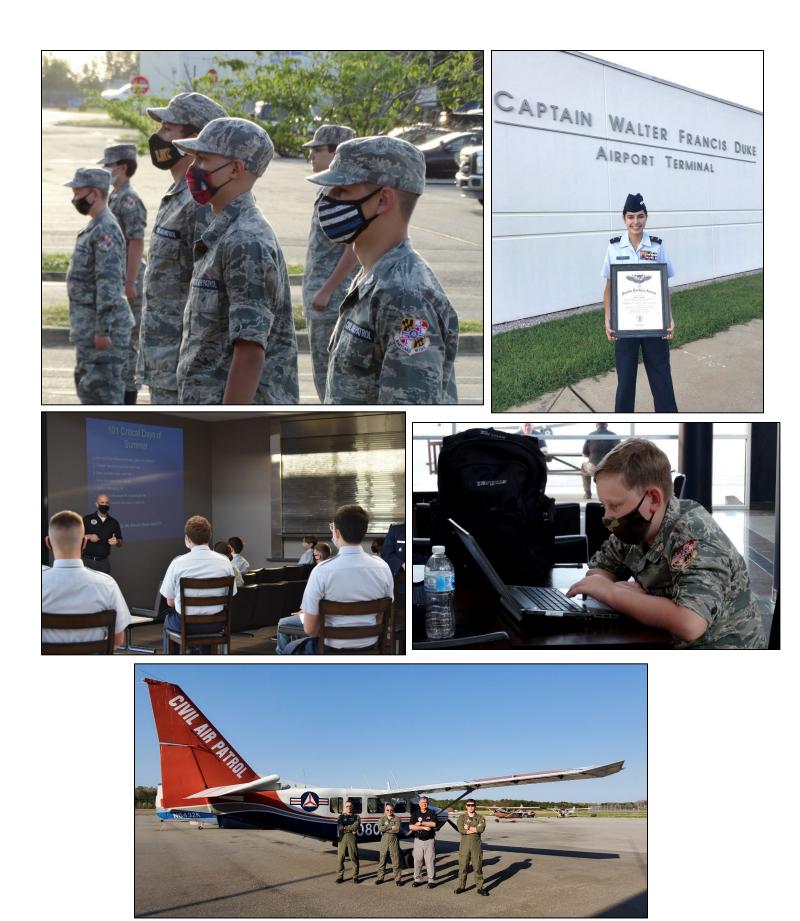
serving America's communities, saving lives, and shaping futures." CAP is a federally chartered corporation that is also the official Auxiliary of the United States Air Force. It is mainly made up of volunteers who dedicate their time to helping others and improving the community. Nationally, there are more than 21,000 cadet members and more than 33,000 adult members. Aircraft, communications equipment, and automobiles are provided to CAP units for their use in training and providing services in emergency conditions and are funded by the United States Air Force.

Cadets are beneficiaries of many unique and valuable opportunities presented through CAP. The Cadet Program is an outstanding leadership opportunity, with many of the cadet leaders moving on to graduate from college and continue to be a positive influence in their community. There is no military commitment incurred by participating in the Civil Air Patrol, however, it does allow youth to see how a military-like organization is structured and offers education and leadership activities to benefit the whole community, both here locally and elsewhere in the state and country.

St. Mary's Composite Squadron has an association with a CAP unit at Esperanza Middle School and the two organizations operate together as one large squadron. Membership consists of 116 members, made up of 63 cadets and 53 adult officers. St. Mary's Composite Squadron conducted more than 300 events during 2021, consisting of training, community service, as well as actual Search and Rescue (SAR) or Disaster Relief missions. The squadron meets weekly on Wednesday nights where they conduct training in aerospace, leadership, character development, cyber security, and physical fitness. The squadron operates a CAP-owned Cessna 182 from the St. Mary's Airport to perform search missions and training.

Other activities in 2021 included COVID response missions to Montgomery County, flight operations, pilot/aircrew training, STEM events, and Air National Guard cook team support. St. Mary's Squadron hosts a state-ranked CyberPatriot competition team as well as a UAS4STEM drone competition team, which traveled to Oshkosh, Wisconsin to compete in a National-level competition in July. In 2021 the Maryland Wing awarded the Quality Cadet Unit Award to St. Mary's Composite Squadron. This award is based on several criteria including cadet flights in CAP aircraft, cadet advancement through a 16-step leadership program, and excellence in aerospace education. This is the twelfth year in a row that St. Mary's has attained this high honor and that is due, in no small part, to the continued availability of the Walter F. Duke terminal building that St. Mary's County provides.





