# 112<sup>th</sup> AIR OPERATIONS SQUADRON



#### MISSION

The 112 AOS is a manpower only augmentation unit, that is, it provides trained, combat mission ready (CMR) AOC crew members to AOCs across the globe. The 112th has no mobility equipment; the only thing that deploys into the theater is the squadron member. This concept is a huge departure from the squadron's previous history of maintaining and deploying large amounts of combat tasked equipment and personnel when tasked. It is, the way that the ANG and the USAF are evolving. Associate and joint units comprised of a mixture of active duty and ANG or Air Force Reserve personnel are being created across the country where the equipment is owned by the active duty, but they are very reliant on the ANG and AF Reserve to man and maintain the weapons systems. The 112 AOS is affiliated with 11th AF's 611 AOC at Elmendorf AFB, Alaska. The primary role of the 611th is to support the North American Aerospace Defense command (NORAD) in the air defense of the Alaskan NORAD Region (ANR). This mission is includes the surveillance, monitoring, identification and interception of all unknown airborne objects within the vast area of Alaska and the Arctic. In addition to the affiliation with the 611 AOC, the 112th is also world-wide deployable to any AOC, worldwide, should it be needed.

#### LINEAGE

112<sup>th</sup> Aircraft Control & Warning Squadron Redesignated 112<sup>th</sup> Aircraft Control & Warning Flight Redesignated 112<sup>th</sup> Tactical Control Flight Redesignated 112<sup>th</sup> Tactical Control Squadron Redesignated 112<sup>th</sup> Air Control Squadron Redesignated 112<sup>th</sup> Air Operations Squadron, 1 Oct 2003

## STATIONS

State College, PA

ASSIGNMENTS

### **COMMANDERS**

LTC Walter N. Brown, Jr., 1949 Maj John E. McHugh, 1950 LTC Kenneth L. Royer, 1952 LTC John R. Fisher, 1963 LTC Donald Tressler, 1968 LTC Early L. Files, 1976 LTC James M. Herron, 1979 LTC Walter D. Douthitt, 1994 LTC Theodore J. Sebastianelli, 2000 Col Joel F. Pannebaker, 2004

HONORS Service Streamers

**Campaign Streamers** 

# **Armed Forces Expeditionary Streamers**

Decorations

### **EMBLEM**



112<sup>th</sup> Air Control Squadron and 112<sup>th</sup> Tactical Control Squadron emblems

112<sup>th</sup> Air Operations Squadron: On a disc Celeste, a keystone Gules fimbriated Or, surmounted by a compass rose Argent of four facets garnished Azure, overall a winged plate bearing throughout three concentric annulets, a cross and a saltire of the last, wings displayed of the third, all within a narrow border Yellow. Attached above the disc, a Blue scroll edged with a narrow Yellow border and inscribed "MOLLITIA EST VINCERE" in Yellow letters. Attached below the disc, a Blue scroll edged with a narrow Yellow border and inscribed "112TH AIR OPERATIONS SQ" in Yellow letters. **SIGNIFICANCE:** Ultramarine blue and Air Force yellow are the Air Force colors. Blue alludes to the

sky, the primary theater of Air Force operations. Yellow refers to the sun and the excellence required of Air Force personnel. The field represents the Squadron's global area of accountability. The compass rose symbolizes the unit's ability to provide simultaneous support in many directions. The keystone is indicative of the significant role played by the unit in serving the US Central Command Air Forces (CENTAF) Air Operations Center (AOC) and other AOC's worldwide. The winged command-grid represents the AOC and the "Falconer" weapons system. Designed by Maj Aaron Vance (approved, May 2004)

## ΜΟΤΤΟ

MOLLITIA EST VINCERE--Flexibility Commands Success

## NICKNAME

## OPERATIONS

April 1949: By issuance of General Order No. 23 from the Department of Military Affairs of the State of Pennsylvania, the 112th Aircraft Control and Warning (AC&W) Squadron was officially created at State College, Pennsylvania. The unit was to be federally recognized as part of our Nation's reserve defenses upon attaining strength of eight officers and thirty-seven airmen.

