

THE BATTLE CREEK ADVANTAGE



WELCOME

Dear Guest,

Welcome to the 110th Wing and Battle Creek Air National Guard Base, a hidden gem for defense capability, right here in Southwest Michigan. I am excited to share with you this organization's mission sets, its amazing people and proud tradition of service to community, state and country, and finally, the exceptional growth potential that together make it one of the premier Wings in the Air National Guard.

The 110th Wing falls under the command of the Governor of Michigan and the Adjutant General of the Michigan National Guard, and is an asset to the Michigan Department of Military and Veterans Affairs (DMVA). When called upon in a federal capacity, the 110th Wing activates members to "Title 10," becoming part of an operational reserve that is integral to fighting this country's wars, providing solutions for problem sets faced by federal and Combatant Command decision makers.

From P-51 Mustangs to the MQ-9 aircraft, the mission of the 110th Wing has changed many times over the past eight decades, and has come a long way since 1947. On the operations side, the 110th Wing boasts a state-of-the-art Air Operations Group that offers command and control and joint task force capabilities to support our National Defense Strategy around the globe, as well as MQ-9 operations that our Airmen pilot remotely from Battle Creek in locations around the world, and is now home to an elite Cyber defense squadron (one of only 12 of its kind). On the support side, the 110th Wing's outstanding Medical Group and Mission Support Group provide exceptional capabilities to ensure our Airmen's readiness to "answer the call" for state and/or federal activation

But always, it is the character of our people – and this organization's enduring culture of excellence – that drives the 110th Wing's ability to succeed. Battle Creek Air National Guard Base is home station for nearly 1,000 diverse men and women – Airmen, federal, state, and civilian employees – who have together established a proud heritage of service in Southwest Michigan dating back to 1947. While the Wing does have a full-time cadre, a majority of our members work full-time within the local community, spending time away from families to report for duty on drill weekends and annual training periods. Their professionalism and expertise are nothing short of inspiring, in both the civilian and military sector.

Today, Air Force leaders in Washington have made it clear that we cannot allow ourselves to stagnate with strategies and missions that may have worked in the past. To paraphrase a recent senior leader quote, if we do not adapt and innovate, we will lose the clear advantage that has kept our national interests secure for decades. This is what makes the 110th Wing's huge potential for future growth so exciting: our Airmen are indeed innovating – constantly – and we are aggressively pursuing ways for our existing capabilities in some of the National Defense Strategy's newest concepts,



like Joint All-Domain Command and Control (JADC2) and space operations, to be leveraged with new missions crucial to Department of the Air Force priorities.

For instance, with ample runway and ramp space, Battle Creek is ideally situated to support a future Launch and Recovery Element (LRE) for the MQ-9 in Michigan, or any number of other flying missions. With all of the infrastructure to maintain cutting edge, innovative capabilities and technology, the base will be in a position to excel if there comes an opportunity to support a Space National Guard. And perhaps most importantly, the 110th Wing's robust communication and command and control network links Battle Creek to other premier defense training spaces such as the National All-Domain Warfighting Center in Northern Michigan, which includes nearly 148,000 acres of ground maneuver space and the largest overland military airspace complex east of the Mississippi River.

With proven capability, values, and experience – and empowerment to solve any problem – the potential for the men and women of the 110th Wing to reach even greater heights is limitless. I cannot wait to see what the future holds for them – and if you are interested in partnering with us on this journey, I can assure you there is always room for one more on this team.



Shawn E. Holtz, Col., MI ANG
Wing Commander



KEY MISSION SETS

AGILE COMBAT SUPPORT: Oversight and operation of all facilities, infrastructure, and support agencies that enable all 110th Wing assigned missions. Approximately 300 Airmen, contractors and civilian employees across 5 squadrons provide vital coordinated support through Security Forces Squadron, Force Support Squadron (Services Sustainment & Airman/Family Programs), Communications Flight, Civil Engineer Squadron, Logistics Readiness Squadron, Contracting and Environmental programs.

MQ-9 AND CYBER OPERATIONS: Intelligence Surveillance Reconnaissance (ISR) to various Federal and State entities, anywhere in the world with the MQ-9 "Reaper" Remotely Piloted Aircraft (RPA). Additionally, for the Federal mission we provide an attack/strike capability when called for. We also provide Cybersecurity and protection to Federal and State entities, ensuring critical networks remain available to accomplish the missions they facilitate.

MEDICAL: Improving the medical readiness, reliability, and relevance of all base personnel, promote health and enhance human performance, and respond when called upon for all local, state, and national contingencies.

OPERATIONAL PLANS/COMMAND AND CONTROL: Providing dedicated integrated support to U.S. Air Forces in Europe/ U.S. Air Forces Africa headquartered at Ramstein Air Base, Germany. Personnel support air staff directorate, strategy, combat plans, combat operations, ISR, weapons systems communications, air mobility as well as aiding any emergency response within the State of Michigan.

FUTURE GROWTH OPPORTUNITIES

SPACE NATIONAL GUARD: Capitalizing on our current mission sets, strengths, and location to support a U.S. Space Force-aligned mission.

FLYING OPERATIONS FACILITIES AND INFRASTRUCTURE: Leveraging the existing assets of Battle Creek ANGB, including airfield pavements, aircraft hangars, and other support facilities, to support a variety of flying operations including a Michigan Army National Guard (MI ARNG) Aviation Support Facility (AASF) package, or other flying mission.

MQ-9 LAUNCH AND RECOVERY ELEMENT: Supporting an MQ-9 Launch and Recovery Element (LRE); or gaining the capability through partnerships to launch and recover MQ-9 aircraft from inside Michigan to be able to capitalize on what Michigan has to offer, including the National All-Domain Warfighting Center (NADWC).

WING VISION STATEMENT

Elite Airmen providing premier mission capability

WING MISSION STATEMENT

Preeminent multi-domain ANG Wing providing MQ-9, Cyber Defense, Agile Combat Support, Command & Control, and Plans for Combatant Commanders and Civil Authorities

ORGANIZATIONS / COMMAND STRUCTURE

COMMANDER 110TH WING

Vice Commander
Command Chief
Executive Officer
Administrative

(269) 969-3221

(269) 969-3289

(269) 969-3496

(269) 969-3555

(269) 969-3299

COMMANDER 110TH MEDICAL GROUP

(269) 969-3211

COMMANDER 110TH COMPROLLER FLIGHT

(269) 969-3222

COMMANDER OPERATIONS GROUP

(269) 969-3432

Commander 172d Attack Squadron
Commander 110th Operation Support Squadron
Commander 272d Cyber Operations Squadron

(269) 969-3283

(269) 969-3525

(269) 969-3498

COMMANDER MISSION SUPPORT GROUP

(269) 969-3207

Mission Support Group Vice Commander
Commander 110th Civil Engineer Squadron
Commander 110th Logistics Readiness Squadron
Commander 110th Security Forces Squadron
Commander 110th Communications Flight
Commander 110th Force Support Squadron

(269) 969-3208

(269) 969-3341

(269) 969-3365

(269) 969-3300

(269) 969-3298

(269) 969-3229

COMMANDER 217TH AIR OPERATIONS GROUP

(269) 660-5900

Executive Officer
Administrative
Commander 217th Air Component Operations Squadron
Commander 217th Air Intelligence Squadron
Commander 217th Air Operations Squadron
Commander 217th Air Communications Operations Squadron

(269) 660-5902

(269) 660-5904

(269) 660-5986

(269) 660-5975

(269) 660-5955

(269) 660-5948

Major Command for the above units—Air Combat Command (ACC) and United States Air Force Europe (USAFE)

On base calls, dial 580-XXXX or XXXX

DSN, dial 94-XXX-XXXX

Outside Line Local, dial 99

Outside Line Long Distance, dial 98

FREQUENTLY REQUESTED NUMBERS

PUBLIC AFFAIRS OFFICE: (269) 969-3385

DEERS: (269) 969-3216

RECRUITING: (269) 969-3415

RETIREE AFFAIRS: 110AW.SCAC@ANG.AF.MIL

FINANCE: (269) 969-3316

SAPR MANAGER: (269) 969-3337

WEB SITE: <http://www.110atkw.ang.af.mil/>

PASS & ID: (269) 969-3216

RETENTION: (269) 969-3205

AIRMAN & FAMILY READINESS: (269) 969-3493

BX/SHOPPETTE: (269) 969-3372

FORT CUSTER LODGING: (269) 731-6126/6726

DOD Self Helpline: (877) 995-5247

Part 1: A History Of Excellence

The 110th Wing traces its lineage back to WWII with the 361st Fighter Group, 375th Fighter Squadron.