Experimental Aircraft Association Chapter 478

With COVID still problematic, EAA Chapter 478 was able to get back in the air but flew only a limited number of Young Eagles (57) at the airport this year. A Young Eagles flight allows youth aged 8 to 17 to experience a free airplane ride, perhaps inspiring them towards a career in aviation. The Chapter also hosted a successful open hangar night at the airport on June 15th.

The monthly VMC Club meetings remained virtual early in the year, but returned to in-person format at the terminal building conference room in June. Rich Byrnes does a fantastic job as organizer and facilitator. VMC Club is a free pilot safety and proficiency forum open to all pilots, you do not need to be an EAA member to participate. It meets the third Saturday of each month at 9:00 am.





AIRPORT DATA

Safety & Security

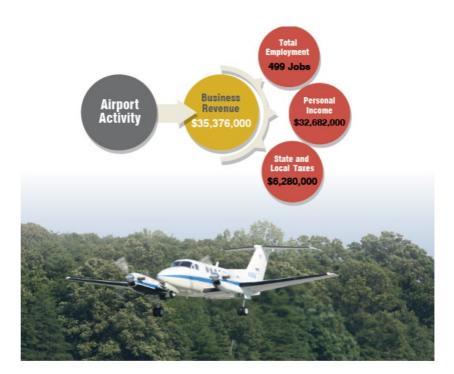
The Maryland Aviation Administration (MAA) conducted their annual licensing inspection on April 15th, 2021 without any significant issues noted.

The FAA Safety Team (FAASTeam) mission is to "lower the Nation's aviation accident rate by conveying safety principles and practices through training, outreach, and education; while establishing partnerships and encouraging the continual growth of a positive safety culture within the aviation community." The FAASTeam Program Manager at the Washington Flight Standards District Office (FSDO) provides national policy and guidance for the southern Maryland region. Local FAASTeam Representatives are James Alexander, Jacque La Valle, and Bill Posnett. Of note, the FAASTeam hosted a pilot forum with NAS Patuxent River Air Traffic Control on August 11th to improve communication, increase traffic awareness/deconfliction, and enhance safety between 2W6 and Pax River air traffic. The event was well-received with 35 people attending, and the plan is for this to be an annual event.

The voluntary Aircraft Owners and Pilots Association (AOPA) Airport Watch Program continues to enhance safety, security, and a sense of ownership among airport tenants. The program features a centralized nationwide toll-free hotline (1-866-GA-SECURE) for reporting and responding to information provided by the airport community. In 2021, the Office of the Sheriff responded to five reported security-related matters at the airport, two of which were minor.

Economic Impact

The MAA issues an economic impact report every three years. Below is a graphical depiction of the economic impact at St. Mary's County Regional Airport as of December 2018. New data was expected in December 2021, but due to COVID no data was collected. Next impact report is expected in 2022.



The following commercial services are provided at the airport:

- ✤ ABSI Aerospace and Defense: Expertise in Unmanned Systems Training and Curriculum Development, Acquisition and Program Management Support, Manned/Unmanned Test and Evaluation, and SecondSky Live, Virtual, Constructive (LVC) Training Environment.
- ★ AIRtec Inc. (FBO Services): Since 1987, AIRtec provides aircraft maintenance, line service, transient aircraft support, and aircraft fueling. AIRtec is also an aviation and technology integration company that specializes in maritime radar surveillance, range safety, airborne telemetry flight operations, priority air transport; Intelligence, Surveillance and Reconnaissance (ISR); maintenance, training, equipment integration and sensor operation. Several aircraft are based at 2W6.
- Alion Science and Technology: An engineering, science, and technology firm with expertise in Artificial Intelligence; Intelligence, Surveillance, Reconnaissance (ISR); LVC Training; Modernization & Sustainment, Networks & Software, Systems Engineering & Integration, and Weapons Platforms.
- Atkinson Aeronautics and Technology, Inc.: A dedicated full-service general aviation maintenance facility offering maintenance, repair, overhaul, interior refresh, and modification for all reciprocating engine and light turbine powered aircraft. Also offering 14 CFR Part 91.411 and 91.413 IFR aircraft certification services under a 14 CFR Part 145 Repair Station certificate.
- Aviation Systems Engineering Company (ASEC): Systems engineering, test and evaluation, logistics, flight operations, and training. ASEC has a North American Navion and Beech Super King Air 300 based at 2W6.
- Chesapeake Technology International: Offering advanced technology engineering including systems work on Electronic Warfare, Tactical/Unmanned, and Training/Simulation.
- → MTech: Aerospace structural design, analysis, and certification.
- → Navy Annapolis Flight Center (NAFC): Part 141 and Part 61 flight training programs. (NAFC ceased 2W6 operations at the close of 2021.)
- → PAE: Training, Logistics, Operations, and Maintenance services.
- → Pax Aero Solutions: Aircraft engineering, fabrication, modification, integration, and repair.
- Piedmont Flight Center: Aircraft rental, Part 61 flight training, and provide airport courtesy car.
- S. Hunt Aero, LLC: The company continues in developing/leasing general aviation hangars, commercial hangars, office/R&D buildings and production facilities. Other than completion of Hangar Z, available land is fully built out. The rapid growth of St. Mary's County Airport would not be possible without this substantial corporate involvement.
- → St. Mary's Hangar Association, Inc.: Hangar Leasing.

New additions in 2021 include:

Southern Maryland Seaplanes: Specialized flight instruction in seaplanes and tailwheel aircraft. Also offering Part 61 private pilot instruction and seaplane sightseeing flights.





Annual Budgeting

Since 1978, the Federal and State Aviation Administrations have funded 30 grants at the St. Mary's County Regional Airport in excess of \$34 million. FAA funding is 90% with the State and County providing 5% each. However, beginning in FY2021, the State of Maryland will only provide the 5% match for construction costs due to significant State budget constraints. Planning, design and construction management will not be funded by the State.

The draft FY2023 Capital Budget Master Plan Improvements include:

a. \$3M in prior approval for the Hangar Access Road extension (Local funding).

b. \$5.4M in prior approval for Phase 3 airfield construction (FAA Airport Improvement Program, 100% federally funded under the Coronavirus Aid, Relief, and Economic Security (CARES) Act).

c. \$1.075M in prior approval for perimeter fence replacement and airfield and ramp pavement repairs (Local funding).

d. \$400,000 for Airport Master Plan update.

e. \$680,000 for Access and Security Improvements.

The airport also received an additional:

a. \$59,000 in discretionary funding through the American Rescue Grant Program (ARPG), which will be applied to operational expenses.

b. \$23,000 in discretionary funding through the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA), which will be applied to staffing for additional janitorial and disinfection.

The table below presents the costs and revenue associated with maintaining and operating the airport. Expenses are grouped by type. Revenues include tie-down and hangar rentals, office space rent, and fuel sales.

Facility Expenses	2017	2018	2019	2020	2021
Facility Maint/Utility	\$ 43,363.34	\$ 36,186.17	\$ 25,359.22	\$ 12,076.30	\$35,511.48
Electric (incl. Nav Aids & Lighting)	\$ 24,479.82	\$ 31,139.32	\$ 20,724.16	\$ 18,336.77	\$21917.01
Airport Lighting	\$ 320.69	\$ 180.88	\$ 833.56	\$ 1,615.44	\$1,200.01
Liability Insurance	\$ 6,160.00	\$ 6,160.00	\$ 6,160.00	\$ 6,160.00	\$ 7,700.00
Property Insurance	\$ 3,116.00	\$ 3,116.00	\$ 3,479.00	\$ 3,847.00	\$ 3,980.00
(structure)					
Grounds	\$ 12,949.00	\$ 11,366.00	\$ 11,762.00	\$ 10,495.00	\$ 7,626.00
Runway/Taxiway	\$ 82,862.40	\$ 93,324.22	\$ 0.00	\$ 0.00	\$ 0.00
Maint.					
Total expenses	\$173,251.25	\$181,472.59	\$ 66,317.94	\$ 52,530.51	\$77,934.50
Income					
Direct Revenue	\$111,996.22	\$ 88,812.80	\$ 84,358.79	\$122,009.68	\$ 119,724.19
Gain/Loss					
Asset / (Liability)	\$ (61,255.03)	\$ (92,659.79)	\$ 18,040.85	\$ 69,479.17	\$41,789.69

Airspace Protection and Encroachment

The Comprehensive Zoning Ordinance Chapter 43 provisions with respect to Airport Environment and Tower installations implemented by the Commissioners of St. Mary's County has served the airport well by preventing penetrations to 14 CFR Part 77 surfaces and preserving airport approach minimums.