Colonel George L. Haller, also Dean of the School of Chemistry and Physics at the Pennsylvania State College, was the driving force in securing a unit of this type for the State College area. Colonel Haller was also the commander of the 153rd Aircraft Control and Warning Group located at the Harrisburg State Airport. The 153rd was the parent group for the newly formed 112th AC &W Squadron.

Major Walter N. Brown, Jr. was designated as the first commander of the new 112th AC &W Squadron. Major Brown was an instructor in the School of Chemistry and Physics at the Pennsylvania State College. Colonel Haller and Major Brown were two of the founders of the firm of Haller, Raymond, and Brown Incorporated, later H.R.B. *"The unit really had its founding because of the university," said Col Jim Herron, unit commander for 15 years. "The original members were all Penn Staters. As a rule of thumb, at least 10 percent of our people are students at the university." The first commander, Maj Walter N. Brown Jr., was a university chemistry and physics teacher. Col George L. Haller, dean of the school of chemistry, was the driving force in getting the unit in State College. Another of the unit's founding fathers, and a Penn State alumnus, was Dr. John L. McLucas, who later served as Secretary of the Air Force.* 

The physical facilities initially used by the unit were not so illustrious. The 112th held meetings for two hours, one night each week, in a vacant garage on McAllister Street in State College. Evidence that these facilities were only temporary was recorded on 5 Apr 49, when a local newspaper reported that Pennsylvania Air National Guard officials had announced that construction would soon begin on a new radar training station.

Technical Sergeant Jack Warnock was the first full-time employee of the 112th and was stationed in the Leitzell Building, on the corner of College Avenue and Allen Street. Sergeant Warnock was

the only full-time employee and served in all capacities—from disseminating official information to accepting incoming, equipment and supplies.

May 1949: The strength of the new 112th was eight officers and forty-five airmen, and federal recognition was recorded on 2 May 1949. The assigned mission was to train personnel in the operation and maintenance of radar and communications equipment. Captain John R. Fisher was assigned as the first regular Air Force Advisor. In early August 1949, the unit participated in its first field training at Indiantown Gap Military Reservation. This training consisted of familiarization with recently received communications equipment and a first-hand look at an active Air Force Radar Station. In September, the unit received its first radar, the SP-1M. By this time, several full-time technicians were employed to maintain the new equipment.

October 1949: The unit was reorganized into two ground control intercept stations. This did not alter the designation or prime location of the unit. It simply provided for a detachment at a separate location with an authorized strength of seven officers and ninety-eight airmen. Total authorized manpower for the two detachments was set at twenty-nine officers and three hundred sixty-two airmen. By the end of the year, the unit had twelve officers and fifty-four airmen. The authorized detachment was organized at the Mifflin County Airport in Milroy with Lieutenant Gerald Funk named as the first detachment commander. A large hangar at the airport was remodeled and used as the armory.

The first annual federal inspection was conducted by the 9th Air Force of the Continental Air Defense Command and took place in March, 1950. Throughout the same year, the unit cosponsored a dance at Hecla Park with a Bellefonte Army National Guard unit, participated in the Armed Forces Day and Fourth of July parades and made other attempts to publicize its existence. The unit gained strength steadily and grew to nineteen officers and one hundred fourteen airmen by year's end. New buildings had been authorized at the new Air National Guard site on the college campus farms, just beyond the dairy barns. Construction was started in July on the administration building, motor services building and a large supply warehouse. The first change of command took place in August, 1950, when Major Brown resigned and was replaced by Captain John E. McHugh.

December 1951: The fledgling 112th Aircraft Control and Warning Squadron was called to active duty for the Korean Crisis and Major McHugh assumed command of the newly activated unit in a simple ceremony.