The 375th served in the European theater until inactivation. The 375th was reactivated and re-designated the 172d Fighter Squadron in 1946. Kellogg Field in Battle Creek, Michigan became home station for the 172 FS by order of then Governor Kim Sieglar in 1947. This is the same year the U.S. Air Force became an independent branch of the armed forces and the 172 FS received federal recognition as an Air National Guard squadron. The 172d FS was federally activated in 1951 for the Korean War and re-designated as the 172d Fighter Interceptor Squadron. The 172 FIS shifted its operational location to Selfridge AFB where they flew their North American P/F-51D Mustangs in support of the Eastern Air Defense Force. *The 172d FIS flew the P/F-51 until 1954.* The 172d, re-designated as a Fighter Bomber Squadron, transitioned into the *North American F-86 Sabre Jet.*



F-89 Scorpion, 1955-1957

The unit flew this aircraft only until 1955 when they transitioned into the more sophisticated *Northrop F-89 Scorpion*. In 1956, the National Guard Bureau announced that the 172 FIS would become part of the newly created 110th Fighter Group. The 110 FG flew the F-89 Scorpion until 1958. In 1958, the 110th traded its Northrop F-89s for a new mission and a new airframe, *the Martin RB-57A Canberra reconnaissance aircraft.* The 172d, now designated as *the 172d Tactical Reconnaissance Squadron flew the RB-57A until 1971.*



OA-37 Dragonfly, 1980-1991

In 1971 the unit's mission changed again to forward air control with the transition to *the Cessna O-2 Skymaster* which flew from Battle Creek until 1980 when the unit upgraded to the *Cessna OA-37 Dragonfly*. The dedicated mission lasted until the 110th transitioned into the Fairchild *A-10A Thunderbolt II in 1991.* The A-10s of the 110th served with distinction in several United Nations operations in Europe and Southwest Asia, most notably with the 332nd Air Expeditionary Wing in support of Operation Iraqi Freedom.



A-10A Thunderbolt II, 1991-2009

The 110th Fighter Wing underwent a major transition moving from the A-10 to the *C-21 aircraft in 2009.* The C-21 is a twin turbofan engine passenger aircraft, the military version of the Lear Jet 35A.

In addition, the base also witnessed the creation of a new unit, *The 217th Air Operations Group on April 1, 2009.* The 217th AOG is a unique organizational structure to support U.S. Air Forces in Europe—Air Forces Africa. The 217th AOG has four squadrons and one flight that include air support, communications, Intel and operations in a largely self-contained package.

In 2010, the 110th Fighter Wing became the 110th Airlift Wing.

In 2015, the 110th Airlift Wing was re-designated the 110th Attack Wing. Its *MQ-9 Reaper* operations facility was fully activated in February 2017. *In January 2018, the 272d Cyber Operations Squadron* was activated, completing the 110th Attack Wing's transition to a multi-mission capability set supporting MQ-9, Cyber Defense, Agile Combat Support, Command & Control, and Plans for Combatant Commanders and Civil Authorities.

The unit was re-designated the 110th Wing to reflect its current versatility in mission capability on March 1, 2019.

110TH OPERATIONS GROUP

The 110th Operations Group (OG) provides MQ-9 aviators and Intelligence Surveillance Reconnaissance (ISR) capabilities, anywhere in the world, to support federal and state authorities when called upon. This includes domestic operations during any disaster relief-type emergency. For federal missions, the unit is also capable of providing an attack/strike capability when necessary. The 110th OG additionally provides Cybersecurity and protection to federal and state entities, ensuring critical networks remain available to accomplish the missions they facilitate.

110th Operations Support Squadron (OSS): The 110th OSS provides professional officers and enlisted members to support the day-to-day administrative needs for the entire Operations Group. They maintain and manage the communications backbone required to accomplish the Remotely Piloted Aircraft (MQ-9) mission. They establish systems and processes to ensure all unit members are trained, proficient, and ready to excel at any mission requested by the federal or state chain of command.



172d Attack Squadron (AS): The 172d AS provides motivated and skilled pilots, sensor operators, and mission intelligence coordinators (MICs) who operate the MQ-9 anywhere worldwide from home station. They also provide a medical contingent to these crews to ensure they are mission-ready.



272d Cyber Operations Squadron (COS): The 272d COS was officially activated in January 2018, standing up from initial operational capability to full operational capability 143 days faster than Cyber mission force standards. The 272d COS has since been successfully mobilized to defend critical national networks while improving cybersecurity posture and mission assurance. In 2020, the 272d

conducted an Innovative Readiness Training (IRT) event in support of the Michigan Department of Transportation and in coordination with the Department of Technology Management and Budget to identify network vulnerabilities and provide invaluable training, networking, and team building opportunities.

110TH MISSION SUPPORT GROUP

The 110th Mission Support Group provides diversified manpower and skillsets to support the readiness of 110th Wing Airmen by providing facilities, services, logistics management, contracting, force protection, fire protection, crisis action planning and response, communications, passenger and cargo movement, and personnel resource management.



Services provides meals for members of the U.S. Air National Guard, Air Force, Air Force Reserve, Army, Army Reserve and Navy Reserve supporting Innovative Readiness Training Appalachian Care 2019, Wise, Va.

110th Communications Flight (CF): The 110th CF provides information technology operations and support services including network defense, information assurance, knowledge operations management, classified/unclassified network management, radio support, telephony, and asset management services for more than 900 users.

The 110th Logistics Readiness Squadron (LRS): The 110th LRS provides logistic support to the Wing in acquiring and issuing equipment, refueling vehicles, conducting maintenance on vehicles, shipping and receiving supplies, managing agreements with outside agencies, and managing deployments. In 2020, the LRS was selected as the 2019 Non-Flying LRS of the Year by the National Guard Bureau, processing 344 members for mobilization, and purchasing \$1.5M worth of equipment, clothing, and COVID-19 supplies.

110th Civil Engineer Squadron (CES): The 110th CES maintains, repairs, and constructs facilities and infrastructure required to execute Air Force missions. The contingency planning, disaster response, and recovery skills provided by civil engineers that can quickly return the Wing to being fully mission-capable also extend to

helping community partners in the city, state, and nation when called upon. Globally, the 110th CES is actively engaged with the Michigan National Guard's State Partnership Program (SPP) with Latvia, providing support and cooperation for firefighting response, emergency management, and aircraft arresting systems while continuing to support military operations worldwide.



Service members from the 110th Security Forces Squadron, Battle Creek Air National Guard Base, conduct training exercises in an empty building provided by the Jackson County Sheriff department. The 110th Security Forces Squadron partnered with the Jackson Area Career Center to demonstrate building clearing tactics and "Shoot/No-Shoot" scenarios to the students enrolled in the Law Enforcement Program.

110th Security Forces Squadron (SFS): The 110th SFS provides force protection and base perimeter security for 347 acres of property, 38 buildings, 120 facilities totaling a replacement cost of \$220 million. The squadron protects all assigned resources and transient aircraft, and provides global deployers, as well as trained emergency responders when called upon.

The 110th Mission Support Group is also complimented by Environmental Management and Contracting teams. **The Environmental Management team** provides pollution prevention and environmental controls, as well as mitigation in accordance with military, local, state, federal agencies. **Our contracting experts** provide military contracting transactions for supplies, services, research, development of project plans through formal advertising/negotiation. They also evaluate contract pricing, ensure green procurement, and manage purchase programs.

110TH MEDICAL GROUP

The 110th Medical Group (MDG) provides highly skilled physicians, optometrists, dentists, nurses, and medical technicians whose mission is to improve the readiness, promote health, and enhance human performance and medical response when called upon for all local, state, and national domestic operations. The MDG is capable of providing backfill support to organizations, augmentation of medical support teams in theater, and stand-alone teams for primary care and logistical support. Capability also exists for specialized preventive and aerospace medicine teams to include public health, bioenvironmental engineering, and disease assessment, surveillance, and intervention. The 110th Medical Group has a track record of providing health care support during wartime contingency operations and humanitarian missions within the continental United States (CONUS) and outside the continental United States (OCONUS)

During the Coronavirus pandemic, the 110th Medical Group overcame a 10% medical readiness deficit due to COVID-19 and maintained above ANG medical readiness goals safely and efficiently.