Airport Capacity

The FAA's National Based Aircraft Inventory assists the FAA in administering its various national airspace planning programs. The data update ensures that all planes are accounted for by location and tail number and is a requirement for receiving continued Federal and State funding. The FAA required each airport to review and update their based aircraft inventory by December 15th, 2021. As of that date, **227** total aircraft are recorded in the inventory; 220 fixed wing (including 189 single-engine, 18 multi-engine, eight gliders, four jets, and one ultralight) and seven rotary wing. Total airport capacity is 74 tie-down spaces, 123 general aviation hangar spaces, and with the 2021 completion of Hangar AA, 14 commercial hangars (including the county hangar). The waiting list, as of December 31st, 2021, contains 57 requests for T-hangar space. While outdoor tie-downs are available, there continues to be a shortage of hangar facilities for indoor aircraft storage which is unlikely to change due to land availability.

With an increasing number of based and transient aircraft, access to general aviation maintenance providers at the airport remains extremely important. There is a current and forecast shortage of certified Airframe and Powerplant (A&P) mechanics throughout the aviation industry, and aircraft don't fly without maintenance. To strengthen the airport infrastructure and the broader AeroPark Airport Innovation District, the University of Maryland UAS Test Site hosted a visit by the Pittsburgh Institute of Aeronautics on September 22nd. PIA, one of the nation's oldest and most respected aviation maintenance schools, briefed the local business and education community on the aviation maintenance career field, job outlook, and suggestions to successfully establish a training program. PIA itself is not currently looking to expand further, but with community support and commitment a maintenance training program in St. Mary's County may be possible. This would build on the efforts of Atkinson Aeronautics and Technology, which has been working with the Forrest Tech Center and College of Southern Maryland to assist in the development of an Aviation Maintenance Apprenticeship program.

Airport Operations

Each take-off and landing is considered a separate aviation-related operation. The Maryland Aviation Administration conducts a study every three years for aircraft operations at all Maryland airports. A new study was conducted in 2019 and St. Mary's County Regional Airport had 40,263 operations in 2019, an increase of 13.1% over the previous report. The next study will be conducted in 2022.

Local GA	24,311
Transient GA	14,692
Air Taxi	1,059
Military	201
Total Operations	40,263

Annual Aircraft Operations

Maryland State Police Trooper 7: The Maryland State Police Aviation Command continues to provide critical community services through Trooper 7 located at the airport. According to the Aviation Command, Trooper 7 flew 401 medevac, 20 search and rescue, and 13 law enforcement missions out of the airport in calendar year 2021 for a total of 434 missions. Trooper 7 continues to enhance airport security by providing a continuous law enforcement presence.



MedSTAR Transport: MedSTAR Transport, a non-profit service based out of MedStar Washington Hospital Center, provides enhanced response times to better assist critical care patients in the Southern Maryland region. MedSTAR's aircraft and crews are single-pilot IFR and night vision goggle qualified to ensure immediate response 24/7 in a wide variety of conditions. MedSTAR's flight data for 2021 was unavailable.



Nalls Aviation: Nalls Aviation is an especially noteworthy aerobatic team based at St. Mary's County Regional Airport. Art Nalls, a retired Marine, holds the distinct honor of owning and operating the world's only civilian AV-8A Sea Harrier (SHAR) jet and has been recognized by the Washington Post, Classic Aircraft magazine, Aeroplane Monthly, and Jets Monthly publications. The Harrier team includes local county residents who maintain the aircraft during the busy national airshow season. Nalls Aviation obtained a second Harrier in 2015, and also has an L-39 Albatross jet trainer, a BD-5 microjet, and a 1939 Piper J-3 Cub. On August 28th, Art Nalls, in conjunction with Hollywood's Tobacco Barn Distillery, completed the "700 mph Bourbon" flight which set three "Bourbon-Aviation" world records.