This action ended much speculation as the unit had been on alert for a possible call-up during the previous nine months. Although on alert status, the normal activities of the unit continued. Members served as honor guard for Vice President Barkley who was guest speaker at the Lewistown Elks golden anniversary parade. The new armory was completed and the unit moved from the McAllister Street location in September. A cyclone fence was installed around the 2.5-acre site. The activated unit remained at home stations in State College and Milroy over the holiday season. The State College VFW gave the squadron a farewell party at the new armory. Mid-January of 1952 was the departure date at which time twenty-three officers and two-

hundred forty-seven airmen deployed to Grenier AFB, Manchester, New Hampshire; their new temporary active duty home. In March 1952, a serious accident hospitalized Major McHugh and Major Kenneth L. Royer assumed command of the squadron.

The 112th AC & W Squadron received word in April 1952 that it would remain at Grenier as a "paper" unit only with no personnel assigned until deactivation. Reassignment of personnel was a new concern for unit members—and reassignment it was. By June, unit members were assigned to Korea, Germany, Thailand and other foreign countries; from the east coast to the Mississippi River; and from the Canadian border to Tennessee.

112th Squadron: federalized in the ANG on 16 Jan 52 at Grenier AFB, NH; assigned to 32nd Air Division on 6 Feb 52; transferred to 4707th Defense Wing on 16 Feb 53; released from 24 months active duty and returned to control of the State of Pennsylvania on 1 Dec 53.

May 1953: The 8254 Air Base Squadron was organized at the State College armory under the command of Major Frank A. Smoker. The primary purpose of the 8254th was to recruit new personnel, receive supplies to be re-established upon deactivation, and receive Personnel from the 112th as they were released from active duty. Major Royer, having been released from active duty himself, assumed command of the temporary 8254th in September. On 30 November 1953, the 8254th was deactivated and the 112th Aircraft Control and Warning Flight was activated the next day. Major Royer assumed command of the reactivated 112th, which became a flight rather than a squadron. The new 112th AC&W Flight was authorized thirty-three officers, one warrant officer and two hundred eighty-one airmen.

As of 1 January 1954, the assigned strength of the unit was eight officers and ninety-one airmen. The active duty tour had taken its toll in manpower. Many men chose not to resume their guard status while others remained on active duty to make the Air Force a career. In April, the unit was reorganized in strength only with a slight reduction in authorized personnel. The Mifflin County Airport detachment was deactivated.

1955 through 1960: During this period, the world situation was relatively stable at least in so far as the 112th was concerned. Unit activities centered on annual federal inspections, annual field training and the ever-present need to recruit.

Training of intercept controllers presented qualifications difficulties, as aircraft were not available nearby. Consequently, controllers were sent to Blue Knob Air Force Station, Claysburg, on weekends for intercept training.

The unit received unsatisfactory ratings in the 1956 and 1957 annual federal inspections for failure to maintain minimum phase strength. The unit was short nine and seven officers, respectively, for those inspections.

The unit M-day assignment was changed during 1958 from the Air Defense Command to the Tactical Air Command. The 112th was reassigned from the 157th Tactical Control Group in

Missouri to the 152nd Tactical Control Group in New York. The mission of the 112th was to gather information within a designated airspace, accurately present this information in a timely enough manner to effectively employ assigned defensive and/or offensive counter air activity.

The unit received a new mobile radar set, the AN/MPS-11, in 1957. A new mobile height finder, the AN/MPS-16, arrived the following year.

In 1958, the unit displayed its tactical electronics equipment at the Grange Fair in Centre Hall and unit air police personnel provided traffic control during football games at Penn State's Beaver Stadium.

By 1960, the unit had acquired 90 % of its authorized equipment and was considered to be in a high state of readiness.

1961: The year began deceptively, with all indications of another "normal" year—a classic example of the adage "a lull before the storm." During annual field training in North Carolina where the unit was participating in Operation Swift Strike, it was learned that the Secretary of Defense had announced the 112th was one of many units throughout the country to be placed on alert status due to the Berlin Crisis.

Speculation mounted, and the unit was badgered with inquiries from the New York Times, Philadelphia Inquirer, Pittsburgh Press and others. Finally, on 24 August, the unit was notified officially of activation.