In 2020, 36 medical professionals activated in support of state COVID-19 response efforts, contributing to the Michigan National Guard's task force that provided 204,647 COVID-19 tests amongst 85 correctional facilities, 293 long



term care facilities and other sites in all 83 of Michigan's counties. In addition, they conducted more than 100 N95 fit tests for COVID support personnel and administered more than 1200 doses of the COVID-19 vaccine to Michigan ANG members.

Future opportunities for the MDG include the Ultimate Caduceus exercise, which will involve collaboration with Battle Creek Veterans Administration hospital to test emergency response/mass casualty, patient assessment & triage, loading & unloading patients, and patient tracking procedures.

217TH AIR OPERATIONS GROUP

The 217th Air Operations Group has a rare organizational structure and mission to support U.S. Air Forces, Europe – Air Forces Africa. The 217th AOG has four squadrons and one flight that provides essential augmentation and expertise when called upon for the 603d Air Operations Group, based at Ramstein Air Base, Germany. This senior level, highly-skilled group provides planning, directives, and assessment of operational-level command and control for all air, space, and cyber power within U.S. European Command and U.S. Africa Command.

217th Air Intelligence Squadron (AIS): The 217th AIS provides trained intelligence personnel for integration into the Intelligence, Surveillance and Reconnaissance (ISR) division of an Air Operations Center. The 217th AIS conducts ISR operations to analyze adversary capabilities and shape targeting objectives to enable senior decision makers. The unit synchronizes national, theater-level, and tactical intelligence resources in support of Joint Force efforts. In 2020, Airmen from the 217th AIS actively supported ISR operations in numerous locations worldwide.

The squadron also operates one of a limited number of National Geospatial Intelligence Agency (NGA)-certified targeting centers in the Air National Guard.

217th Air Component Operations Squadron (ACOS): The 217th ACOS provides trained personnel for integration into a combatant commander's Air Component staff. Areas of expertise include Personnel, Intelligence, Operations, Logistics, Planning, Communications, Infrastructure and Programming. The squadron creates and executes theater security cooperation plans to shape U.S. Air Force engagement with countries in the European and African theaters. The 217th ACOS is also capable of disaster response planning for domestic operations such as the Coronavirus pandemic response. Airmen from the unit have also augmented the Air National Guard Readiness Center Crisis Action Team to respond to national emergencies such as hurricanes, wildfires, floods and civil unrest.

217th Combat Operations Squadron (COS): The 217th COS provides supplemental forces that create operational guidance (directive), plans, and tactical oversight of military

action between strategic level intention and mission accomplishment. Directly supporting the Joint Forces Air Component Commander and the Area Air Defense Commander, the 217th COS integrates space, cyber, missile, and air assets across all military departments for offensive and defensive posturing, and humanitarian relief which includes direct support to other component commanders. Over the past 11 years, the 217th COS has provided more than 53,000 days of support to active duty components (~145 years), including three Numbered Air Forces, six Major Commands (MAJCOMS) and 17 major exercises supported annually.



217th Air Communications Squadron (ACOMS): The 217th ACOMS provides Air Operations Center (AOC) communications capabilities including, voice, data,

radio and video communications between 217 AOG and USAFE-AFAFRICA units. The squadron provides trained personnel for the 603d ACOMS located at Ramstein Air Base, Germany for multi-theater operations and exercises. Additionally, the 217th ACOMS provides knowledge management and communication support to other DoD, Joint partners & allies, federal, state, and local agencies for command and control of exercises, natural disasters, and other events. The 217th ACOMS is an enabler of Joint All Domain Command and Control (JADC2) and Advanced Battle Management Systems (ABMS) technology integration for the 217th AOG.

215th Air Component Operations Flight (ACOF): As Battle Creek ANGB's newest mission, the 215th ACOF was established Dec. 1, 2020 and provides support to the 15th Air Force Joint Task Force Headquarters, located at Shaw Air Force Base, South Carolina. Airmen from the 215th ACOF are responsible for rapidly-deployable command and control, intelligence, planning, and logistics support to the functional directorates and joint operations center and are capable of providing additional support to Department of Defense, Joint partners & allies, federal, state, and local agencies for command and control of exercises, natural disasters, and other events. The 215th ACOF and its aligned partner, the 15th Air Force, are part of the Dynamic Force Employment (DFE) in support of the Emergency Response Force (ERF) and maintains a posture to deploy on a 96-hour timeline.



Northern Strike 20; 217th Air Operations Group enabled the first reserve component integration of an Army Battlefield Coordination Detachment (BCD)

Part 2: Serving Community, State And Nation

Cutting edge technology, robust infrastructure, high-demand skillsets and innovation

MQ-9 “REAPER”

The 110th Operations Group flies the MQ-9 “Reaper” remotely piloted aircraft (RPA) in support of overseas contingency operations 24/7, 365 days a year. We initially stood up this capability in February of 2017 and have been flying one continuous combat line since then, non-stop. Additionally, we have the capability to surge to a second combat line when called upon. Like any other Guard mission, this is accomplished through the combined efforts of full time staff and our part-time, traditional guard members.

The MQ-9 Reaper is an armed, multi-mission, medium-altitude, long-endurance, remotely piloted aircraft that is employed primarily against dynamic execution targets and secondarily as an intelligence collection asset. Given its ability to stay airborne for significant periods of time, wide-range sensors, robust communications suite, and precision weapons, it provides a unique capability to perform strike, coordination, and reconnaissance against high-value, fleeting, and time-sensitive targets.

MQ-9 Reapers can also perform the following missions and tasks: intelligence, surveillance, reconnaissance (ISR),

close air support, combat search and rescue, precision strike, convoy/raid overwatch, target development, and others.

The MQ-9 baseline system carries the Multi-Spectral Targeting System (MTS-B), which has a robust suite of visual sensors for targeting. In addition to other strike and targeting capabilities, the MQ-9 can also employ four laser-guided, air-to-ground missile (AGM)-114 “Hellfire” missiles, which provide highly accurate, low-collateral damage, anti-armor and anti-personnel engagement capabilities.

In its secondary role as an ISR asset, the MQ-9 is part of a system that supports strike aircraft and ground commanders by acquiring and tracking dynamic targets or other useful intelligence. It is also capable of supporting a wide range of operations such as coastal and border surveillance, weapons tracking, embargo enforcement, humanitarian/disaster assistance, support of peacekeeping and counter-narcotic operations. Utilizing satellite communication links, the MQ-9 can acquire and pass real-time imagery data to ground users around the clock, and beyond-line-of-sight (BLOS).



The remotely piloted aircraft can be disassembled and loaded into a single container for deployment worldwide. The entire system can be transported in the C-130 Hercules, or a larger aircraft. The MQ-9 aircraft can operate from standard U.S. airfields.

The MQ-9 is controlled using a concept known as remote split operations, which employs a launch-and-recovery ground control station for take-off and landing operations at the forward operating location, while the crew, based at the 110th Wing or similar facilities in the continental United States, executes command and control of the remainder of the mission via beyond-line-of-sight links. Remote split operations result in a smaller number of personnel deployed to a forward location, fortification of aircrew safety, consolidation of control in one location, and simplified logistical processes.

CYBER

The 272d Cyber Operations Squadron (COS) has grown rapidly since its initial standup in January of 2018. Since its very early days, the squadron has been heavily involved with cybersecurity in the State of Michigan, defending the nation during federal mobilizations, and assisting our partner nations in the Baltic region to help defend themselves from Russian aggression in the cyber-domain.

The 272d COS is closely linked with the Michigan Department of Technology Management and Budget (DTMB) to provide expertise in the field of cybersecurity to aid in bolstering the defensive posture of state networks. Unit representatives regularly participate in the Michigan

cyber-partners meetings which include DTMB, the Michigan State Police (MSP), the and the Department of Homeland Security Cybersecurity and Infrastructure Security Agency (DHS CISA) among other entities across the state with the aim of addressing current cyber-threats and defensive measures that can be taken to improve mutual security postures.