Operations Equipment and Navigation Aids:

- ★ The Automated Weather Observing System (AWOS) is inspected three times per year, one of which by the FAA. The last FAA inspection was in October 2021. The AWOS continued to struggle some in 2021 with many inoperative periods. The MAA continues to fund the AWOS connectivity to the national FAA weather database.
- ✤ For Instrument Flight Rules (IFR) operations, the airport is serviced by non-precision RNAV GPS approaches for both runways 11 and 29.
- ✤ While a GPS WAAS signal is available via Channel 70502 W11A, the GPS approaches have not been developed for CAT II approach minimums and are currently restricted to a decision height of 298 feet Above Ground Level (AGL).
- Automatic Dependent Surveillance-Broadcast (ADS-B) Out is required as of January 1st, 2020 on all civil aircraft that operate in airspace requiring a Mode C transponder. Aircraft equipped with ADS-B In can see ADS-B traffic on a cockpit display to enhance situational awareness and safety. The AAB has been exploring, with the help of a subject matter expert, an ADS-B repeater (ADS-Rebroadcast) at 2W6 to further enhance situational awareness and safety.

CHALLENGES ENCOUNTERED OR EXPECTED

- The AAB recognizes the challenges faced by the Commissioners of St. Mary's County and the DPW&T Director, especially with only limited financial resources and staffing available. The Board will continue to search for ways to increase a revenue stream and enhance the economic value of the airport. The ultimate goal is for the airport to remain self-sustaining financially.
- As the airport and surrounding area continues to grow and expand, it must be top priority to ensure the airport remains an airport. While there's no reason to believe that may be in jeopardy here, there are examples of general aviation airports in other communities that were closed or restricted to accommodate other priorities. Notable examples include Santa Monica Airport, CA and Chicago's Miegs Field.
- The AAB recognizes the unique operational demographics of the airport when attempting to maintain appropriate Rules, Minimum Standards, Standard Operating Procedures, and other documents. The Board will continue to engage the airport and surrounding community in order to provide sound recommendations to the County regarding these important documents.
- The AAB recognizes the significant nationwide shortage of pilots and mechanics to sustain and grow the aviation industry, and the implications for national defense, commercial air transportation, business aviation, and our local airport. FAA data indicates there were 827,071 active pilots in 1980 and only 691,691 in 2020. While the numbers have trended positive since 2017 after years of decline, the Boeing Pilot and Technician Outlook 2021-2040 estimates there will be a demand for 612,000 new pilots and 626,000 new maintenance technicians to support commercial aviation globally over the next 20 years. The demand remains strong, but the numbers decreased from the 2020 estimates due to the "uneven global recovery" from the industry downturn caused by COVID-19. It's evident that a shortage of pilots and maintainers is detrimental to the future of general aviation and general aviation airports such as St. Mary's County Regional, along with the broader aviation industry. We should do all we can at the grass roots level to generate interest in aviation and inspire people to fly or fix airplanes.

RECOMMENDATIONS FOR THE FUTURE

 \rightarrow The County should plan now to utilize the airport as a vertiport for future Advanced Air Mobility (AAM) operations. AAM promises to use electric Vertical Takeoff and Landing (eVTOL) aircraft as air taxis connecting remote hubs to urban centers or large airports. Smaller regional airports such as 2W6 are well-positioned to support AAM development and success because the flight operations infrastructure and expertise is already in place. The airport is within a short drive of thousands of local passengers who could benefit from quick, quiet, economical, efficient travel to Washington DC, Baltimore, Reagan National Airport, BWI, Richmond, or the eastern shore. With no interstates, commercial rail, or commercial air travel in St. Mary's County, AAM would be a tremendous convenience for local businesses and residents, and a new source of revenue. The Advanced Aviation Infrastructure Modernization (AAIM) Act, if passed by Congress, would establish a pilot program to provide planning and construction grants for AAM infrastructure. With or without federal funding, this is an opportunity to be seized now. St. Mary's County Regional could be a key location in the Chesapeake UAS Route Network project being led by the University of Maryland. Further information available at https://www.mckinsey.com/industries/aerospace-and-defense/ourinsights/final-approach-how-airports-can-prepare-for-advanced-air-mobility and https://wisk.aero/news/press-release/aam-airports-whitepaper/.