On 1 October 1961, twenty-three officers and two hundred twenty-eight airmen were activated for a period of 12 months, unless sooner relieved. Their mission was to provide a back-up air defense capability for the 86th Air Division. The advanced detachment departed on 26 October for Fliegerhorst Buechel, Germany—their new active duty home. The main body departed Greater Pittsburgh Airport during 8 to 12 November and flew to various points in Germany. Travel to Fliegerhorst Buechel was completed by surface transportation. Equipment was transported by ship to Bremerhaven and then moved to Buechel, arriving on 24 November 1961. The last shipment of equipment arrived by rail on 15 December 1961.

Fliegerhorst Buechel is a German Air Base located in the picturesque Eifel Mountains and was the home of the Jabo 33rd Fighter-Bomber Wing. Housing was in French-built barracks. Living conditions were crowded, and adequate messing facilities did not initially exist. A German NCO canteen was converted into a seating area for eating, and meals were prepared on field ranges until messing-facilities were completed in late February 1962. By late January, a Base Exchange, barber shop and snack bar were available. Despite uncooperative weather consisting of seemingly constant freezing rain, occasional snow, sleet and fog; the unit was operational by 28 Jan 62. Two FM radio relay sites were established, one at Adenau and one at Stein. Motor transportation facilities were initially located at Ulmen, but facilities on Buechel were made available in April.

Operational activities were conducted on a 24-hour basis. During operational evaluations; the 112th received an excellent rating by 17th Air Force. All was not work, however. Many trips were made to such resort areas as Garmish and Berehtesgarden. Personnel visited with German families over the holidays and took part in many German customs. Courses were offered in the German language. "We arrived in the wee hours, in total darkness," recalled retired MSgt Myron L. Bowersox. "We pulled up to the gate with armed guards and dogs. The place looked like Stallag 17. We all looked at each other and wondered what the hell we were into. "I remember the base commander, Col Walter Kruponsla. He was an ace fighter pilot with Luftwaffe (during World War II). He hated our guts. He wouldn't let us fly the U.S. flag. He also wouldn't let us fraternize with his people. But we did it anyhow, behind his back. We'd play cards and go out together It was great."

On 9 May 1962, operations ceased, and the unit received orders to dismantle its equipment. A convoy of vehicles carrying the major part of the unit equipment left for the port of Bremerhaven on 13 June 1962. Two days later, several persons departed Germany for Boiling AFB to establish an out-processing center. The out-processing procedures established were effective enough to receive favorable recognition by Headquarters USAF.

On 4 July 1962, an advanced detachment arrived in the United States and proceeded to Brooklyn Army Terminal to deliver organizational equipment to State College on 5 July 1962. Personnel began arriving at the out-processing center on 12 July, and the last person separated on 25 July 1962. Personnel were released from active duty when they arrived at the processing center and were assigned to Headquarters Pennsylvania ANG until 8 August, at which time they were reassigned to the 112th. A2C Robert Cook during his tour in Germany designed the unit emblem. Headquarters USAF on 30 September 1962 formally approved the unique design.

1963 through 1969: As was true following the Korean Conflict, active duty took a toll in personnel, and the unit faced a major recruiting job. Continuous field training was authorized from March through June, the National Guard Bureau increased school quotas, and a local recruiting program was established.

In 1964, the Air Force Reserve Center in Altoona was deactivated, and approximately twenty-five of these men joined the 112th.

Field training for 1964 was held at Onyx Peak, 9720 feet high, in the San Bernadino National Forest in California.

Field training in 1965 consisted of four separate operations, the most desirable of which was held at Sembach, Germany.

The unit's prime radar was shipped to Southeast Asia in 1965, and the unit received a radar simulator.

On 2 Oct 65, the 112th AC & W Flight became the 112th Tactical Control Flight. The unit was

designated to be a Control and Reporting Post (CRP).

In 1966, unit patches were worn for the first time.

In 1967, civil disturbance training became a requirement and Autovon telephone service as installed.