The 272d COS has also been called upon to assist the Secretary of State Bureau of Elections (SOS BOE) with identifying potential vulnerabilities in systems and processes used, as well as supporting multiple training sessions for election officials across the state.



JOINT ALL-DOMAIN COMMAND AND CONTROL (JADC2)

Joint all-domain command and control (JADC2) is the core enabling capability for a Joint Force Commander to connect all forces in all domains together as an organic whole to accomplish critical objectives. Simply put, JADC2 enables the U.S. Military to fuse together different platforms and technologies that may operate in each of the five primary “domains” of warfare; air, land, maritime, space, and cyberspace to pursue U.S. military objectives. As the pace of technological change accelerates throughout the world, the advantages the American military has historically enjoyed have eroded. Today, military planners must account for adversary capabilities in Space and Cyberspace that weren’t available or possible even a few short years ago. Recent events such as the COVID-19 pandemic highlight the importance of being able to rapidly inform public opinion. Commanders must be able to receive an accurate picture of the battlefield as well as have confidence their decisions and commands are securely transmitted and received. These emerging requirements require the U.S. military to make significant investments in new technologies and processes to keep pace with the rapid changes that are occurring.

The 110th Wing is also a key player with the National All-Domain Warfighting Center (NADWC) in Northern Michigan. The National All Domain Warfighting Center (NADWC) encompasses the collection of Michigan’s unique environment and premier Air and Army training venues (including nearly 148,000 acres of ground maneuver area and the largest overland military airspace complex east of the Mississippi River) and provides the operational and developmental framework required to fully integrate joint all domain training. Personnel from the 110th Wing participate annually in Joint exercises such as Northern Strike, which provide a venue to integrate and train with the Michigan Army Guard as well as sister services, interagency organizations, and multinational partners.



Over the course of several months we partnered with leaders in the education system and other related fields to focus on the problems of developing future cybersecurity leaders within the State, improving the K-12 curriculum to include cybersecurity, and to raise the cyber-defense posture of our public schools. In addition to traditional partnerships with DTMB, we have also leveraged the Innovative Readiness Training (IRT) program at the federal level to allow the MING to provide a value added service to the State of Michigan by bringing to bear a larger portion of our members without the need to use any State Active Duty funds. This program requires our members to receive training to meet federal requirements at a lower cost than would normally be incurred. In our first attempt at using this program, we partnered with DTMB to lead selection of, and coordination with, the Michigan Department of Transportation (MDOT) to identify systems in need of a cybersecurity assessment. Upon receiving approval from the Secretary of Defense under the IRT program, we assessed Michigan’s Advanced Traffic Management System (ATMS) on behalf of MDOT and identified multiple vulnerabilities, improved security of the system, provided excellent training value, and helped secure Michigan’s roadways for 9.8 million residents.

Beyond providing support to the State of Michigan, the 272d COS supports one of two concurrent six-month federal mobilizations in partnership with eleven other COSs across the country. In 2018, the squadron provided support to the North American Aerospace Defense (NORAD) and U.S. Northern Command (USNORTHCOM). During this time, the unit secured the classified networks of both NORAD and USNORTHCOM, safeguarding multiple mission systems used by the command on a daily basis to defend Department of Defense networks. Additionally, the squadron sent several members forward to remote regions of Alaska to provide security assessments and defense of our long-range radar sites in that area.

In addition to State and Federal support, the 272d COS has cooperated with Latvia and the U.S. European Command (USEUCOM) through the State Partnership Program (SPP) to help deter and defend against Russian aggression in the region. This linkage is facilitated through multiple exercises and conferences throughout the year. In 2019, the Michigan Army and Air National Guard had the opportunity to participate in U.S. Army Europe’s (USAREUR) Saber Guardian exercise. This exercise was focused on the Balkans and allowed us to facilitate a live cyber-threat emulation portion of the exercise which was the first time this had ever occurred in this particular exercise.

The 110th Wing is currently postured to be at the forefront of JADC2 development and implementation through each of our primary missions sets;

- 1. MQ-9 Operations: Intelligence collection via remotely piloted aircraft are critical to the ability of commanders to accurately target and track enemy movements.**
- 2. Defensive Cyber Operations: Defense of computer networks is critical to protect our resources and ensure the integrity of our data.**
- 3. Command & Control: The core of what JADC2 intends to do, plan, execute, and assess missions in an all-domain environment.**

Multicomponent Joint Terminal Attack Controllers (JTAC’s) Joint Fires Observers (JFOs), and Tactical Air Control Party (TACP) members conduct training at Camp Grayling, part of the National All-Domain Warfighting Center in Northern Michigan during Northern Strike 20, July 23, 2020. Northern Strike is designed to challenge the training audience with multiple forms of convergence that advance interoperability across multicomponent, multinational, and interagency partners.

Michigan Air Guardsman's experience at USAFE-AFRICA defined by opportunity, innovation

When U.S. Air Force Tech. Sgt. Aaron Solis enlisted in the Michigan Air National Guard's 110th Wing nearly 16 years ago, he never thought he'd be where he is today, serving at the 603d Air Operations Center (AOC), Ramstein Air Base, Germany.

The 603d AOC provides planning and directing initiatives, and assesses operational level command and control of integrated air, space, and cyber power in support of two combatant commands: U.S. European Command (USEUCOM) and U.S. Africa Command (USAFRICOM). The facility has been Solis' workplace for the past six months.

"I joined the 110th WG at Battle Creek Air National Guard Base, Michigan in 2005, mostly as a way to pay for college," Solis said. "I started as an A-10 Thunderbolt II weapons maintainer, but when the A-10s were reassigned to another base in 2009, I had to find something else."

Pushing through moments of doubt, Solis seized the opportunity to become an Intelligence Imagery Analyst with the 217th Air Operations Group, a component of the 110th Wing also based at Battle Creek with a rare mission to provide reserve-component augmentation for the 603d AOC.

"I found a career I liked," said Solis. "I love what I do – and I'm good at it."

Over the past five years, Solis' high-demand skillset has taken him around the world. A six-month deployment to Qatar in 2017 was followed in 2018 with work in Germany and in Latvia. He has also served stints at Department of Defense facilities in Alabama, Virginia, and Florida.



U.S. Air Force Tech. Sgt. Aaron Solis, an Intelligence Imagery Analyst with the 217th Air Operations Group, 110th Wing, Michigan Air National Guard, stands in front of the NATO Allied Air Command Headquarters, Ramstein Air Base, Germany, Feb. 11, 2021. Solis has been augmenting the 603d Air Operations Group at Ramstein AB for the past six months, including work on the European Partnership Integration Enterprise (EPIE), which melds capabilities of intelligence professionals from NATO partner countries under one roof.

With deep reservoirs of experience like his, Solis points out that Air National Guard members can provide mission-critical continuity, stability, and backfill when called upon to augment their active duty counterparts – especially in dynamic, high-pressure environments like the 603d AOC. The Michigan Air National Guard presently has about a dozen members activated at Ramstein Air Base.

"Since 2018, I have been coming out [to Ramstein AB] to support the 603d AOC about once a year, never for less than three months at a time," Solis says. "I have been able to lend insight to long-running issues, providing instant expertise and leadership without the long spin-up that comes with an inbound active duty Airman. I am also able to keep up to date on the current processes here and then provide training to the drill status members back in Michigan."

As the COVID-19 pandemic continues to impact normal workflow process and manning procedures, Solis says these last few months have presented new challenges that make that continuity even more important.



217th Air Operations Group, Air Operations Center, 110th Wing, Battle Creek Air National Guard Base

"It's been a rough year for everyone, but I've been happy to be here during this time," Solis said. "I've had to step in several times with the experience of a non-commissioned officer when the team needed me; overall, I have been extremely impressed with the way everyone here has accomplished the mission even with an ever-increasing workload and fluctuating [COVID-19 risk-mitigation] protocols on and off-base."

Despite the challenges presented by COVID-19, Solis says he has found new gratification this year in his work with the European Partnership Integration Enterprise (EPIE). EPIE collaboratively paves the way in coalition intelligence surveillance and reconnaissance, melding the capabilities of intelligence professionals from multiple NATO ally countries under one roof.