- The Board continues to fully support the goals and objectives of the 2002 Airport Master Plan and is pleased to see great progress made in recent years with more to come. It has been 20 years since the Airport Master Plan was last updated, and technology and society have changed. Now that AECOM has been selected as the new airport consultant, the Board plans to support review and revision of the Master Plan to account for growth in the southern Maryland region and at NAS Patuxent River, and industry advances on the horizon such as AAM.
- ✤ Work with the Department of Economic Development and airport stakeholders to further develop and market the airport and surrounding area (AeroPark Innovation District) as a regional asset for all of Southern Maryland. A primary goal is establishment of a restaurant, observation area, and pilot store/gift shop to increase utilization of the airport terminal building, attract transient pilots and the general public to the airport, and increase revenue. By providing a convenient airport with attractive amenities, St. Mary's can lure pilots looking for an excuse to go flying and the local community looking for an excuse to enjoy a good meal while watching an operating airfield. The restaurant is getting closer to reality with the current terminal renovation.
- Continue to provide and support activities that promote interest in general aviation, flight/maintenance training, and STEM education. One great example is Atkinson Aeronautics' initiative to help create an Aviation Maintenance Apprenticeship program in conjunction with the Forrest Tech Center and College of Southern Maryland. The ultimate goal is to locally grow a qualified workforce to meet the demands of the airport, the Patuxent River Naval Air Station, and the Patuxent River Naval Air Museum. The addition of an aircraft maintenance training program to local education offerings would be extremely beneficial. The AAB encourages one or more local education institutions to seriously consider this opportunity.
- Continued monitoring of development within the Airport Environs and in the vicinity of the airport property to provide sound technical recommendations to the Commissioners of St. Mary's County in order to protect the County's and the FAA's substantial investment in this important public asset.
- Update airport website <u>https://www.stmarysmd.com/dpw/airport-operations/</u> to be more current and better organized.
- Create a master email contact list of airport tenants, airport businesses, and other interested parties to create a community atmosphere where airport information and events can be quickly and easily shared.
- Maintain the new airport Facebook page <u>https://www.facebook.com/StMarys2W6/</u> as another source of information for the airport community.
- The Board concurs with the Airport Operations action items that have been integrated with the DPW&T's 2006 Transportation Plan. Brudis & Associates, Inc. was contracted in November 2021 to update the Transportation Plan, which should be complete in 2022. The Board will continue to monitor and address these issues as presented for recommendation and/or action. Specific Action Items of particular interest to the Board are as follows:
 - Develop an Airport Business/Finance Plan that is integrated with the Airport Master Plan and in conjunction with the Department of Economic Development. As the County deals with growth, budget challenges, and FAA requirements, it is essential the County has a vision on how to manage this essential resource.
 - Once the runway is extended, "open up" the southwestern portion of the airport for development by extending water and sewer with County funding resources as shown in the capital improvement plan, and providing a second entrance to the airport via Lawrence Hayden Road connection to the planned Airport Loop Road.
 - Work with the Emergency Services Director to provide annual updates of the disaster preparedness plan.

- Ensure increased safety for pilots, aircraft, persons and properties through the review and update of existing safety processes, and encouraging participation in FAA Safety Team events (WINGS pilot proficiency program), VMC Club, and other pilot forums.
- → Pursue and obtain all required navigation and obstruction removal easements.
- ✤ Track, monitor, and assist new activities on the airfield to ensure they are conducted with all notifications, permits, and notice. Facilitate the process of allowing new businesses to operate on the airfield in a timely manner.
- Continue to work with the County and the FBO to evaluate and provide recommendations on the Airport Layout Plan, identify additional areas for tie-down spaces, and consolidate parking areas where available in order to meet current and future demand.
- Seek FAA funding for the installation of an Automatic Dependent Surveillance Broadcast (ADS-B) antenna so as to facilitate 978 MHz ADS-B broadcast to aircraft during ground operations. This will serve to increase safety in flight operations by providing pilots with weather, traffic, airspace, and other critical information prior to takeoff and during air traffic pattern operations.