As was true in 1969, annual field training for 1970 was held in the New England area. Annual field training for 1971 and 1972 occurred at home station. The Texas plan was in operation for 1972—allowing each guardsman, within limits, to choose his own time frame for field training.

Hurricane Agnes wreaked havoc with much of Pennsylvania during the summer of 1972. The 112th responded as requested with limited aid in the form of men and communications gear. The 112th set up an HF radio station near Wilkes-Barre at the J.B. Post coal yard.

Annual field training for 1973 was held at Niagara Falls, NY. The Honorable John McLucas was appointed as Secretary of the Air Force and Staff Sergeant Daryl Johnson became the unit's first full-time recruiter.

In 1974, as was the case with Hurricane Agnes, unit personnel were activated to provide emergency relief during the Independent Trucker's Strike. Much needed fuel oil was convoyed from Phillipsburg to State College High School. Debra L. Weaver enlisted in the 112th becoming its first female member.

Communications personnel participated in a test of the state's emergency communications system while deployed to Mount Penn, outside Reading in 1975.

The Conemaugh River Flood offered another opportunity for state active duty in 1977. Members of the unit manned the Emergency Operations Center in Johnstown to provide a communications link to Fort Indiantown Gap.

July 1977. After a flash flood killed over 70 people in seven western Pennsylvania counties, members of the Air Guard's 271st Combat Communications Squadron and its 112th Tactical Control Squadron provided around-the-clock communications between flood-ravaged Johnstown and the Adjutant General's office. ANG assistance was needed because the flood had destroyed the local phone firm's main switching facility in the flooded region

Later in October, unit members deployed to Santa Rosa Island, Florida as part of Bold Eagle '78. The unit augmented the 110th Tactical Control Flight from Alcoa, Tennessee and the exercise focused on providing close air support on the overland range complex around Eglin AFB.

1978 through 1982: The 112th continued to develop its exercise play with the deployment in January for Joint Chiefs of Staff Exercise Empire Glacier '78. Together with the host unit, the

108th Tactical Control Flight from Syracuse, the 112th formed a Control and Reporting Center to provide air control and airspace management for airspaces over Lake Ontario and at Fort Drum. For cost saving considerations and in an effort to mirror climatic conditions, Empire Glacier became an alternative to an Alaskan exercise called Jack Frost. As it turned out, weather conditions were far worse in Syracuse than in Alaska during the same period. The 507th Tactical Air Control Wing exercise director was delighted to report that the combined efforts of the 108th and 112th were instrumental in conducting the exercise without any airspace violations.

In the early 80's, the 112th began deploying to Fort Monroe, Virginia—home of the 72nd Tactical Control Flight. The 72nd provided close control for F-15A, from the 1st Tactical Fighter Wing at Langley AFB. This was the same type of training that unit controllers needed to hone their individual skills—training that proved invaluable to the deployment challenges the unit would embrace in the 80's.

For the fourth time in the 70's, the unit deployed to Niagara Falls for annual training in 1979. - The AN/TPS-43E three-dimensional radar is received in June 1980. The acquisition of this radar required extensive electronics training for maintenance personnel.

1983 to 1988: The unit underwent a rigorous TAC IG five phase Operational Readiness Inspection in June, achieving an overall rating of satisfactory. This deployment to Camp Varnum, Rhode Island, was a strong showing of the unit's readiness, highlighted by Excellent ratings in Generation and Command and Control and an Outstanding rating in Continuous Operations. The ORI was conducted under the auspices of Sentry Yankee '83; another 152nd Tactical Control Group sponsored exercise. The rewards for all the hard work came immediately with the opportunity to lead back-to-back deployments to Denmark and Italy. At that time, Tactical Air Command instituted a program called Checkered Flag, which was designed to familiarize ANG units with their proposed wartime locations. Consequently, the European Theater opened up to units like the 112th. Toward the end of August 1983, prime mission equipment and members of the unit along with many augmentees flew onboard 9 C-141's to Karup Air Base, Denmark. Housed at a Danish tank base in Hostebro, the 112th set up its site near the North Sea hamlet of Bovberj. After more than a month in Denmark as part of Oksboel Tactical Fighter Weaponry '83 controlling Danish, German, British, Norwegian and U.S. aircraft, unit equipment and personnel were intratheater airlifted via C-I30s and C-141s to Aviano Air Base, Italy for Display Determination '83. During Display Determination, the 112th directed hundreds of NATO aircraft in a 90 square mile block of airspace above Aviano and a nearby live firing range at Montiago in northeastern Italy.