Solis participated in the first EPIE field deployment in Latvia in 2018, led by the Michigan Air National Guard, which has had a flourishing link with Latvia under the National Guard Bureau's State Partnership Program since 1993. His recent work has involved the refinement of processes and workflow between EPIE, NATO Allied Air Command, and the 603d AOC.

"Building those relationships to recognize and leverage our NATO partners' experience and talent is the most rewarding part of the job," said Solis. "Those partnerships are the way forward."

He has also been involved with Intelligence, Surveillance and Reconnaissance Dynamic Execution (IDEX), an intuitive web-based application built to enable both strategic-level thinkers and tactical-level warfighters to task, monitor, and re-task active and future intelligence, surveillance and reconnaissance (ISR) missions.

"IDEX is considered an innovative program," Solis said. "It's changing the way ISR tasking is done."

While IDEX was developed for use in the U.S. Central Command area of operations, Solis has been working to adapt it for USEUCOM and USAFRICOM requirements, and to help make it usable for all combatant commands.

With the advantages of experience, continuity, and long-term relationships, Air National Guard members like Solis continue to be recognized for their innovative contributions to Department of the Air Force initiatives, as evidenced by the christening of the Kelly Johnson Joint All-Domain Innovation Center at Selfridge Air National Guard Base, Michigan in September 2020. The center is a venue for service members and industry partners to solve problems, apply technology solutions, and solve crucial needs.

More than a decade after his unexpected career field change, Solis now sees opportunities to literally shape the future with his own innovative solutions each time he puts on the uniform.

"I am happy to learn and grow in my career, and of course, have opportunities to travel the world," Solis said. "I have made a lot of lasting friendships and I am thankful to have had an opportunity to support the teams I've been a part of – the journey has been worth it."

AGILE COMBAT SUPPORT

Agile Combat Support capabilities are defined by the Air Force as the ability to create, protect, and sustain air and space forces across the full range of military operations. It is the foundational and crosscutting U.S. Air Force system of support that enables Air Force operational concepts and the capabilities that distinguish air and space power (speed, flexibility, and global perspective) to succeed. Battle Creek Air National Guard Base is home to robust, in-demand Agile Combat Support capabilities that frequently serve active duty, joint, and partner organizations in deployed environments. Agile Combat Support is provided by people and organizations responsible for planning, programming, and sustaining the forces; determining who and what are deployed; as well as how they arrive and return home safely. The dedicated support of our people makes agile combat support a reality. The 110th Mission Support Group is dedicated to providing the most capable and ready Airmen, providing the foundation for executing the Wing's missions and taking care of the 110th Wing family. The members of the 110th Mission Support group provide vital coordinated support through the 110th Security Forces Squadron, 110th Force Support Squadron (including Services Sustainment & Airman/Family Programs), the 110th Communications Flight, 110th Civil Engineer



Senior Airman David Parks, 110th Force Support Squadron services personnel, uses standardized hand-and-arm signals to guide his counterpart, Tech Sgt. Trent Wollberg in lifting, moving, and placing a palletized load during training.

Squadron, the 110th Logistics Readiness Squadron, and the contracting and environmental programs. These functions provide the connective tissue required to support the Wing's operational missions and combat capability, from home station to deployed operations abroad.



110th Mission Support Group conducts HAZMAT Operations training for five North Atlantic Treaty Organization (NATO) partner nations.



(Above) Service members from the 110th Wing help package food at the South Michigan Food Bank. (Below) Tech. Sgt. Les Petitpren, 110th Medical Group, Battle Creek Air National Guard Base, conducts COVID-19 testing of employees at West Woods of Bridgeman Nursing and Rehabilitation Center. As of May 2020, more than 1000 Michigan Guard Airmen and Soldiers are actively supporting the state's COVID-19 response at the request of state and local agencies. Response missions include food distribution, screening operations, supply and logistics management, and alternate care facility support.

DOMESTIC OPERATIONS

As part of the National Guard, the 110th Wing has a unique dual mission, serving federal and state authorities when called upon. The federal mission is to maintain properly trained and equipped units available for prompt mobilization for war, national emergency or as otherwise needed. The state mission requires provision of trained and disciplined forces for domestic emergencies or need. The National Guard is the primary military responder in all civil support operations, often known as Defense Support of Civil Authorities (DSCA) or Domestic Operations (DOMOPS).

The 110th Wing has routinely stepped up as "Michiganders helping Michiganders" to support the residents of our state and nation during these types of emergency response missions, especially since the Homeland Security Act of 2002 and Homeland Security Policy Directive 5 (HSPD-5), "Management of Domestic



Incidents” were enacted. Dating back to 2005, the 110th Wing received, welcomed, and cared for Hurricane Katrina survivors as they were evacuated from New Orleans. In 2015, the 110th Wing fire department responded to a 193-vehicle pileup and explosion on I-94 cause by whiteout weather conditions. Since March of 2020, men and women of the 110th Wing have been on the front lines of the COVID-19 pandemic, responding to numerous requests for assistance from local agencies such as food distribution, COVID-19 testing, and COVID-19 vaccine distribution efforts in multiple communities across the state. In August, members of the 110th Operations Group deployed to assist firefighters battling the California wildfires using the MQ-9 “Reaper,” providing fire teams with aerial footage. In January of 2021, Wing members traveled to Washington, D.C. to support federal and district authorities for the 59th Presidential Inauguration.



Senior Airman Teign Betts and Senior Airmen Steven McCarty, 110th Wing mission intelligence coordinators, support the California wildfires analyzing footage from the MQ-9 Reaper to relay important information to firefighters battling wildfires on ground.

The unique capabilities of the 110th Wing, including command and control, cyber defense, aerial footage, medical experts, and agile combat support are a force multiplier for both the federal and state missions. The men and women of the 110th Wing stand ready to support our communities, state, and nation when called upon for both DSCA and DOMOPS requirements.

DEPLOYMENTS

With the unique circumstances of Calendar Year (CY) 2020 we continued deployment operations, started preparing for our large cycle of deployments in CY21, and supported domestic operations. In CY20, the 110th Wing mobilized 389 members to support a variety of missions across the globe.

Significant deployments included:

- 88 members deployed with 110th Operations Group at home station conducting MQ-9 Operations abroad
- 23 members deployed in support of Air Expeditionary Force deployments (AEF) worldwide
- Over 100 members supported COVID-19 missions in the state of Michigan



The 217th Air Operations Group provided over 12,000 days of Operational Support to United States Air Force in Europe – Air Forces Africa (USAFE-AFRICA)

In addition, individual members served in a variety of duty locations, including:

Countries:

Germany	Jordan	Kuwait	Latvia	Qatar
United Kingdom				

States:

Alaska	California	Florida	Maryland	Michigan
New Mexico	Pennsylvania	South Carolina	Virginia	Wisconsin
Washington D.C.				

RPA missions have supported 5 different regions, 7 different Areas of Responsibility (AORs) in support of 6 exercises

PARTNERSHIPS

State Partnership Program (SPP): The National Guard State Partnership Program (SPP) is designed to establish long term relationships in which U.S. states and their partnered nations share best practices and expert knowledge in a range of areas. The SPP is a Department of Defense joint security cooperation program administered by the National Guard Bureau that links a state’s National Guard with the armed forces of a partner country in order to build long-lasting, mutually beneficial relationships with U.S. allies around the world. The State of Michigan was one of three charter states to join the program when it was partnered with Latvia in 1993. This partnership has helped develop & establish a stronger Latvian military presence leading them to become members of NATO. In addition, Michigan has since been partnered with Liberia in 2010. Both partnerships provide 110th Wing members with valuable experience operating under different theaters of operation (U.S. European Command and U.S. Africa Command) and allow for the development of long-term relationships between functional counterparts. Current areas of cooperation for 110th Wing members under the Latvia partnership include airbase operations, cyber, fire protection, security forces, public affairs, medical and intelligence, reconnaissance, and surveillance capabilities, among other lines of effort.