The Danes liked the 112th so much that they invited the unit back the very next year for a Danish exercise called Bold Gannet. Earlier in August, members of the unit augmented the 101st Tactical Control Squadron in their deployment to Hundborg, Denmark. The 101st was there for Tactical Fighter Weaponry '84. Following TFW in September, the scene shifted to Kalundborg, Denmark for Bold Gannet. The 112th controlled both sides of an air war involving fighters and bombers from various NATO countries.

9 November 1985 marked the end of an era when Chief Warrant Officer Clarence E. Weaver

retired. Mr. Weaver was appointed the grade of Warrant Officer (W-I) on 9 Feb 59—the last day that the United States Air Force appointed Warrant Officers.

In 1986, another Sentry Yankee exercise, this one conducted at Niagara Falls Air Force Reserve Base, highlighted the year's calendar.

Toward the end of 1986, the upcoming ORI became the focus of the unit's attention. The first of several operational readiness evaluations occurred when the unit deployed to the Grange Fair Grounds in Centre Hall. The 112th was able to generate to a full mission capability within the prescribed time constraints. Additionally, the unit was tasked to "survive and operate" during the continuous operations portion of the evaluation. The weather conditions were not the best; the initial assessment of the 112th's capabilities was encouraging. There would be more opportunities.

In 1988, the major activity was the 112th's deployment to Turkey. The 112th became the first unit of its kind to deploy to this pivotal NATO country. Exercise Display Determination was the vehicle with the unit operating from Bandirma on the Sea of Marmara in northwest Turkey.

On 15 October 1988, the 112th TCF became the 112th Tactical Control Squadron.

The 112th Tactical Control Squadron is an Air National Guard unit that is assigned to the Air Force's Tactical Air Command. It is a non-flying support unit which has, as a Federal mission, aircraft control and communications. When not supporting the Tactical Air Command in a Federalized status, the 112th is responsible for erecting, operating, and maintaining a share of a communications network for use by the agencies of the State of Pennsylvania. In addition, a fleet of 60 vehicles, plus power production units as well as portable heaters and air conditioners are available for use in civilian emergencies. As a Federalized unit, the 112th is responsible for the operation and maintenance of a radar control post in or near a combat zone. It would be the 112th's responsibility to both maintain constant surveillance for hostile aircraft, and to provide radar control of offensive aircraft on bombing or low-level fire support missions. The 112th currently has 26 officers and 204 enlisted men. The Unit has authorized equipment worth over four million dollars, including HF, UHF, VHF radio equipment; radar systems; and more than 60 vehicles including portable generators and temperature control units. Men in the Unit serve as mechanics; personnel specialists; radar operators and repairmen; radio operators and repairmen; refrigeration specialists; electronics and telephone specialists; medics; and administrative personnel.We spend most of our week end effort training for a peak of readiness to assume responsibilities for the Nation's defense. Because a unit like the 112th is made up of many integral and interactive sections training is necessary to insure individual readiness as well as Unit teamwork. Our operations, our maintenance and our support sections must be able to support each other and work together as a smooth machine. Radar Operations This section is responsible for the control of, coordination of, and communication with aircraft. This capability can be both an offensive and a defensive maneuver and is the primary mission of the 112th. All other sections perform their functions in support of this mission. The radar in use is also capable of "seeing" and tracking the movement of heavy storm systems, so that a civilian community welfare effort is

possible as well as a federalized wartime effort. Maintenance Extremely complicated equipment is needed to support the primary mission of the Unit. Obviously, radar and communications equipment is necessary and the maintenance of these systems is the responsibility of the Radar and Communications Maintenance people Because the Unit has a mobile capability, many trucks and wheeled vehicles are required to transport the equipment and motor-operated power generating units. The maintenance of the vehicular and "power equipment is the responsibility of the Motor Transportation and Aerospace Ground Equipment sections. As with the care of any equipment, periodic preventative maintenance is required. The scheduling, control and inspection of such an effort is the responsibility of an administrative maintenance section known as Maintenance Management. Supply Equipment, parts, and supplies are all required to support the Unit mission. The procurement of these items is the responsibility of the Supply section. Food Service Anyone will tell you that food is important to a military man. Our Food Service section maintains the capability of preparing and serving meals for the entire Unit over extended periods of time. Medical Services Preventive medicine, in the form of sanitation inspections, immunizations, and physical examinations, as well as first aid support are the responsibility of our group of "corpsmen." Personnel/Administration Pay, promotion, special orders, retirement records, etc. are all "people oriented" items that fall under the realm of these two sections. Air Technician Detachment It is clear that the continuous needs of a Unit like the 112th require constant attention, not just weekend attention. A group of 23 people, full-time technicians, provide this needed continuity. The Air Force Advisor Two active duty, regular Air Force people are assigned to the 112th as representatives of the United States Air Force to assist with the supervision of training and to aid in the attainment of operational readiness. From these brief descriptions of the Unit's sectional responsibilities, it becomes evident that the 112th is a totally self-sufficient entity that can readily move from one location to another and retain that selfsufficiency while performing an assigned defense or public welfare task. This capability is by design and the efficient contribution by each individual is necessary for the Unit to function in this manner. Due to the sectional make-up of the Unit, it is possible to dispatch motor vehicles or communication equipment or portable food service facilities, or persons with special skills to areas of need. In this way, the 112th has served the State in natural disasters as well as maintaining a position of readiness in the defense network of the County. The term, "Citizen Soldier", is indeed descriptive of the men of the 112th, .since, in a normal year, we are soldiers for 39 of the 365 days.

16 November 1990: The Department of the Air Force bestows the Outstanding Unit Award on the 112th Air Control Squadron for outstanding performance during the period 1 July1988 to 30 June 1990. This prestigious award culminated an unprecedented period of achievement that included four Superior Performance Awards from the 152 Air Control Group and five Pennsylvania ANG Unit Effectiveness Awards.

29 September 1992: Following years of negotiation with Penn State University, a new lease for 22 acres at the University Park Airport was affected on 29 September 1992. The existing on-campus lease was set to expire in 1999.

1989 through 1994: Counter Drugs became the byword for this period. Starting in 1989 with an

exploratory deployment to Great Exuma in the Bahama Islands, and continuing with four other Operation ANGIE (ANG Interdiection Effort) deployments to Great Inagua, the 112th became a key player in what became known as counter drug operations.

As part of a network of ground and air sensors, the mission was to detect and track the illegal movement of narcotics through the Caribbean basin into North America. In late March 1993, the unit was tasked to support yet another counter drug operation. This time the site was located in the jungles of Columbia, South America. Operation Support Justice IV brought unit personnel closer to the leading source of the world's cocaine production. Commercial aircraft flew members to Panama to remain overnight for a C-130 trip to a dirt strip runway in southern Columbia. The assault landings and take-offs were something to behold. Soldiers from the Columbian Army served as the front line protection for the compound. The tents were routinely kept at 50 degrees to keep the snakes out. If supplies couldn't be flown in from Panama, a nearby river was the only source for drinking water. Columbia was indeed an interesting place.

Early in January 1994, Operation Steady State offered a chance to return to Columbia. Civil engineering site improvements were made. The mission was the same.

In 1991, the unit deployed to Ovar, Portugal to participate in JCS exercise "Ocean Safari." The unit's success in this exercise is directly attributed to an outstanding working relationship with the Portuguese Air Force.