Community Organizations: The 110th Wing partners with local committees within the Battle Creek community to include the Battle Creek Military Affairs committee, Joint Base Partnership Council, and the Battle Creek Chamber of Commerce. These committees meet with representatives



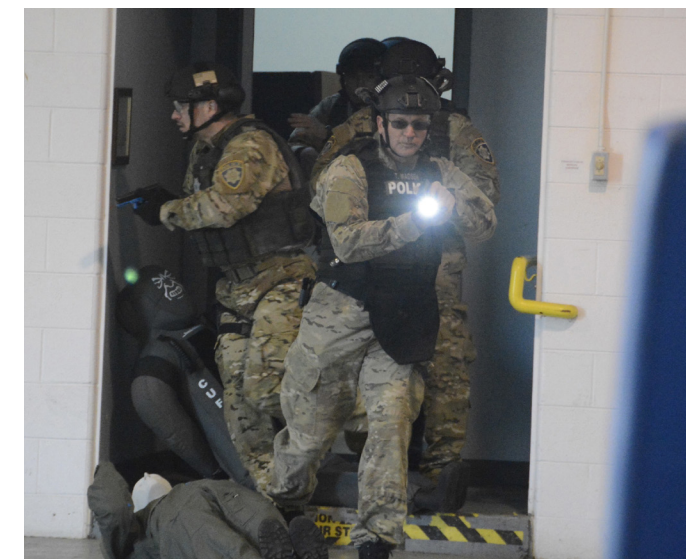
Members of the Michigan Air National Guard and the Latvian Air Force after a planning meeting at Lielvārde Air Base, Latvia, to chart cooperation under the National Guard Bureau’s State Partnership Program over the coming year



Soldiers and airmen from the Michigan National Guard participate in a volunteer work project at the National Social Care Center, Riga affiliate, as part of Latvia’s “National Clean-up Day,” along with four soldiers from the 407th Civil Affairs Team stationed at Lielvārde Air Base, two personnel from the U.S. Embassy Office of Defense Cooperation, and members of Latvia’s National Guard (Zemessardze)

from local bases, local organizations, and city entities such as police departments and governments to help educate and advise the direction of DoD interest within the local community.

STARBASE: STARBASE is a DoD community outreach program for fifth and sixth-grade students and a proven leader in introducing science, technology, engineering, and mathematics (STEM) concepts for over 20 years. STARBASE looks to add value to America through a youth program that raises the interest and improves the knowledge and skills of at-risk youth in



Active shooter tactics familiarization event between the Michigan Air National Guard, military personnel from the Republic of Latvia, and local Michigan police.

science, technology, engineering, and math by exposing them to the technological environment and the positive role models found on military installations. Battle Creek ANGB is home to a STARBASE program that allows students experience STEM concepts and witness opportunities for service in their local community.



Michigan Air National Guard firefighters from the 110th Wing, respond to a multi-vehicle crash on the I-94 expressway near the base. The Air National Guard is “Always on Mission” and Michigan Airmen and equipment demonstrated this capability by assisting civil authorities to protect life and property damage.

Civil Air Patrol: The Civil Air Patrol (CAP) is a congressionally chartered, federally supported non-profit corporation that serves as the official civilian auxiliary of the United States Air Force. CAP is a volunteer organization with an aviation-minded membership that includes people from all backgrounds, lifestyles, and occupations. It performs three congressionally assigned key missions: emergency services, which includes search and rescue (by air and ground) and disaster relief operations; aerospace education for youth and the general public; and cadet programs for teenage youth. In addition, CAP has recently been tasked with homeland security and courier service missions. CAP also performs non-auxiliary missions for various governmental and private agencies, such as local law enforcement and the American Red Cross. In Michigan, CAP has recently been instrumental in delivering COVID-19 test kits and vaccinations around the state and they provided critical reconnaissance for relief efforts after massive flooding effected the city of Midland and surrounding areas. The 110th Wing has worked with the local CAP Chapter for approximately three decades, allowing them to utilize the base’s facilities for training and classroom space.

Michigan State Police: The Michigan State Police (MSP) and the 110th Wing have had a strong mutual partnership for several years. MSP utilizes BCANGB facilities to conduct drivers’ training and dog handling training. In 2020, MSP Cyber Division entered into agreement with the 110th

Wing to become a tenant at BCANGB. The sections of the Michigan Cyber Command Center (MC3), Computer Crimes Unit (CCU), and the Internet Crimes Against Children (ICAC) Task Force are highly specialized law enforcement personnel in the discipline of high-tech crime investigations. They will conduct investigations, provide forensic data recovery services, promote public awareness of cyber security issues, and provide law enforcement education opportunities.

Defense Logistics Administration (DLA): Defense Logistics Agency is a worldwide organization whose mission is to deliver superior support that includes force readiness, force protection, occupational health, safety, environmental sustainability services, facilities and equipment life cycle management, administrative, and morale, welfare, and recreation services to DLA and the warfighter. The 110th Wing has hosted DLA services for 10 years providing over 35 classes a year, training on all aspects of support to military members and DoD members worldwide.

Veterans Health Administration: Over the past two years, the 110th Wing has been working with the Veterans Health Administration and the National Disaster Medical System to conduct annual exercise training events (Northern Caduceus & Ultimate Caduceus). These exercises focus on training VA members and 110th Medical Group members on mass casualty scenarios, covering full scale patient movement and patient reception offload from large aircraft, including the C-130 and C-17. This joint exercise allows proper emergency preparedness for response to natural disasters and possible military contingency events as well as the sharing of best practices for aeromedical patient evacuation scenarios.



In participation with Talons Out Honor Flight, the 110th Wing Honor Guard participate in a tribute to the nation’s oldest living veteran at Oakland International Airport, Waterford, Mich. Emma Didlake, a veteran of the Women’s Army Auxiliary Corps who served in World War II, met President Obama and visited multiple memorials.

MEMBERSHIP INCENTIVES

State Tuition Assistance Program (STAP): All members of the Michigan National Guard can access the State Tuition Assistance Program (STAP):

Tuition assistance of up to \$14,400 per academic year for:

- Associate Degree
- Bachelor’s Degree

Tuition assistance of up to \$6,000 per academic year for:

- Master’s Degree
- Certificate Programs
- Training Programs

Professional Military Education: Helping develop Airman into stronger leaders, professional military education is available for all Air Force members at different levels. As Airmen progress through the ranks, they will attend different levels of formal military education focusing on building the enlisted and officer core with problem solving, leadership, and management skills.

Enlisted

- Airman Leadership School (ALS)
- Non-Commissioned Officer Academy (NCOA)
- Senior Non-Commissioned Officer Academy (SNCOA)

Officer

- Squadron Officer School (SOS)
- Air Command and Staff College (ACSC)
- Air War College (AWC)

Education Benefits: Michigan Air National Guard members have access to many education benefits, including the GI Bill:

- Montgomery GI Bill – Full time students given money for expenses each month
- Montgomery GI Bill Kicker – Full time students earn additional money with critical skill job
- Post 9/11 GI Bill – Rewards members on Active Duty and Reserve Title 10 and Title 32 time (90 aggregate days minimum), Benefits can transfer to spouse or children
- College Tuition Grants – 22 schools participate offering members reduced rates, Guard members must be a Michigan resident. www.michguard.com/education
- NGAM Tuition Grants – Scholarships awarded twice yearly, amounts vary depending on number of applicants
- DANTES/CLEP Testing – Free college equivalency testing for members

Community College of the Air Force (CCAF): The Community College of the Air Force program provides airman with knowledge, skills and theoretical background for enhanced performance as technicians and noncommissioned officers.

- Only college system solely for enlisted members
- Awarded Associate in Applied Science for successful completion of a degree



Scan to go to the 110th Wing website for more information



ECONOMIC IMPACT

Through efficient use of federal resources allocated annually to train Airmen and execute our federal missions, the 110th Wing has a significant impact on the economy and labor force of Southwest Michigan.

EMPLOYMENT

MILITARY	AUTHORIZED	
• Active Guard & Reserve (AGR)	188	
• Title 32 Technician (Dual Status)	72	
• Drill Status Personnel	689	
TOTAL	949	
CIVILIAN	AUTHORIZED	
• Title 5 Federal Civilian	18	
• State Employees	19	
• Contract Employees	42	
TOTAL	79	
ASSETS		
• Leased Land (347 acres)	\$ N/A	
• Airfield Pavements (28 acres)	\$ 20,600,000	
• Roads & Parking (175,000 sq. feet)	\$ 9,589,298	
• Utility Infrastructure	\$ 2,840,996	
• Buildings	\$ 187,838,538	
• TOTAL FACILITIES & INFRASTRUCTURE	\$ 220,868,832	
• EQUIPMENT	\$ 23,631,000	
TOTAL VALUE OF ASSETS	\$ 244,499,832	

ECONOMIC IMPACT (FISCAL YEAR 2020)

• Full-time Payrolls	\$ 35,708,923
• Drill Status Guardsmen Payrolls	\$ 25,686,531
• Operations & Maintenance (O&M)	\$ 9,593,880
• Annual Appropriated Expenditures	\$ 3,029,505
TOTAL DIRECT ECONOMIC IMPACT	\$74 MILLION



Lt. Col. Kurt Taylor, 110th Wing Staff Chaplain, provides an outdoor service to members of the 110th Wing.



Master Sgt. Quentin Greiner adjusts the Alaskan Shelter tent to ensure proper assembly at Sparrow Hospital.



Tech. Sgt. Joni Jackson, a finance specialist assigned to the 110th Comptroller Flight



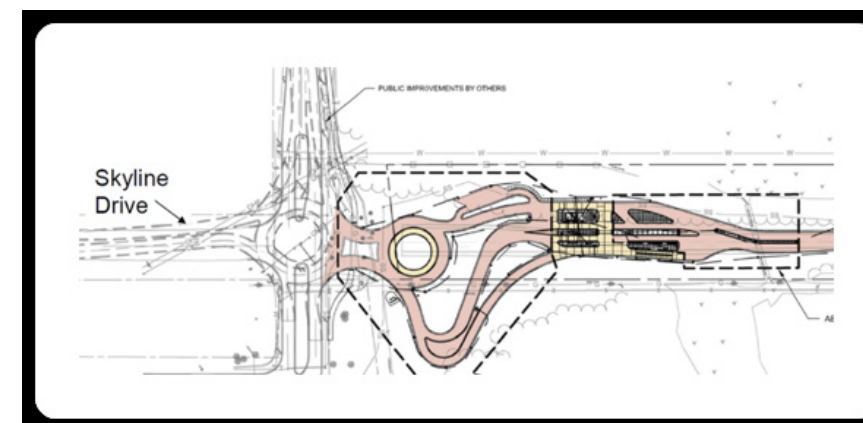
Base Honor Guard team members perform military funeral honors for retired guardsman at Memorial Park Cemetery, Battle Creek, Mich.

110TH WING MILCON PRIORITIES

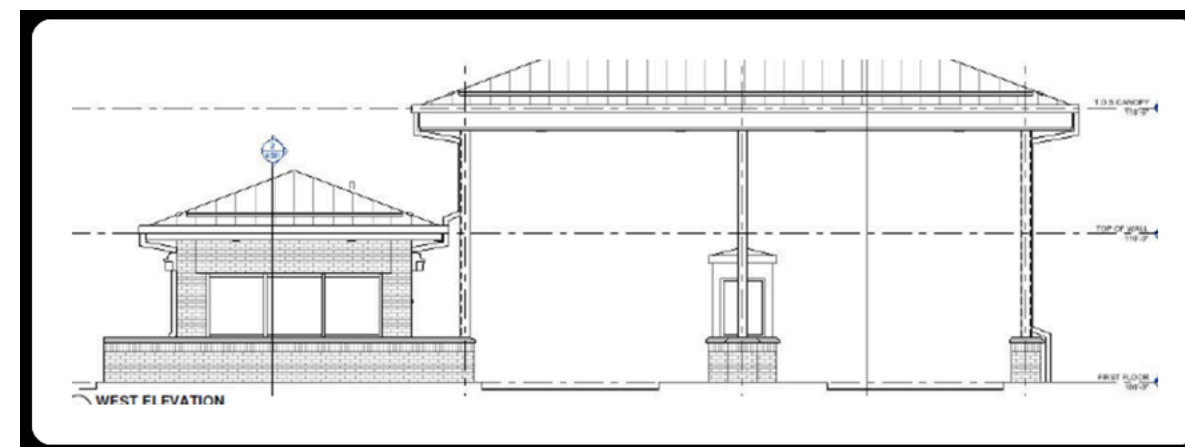
The Military Construction (MILCON) program at Battle Creek consist of 5 projects totaling \$47 million. The top two priority projects correct deficiencies and allow for future mission growth:

#1 MILCON PRIORITY – CONSTRUCT MAIN GATE ENTRANCE

- \$10 Million programmed amount
- Project Status: 100% designed & ready to execute. Project is in Future Years Defense Plan (FYDP)
- Fiscal Year (FY) 2023 is current programmed year – Candidate to be brought forward to FY 2022
- Director ANG's #7 MILCON priority (out of 103)
- MI-TAG's #2 MILCON Priority



Site plan for the new main gate located at the intersection of Hill-Brady Rd and Skyline Drive



Elevation drawing of the new main gate guard house and covered vehicle inspection lanes

#2 MILCON PRIORITY – CONSTRUCT COMMUNICATIONS SERVER BUILDING

- Estimated cost: \$5 million
- Project status: Programming
- Existing building has reached max capacity. A larger facility will accommodate mission growth.
- Supports remote flying, command & Control, and Cyber Defense missions.

Part 3: Future Value Available Today

Leveraging our unique opportunities to shape the future

SPACE OPPORTUNITIES

The U.S. Space Force (USSF) is the newest branch of the Armed Forces, established December 20, 2019 with enactment of the Fiscal Year 2020 National Defense Authorization Act (NDAA). The USSF was established within the Department of the Air Force, meaning the Secretary of the Air Force has overall responsibility for the USSF, under the guidance and direction of the Secretary of Defense. Additionally, a four-star general known as the Chief of Space Operations (CSO) serves as the senior military member of the USSF and is a member of the Joint Chiefs of Staff. As of now, a Space National Guard has yet to be created/authorized via the NDAA. The USSF is a military service that organizes, trains, and equips space forces in order to protect U.S. and allied interests in space and to provide space capabilities to the joint force. USSF responsibilities include developing Guardians, acquiring military space systems, maturing the military doctrine for space power, and organizing space forces to present to our Combatant Commands.

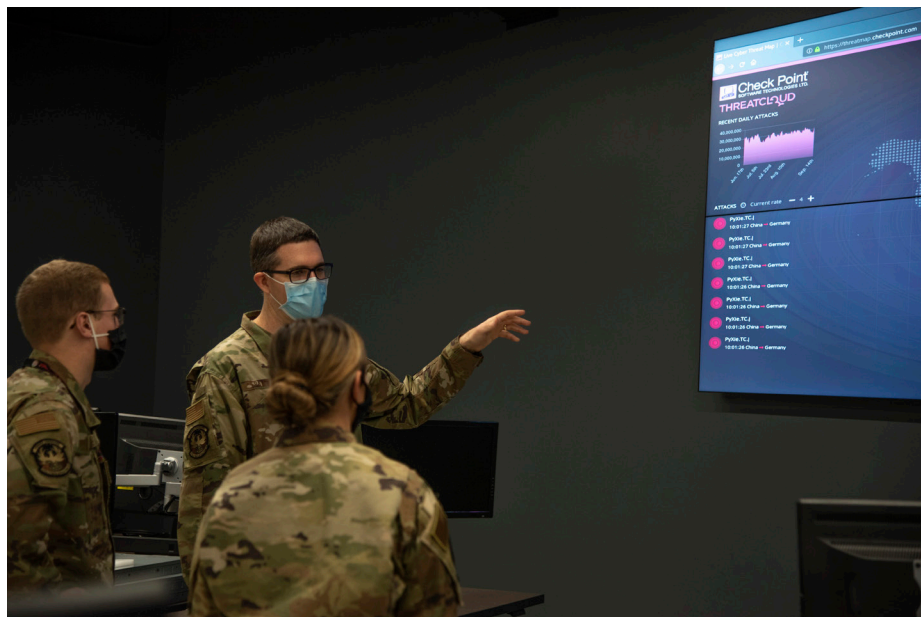
As the 110th Wing looks to its future, comparing our current mission sets, strengths, and location, we believe would be well positioned to support a space mission. The 110th Wing already has a significant number of space and space-related specialties, including intelligence, network and satellite communications, cyber, information operations to name a few. Additionally, our accredited secure facilities and robust communications architecture are second to none. In the

2020 Space Air Reserve Component (ARC) Priorities several potential mission sets are mentioned as outlined below:

- **Combat Training Squadron to support Space Electronic Warfare (SEW)**
- **Space Situational Awareness**
- **Space Intel & Threat Analysis**
- **Cyber Intelligence Surveillance and Reconnaissance**
- **Electronic Warfare analysis**
- **Space Targeting and Space exploitation**
- **Acquisition Intelligence**
- **Cyber Mission Defense Team for all National Guard Space Squadrons**
- **Offensive SEW and Defensive SEW**

A small cross functional team composed of space, cyber/communications, operations, and intelligence personnel from the 110th Wing has been formed with the goal of analyzing the 110th Wing's capabilities providing recommendations on future courses of action that will best prepare the 110th Wing for a future space opportunity that will ensure the long-term viability of the Wing and position Battle Creek ANGB for relevance well into the next century.

Maj. Richard Frantz, 272nd Cyber Operations chief of training, explains the Threat Cloud program to Senior Airman Kelsie Hubbard, and Senior Airman Micah Sage, cyber operators on the operations floor at Battle Creek Air National Guard Base. Threat Cloud was recently used in a joint mission to improve traffic conditions for the state of Michigan during Operation Resilience, Innovative Readiness Training.



MQ-9 LAUNCH AND RECOVERY ELEMENT (LRE)

The 110th Operations Group is researching the possibility of supporting an MQ-9 Launch and Recovery Element (LRE); or gaining the capability through partnerships to launch and recover MQ-9 aircraft from inside Michigan to be able to capitalize on what Michigan has to offer. Specifically, Michigan hosts large amount of airspace, has the restricted training areas and ranges to allow employment of live munitions from the MQ-9 (including Hellfire missiles), coastal and woodland geographical features, and a cooler climate which better matches that of our likely Near Peer adversaries. Having a resident LRE capability would significantly enhance training capabilities the National All Domain Warfare Center (NADWC) brings to the DoD.



An MQ-9 Reaper assigned to the 214th Attack Group, prepares for flight at Alpena Combat Readiness Training Center, Mich. The MQ-9's historic first launch into Michigan's national airspace comes just ahead of its participation in exercise Northern Strike 19, the DoD's largest annual joint, reserve component readiness event.

Currently, partnerships with other MQ-9 units are required for them to either deploy their LRE to Michigan, or to fly their MQ-9 from home station to Michigan and then back to home station after flying over the NADWC. Leveraging other units to deploy their LRE increase those units OPSTEMPO, has significant deployment costs, is highly weather dependent, and is only able to support NADWC for a short deployed time period.

We also envision other possible customers for a Michigan-based LRE capability. These include other Air National Guard units for training and exercise support, Active Duty Air Force for training, Department of Homeland Security (DHS), Customs and Border Patrol (CBP) and various government and civilian research, test, and development opportunities.

FLYING OPERATIONS FACILITIES AND INFRASTRUCTURE

Battle Creek ANGB is a former fighter base that operated A-10 Thunderbolt aircraft until 2009 and C-21 Learjets until 2013. The majority of facilities and infrastructure required to support a flying operation remain in place in Battle Creek, including airfield pavements, aircraft hangars, and other support facilities. These facilities are sufficient to support a variety of flying operations including an MQ-9 Launch and Recovery Element (LRE), a Michigan Army National Guard (MI ARNG) Aviation Support Facility (AASF) package, or other flying mission. The robust facilities, infrastructure, and central location also make Battle Creek an ideal site to support Domestic Operations (DOMOPS), such as debarkation of the MI ARNG Command and Control Chemical, Biological, Radiological, Nuclear Response Element (C2CRE) or as a mass casualty evacuation site in support of the Veterans Administration and U.S. Transportation Command.

AIRFIELD PAVEMENTS

The ANG still owns and operates over 135,000 square yards (28 acres) of paved aircraft ramp and apron space. The pavements are located adjacent to aircraft hangars and other aviation support facilities necessary to support any flying mission. The following table breaks down the various sections of pavement designed to bed down and operate aircraft from Battle Creek.

BATTLE CREEK AIR NATIONAL GUARD BASE AIRFIELD PAVEMENTS

Pavement Area	Material	Size (acres)
West Ramp	Asphalt	6.5
South Ramp	Concrete	14.4
East/De-arm Ramp	Concrete	1.7
Hangar Aprons	Asphalt	5.4
Total Ramp Space	Mixed	28



The Battle Creek ANG Base is collocated with the Battle Creek Executive Airport at Kellogg Field. The civilian airfield has a 10,004' main runway and 4,835' cross runway with associated taxiways. The airfield has a manned air traffic control tower and is situated on a 1,260-acre site, zoned for industrial use and is owned and operated by the City of Battle Creek.

BATTLE CREEK AIRPORT RUNWAYS

Runway	Width (feet)	Length (feet)
5L/23R	150	10,004
13/31	100	4,835
5R/23L	75	4,100



AIRCRAFT HANGARS

The primary maintenance hangar is currently vacant and offers nearly 68,000 square feet of space. The facility provides 26,118 square feet of open hangar floor space. An additional 11,100 square feet of specialized maintenance shop space and 3,633 square feet of administrative space are currently available to support flying operations.

The 21,713 square feet secondary maintenance hangar currently serves as the Logistics Readiness Squadron (LRS) headquarters and supply warehouse. With the addition of an adequate replacement facility for LRS, the current facility could easily be reconverted to a hangar to meet flying mission requirements, offering a potential 12,500 square feet of hangar floor space for aircraft maintenance and additional administrative space.



AIRCRAFT SUPPORT FACILITIES

Additional support facilities also remain in place and operational at Battle Creek ANG Base. The fuels complex currently has 100,000 gallon storage capacity for jet fuel, as well as 5,000 gallons each of diesel and gasoline ground fuels. A jet fuel tank replacement is scheduled to be completed by the end of 2021 which will increase jet fuel storage capacity to 150,000 gallons. A 22,000 square foot fire station is located adjacent to the airfield. The National Guard Bureau has programmed for 18 Title-5 civilian firefighters to be funded and hired in fourth quarter of fiscal year 2021.



Former Maintenance Hangar

Year: 2005

Size: 21,713 SF

This former maintenance hangar houses the Logistics Readiness Squadron, Deployment Processing Center and Supply Warehouse for the Wing. The facility could easily be reconverted to a hangar to meet mission requirements, offering a potential 12,500 square feet of hangar floor space for aircraft maintenance.

◀ Main Hangar

Year: 1960 (Under Renovation)

Size: 67,795 SF

Facility provides 26,118 square feet of hangar floor space. 11,100 is specialized maintenance activities including: machine shop, sheet metal shop, welding shop, wheel and tire shop, electrical systems shop, pneumatic/hydraulic shop. Aircraft maintenance support space (3,633 SF) is provided for supervision, training, analysis, scheduling, debrief of aircrew. Additional area utilizations include: communications flight (13,998 SF) which supports computer services, telephone and radio systems, audio-visual services, and public affairs. The facility can support RPA operations without any expansion.



Base Fire Station

Year: 2007

Size: 22,215 SF

The facility received a \$5 million upgrade in 2007 to increase the total size to 22,200 square feet. Located on the flight line, the fire station includes: apparatus bays, alarm room, equipment maintenance and storage areas, and facilities to maintain fire fighter physical fitness. With the hiring of Title 5 firefighters in FY21, the station will provide primary structural fire response to the installation.



Fuels Complex

Year: 1994

Size: 100,000 gallons Jet Fuel Capacity

Facility is the centralized management and control location for all base functions related to petroleum products. Including: receipt, storage, and issue. The complex includes a laboratory to ensure the aircraft fuel products conform to military specifications. Truck fill stands are provided as a means of transferring aviation fuel from the storage tanks into fuel servicing vehicles (refuelers) and tank trucks. The complex currently has the capability to store 100,000 gallons of jet fuel. We do have a tank construction project underway that will give us the capability to store an additional 50,000 gallons of fuel by the end of 2021.



**BATTLE CREEK ANGB
3545 MUSTANG AVENUE
BATTLE CREEK, MICHIGAN 49037**