After returning home, the unit immediately began preparing for its upcoming ORI. The unit conducted extensive Warrior Preparation exercises and Command and Control procedures were practiced and refined to ensure all tasking could be directed from one central command post. As the scenarios increased in difficulty, changes were made to the command post to comply with the heightened operational requirements. As the final Warrior Prep exercise was conducted, all squadron functions were coming together. The unit continued fine tuning for the inspection via classroom activities, a few deployments in inclement weather, wearing of the chemical ground crew ensemble and practicing weapons safety. As the inspection approached, the unit was positioned to perform at its best.

On 1 June 1992, the 112th TCS becomes the 112th Air Control Squadron. Later in the year, the 112th ACS receives the Joint Meritorious Unit Award for outstanding contributions during counter drug operations.

In July 1992, the 112th underwent an Operational Readiness Inspection conducted at Rattlesnake Mountain. The overall rating for the inspection was Excellent. There were six outstanding and twenty-three excellent ratings. Included were three areas rated "best seen to date" by the Air Combat Command IG Team. They were Command and Control, Vehicle Maintenance and Casualty Care. Following the inspection, in August and September, the unit accepted the challenge of a 60-day counter drug rotation at Great Inagua, the Bahama Islands. A crew rotation mid-way worked well allowing guardsmen to participate for shorter periods.

In March 1993, 20 people were placed on State Active Duty during the "Blizzard of '93." During the activation, 112th personnel assisted the Pennsylvania State Police in rescuing stranded motorists from local highways, transporting medical personnel to area hospitals and helping keep the roads clear.

Later in May 1993, the unit participated in a readiness exercise at Alpena, Michigan called Ready Wolverine '93. Air control procedures played a very important role during this exercise. Some changes in personnel in critical fields made the exercise a very important challenge for the unit. Airlift was provided to make the move to and from the Alpena Air National Guard Combat Readiness Training Center.

In July 1993, the unit went into major mission conversion when it received the AN/TPS-75 Radar, its first AN/TYQ-23 Modular Control Equipment (MCE) Operations Module and the AN/TSC-94 Satellite Terminal. This mission conversion was a technological quantum leap in the way the 112th would do its mission. It was no longer just a radar unit, the 112th was now tasked to perform battle management, weapons control, surveillance, identification and data link management. In August, both Operations and Maintenance personnel received in-house training on the new equipment from AETC's Mobile Training Team. September brought another counter drug deployment to the Caribbean. The year ended with the Operations Module being deployed to the 74 ACS at Langley AFB for a Joint System Training Exercise.

9 May 1994: A ground-breaking ceremony was conducted at the site of the new State College ANG Station at the University Park Airport. Actual construction on the building project began in September 1994.

The two-phase project would be completed in August 1998 with the unit moving into the new facilities. Colonel Jim Herron was responsible for much of the preparation work needed for the actual construction. Additional thanks are owed to former Congressman William Clinger, who helped secure \$9.7M to finance the project.

1995 through 1999: As the face of the U.S. military continued to evolve across the globe, the considerable logistical expense associated with moving units overseas impacted the 112th's exercise participation. In what would prove to be the last opportunity for quite some time, the entire unit participated in LINKED SEAS '95 at Sagres, Portugal in June. The 112th performed its assigned mission by establishing a data link to the Portuguese command center. This data link provided, for the first time, an air and surface picture of the aircraft and ships participating in the exercise. As a result, the unit received great praise from the U.S. Admiral commanding the Iberian forces.

Just as the exercise opportunities began to dwindle, a chance to support worldwide contingency operations emerged in southern Europe. In 1996, the ANG began to get involved in the rotation providing personnel to support the Bosnia Theater of Operations. A detachment from the 603rd ACS in Aviano AB, Italy was established on the "spur of the boot" at an Italian Air Force Station near Mount Jacotenente. The primary mission was to data link the Bosnian air picture to the

Combined Air Operations Center in Vicenza. The weapons mission was to conduct air-to-air pre and post-strike refuelings for Operation Decisive Endeavor. Weapons control personnel played a vital role in the flight safety and mission accomplishment of all airborne assets participating in the operation. Later, in 1997, members of the 112th returned to the same site to repeat this mission, although the name had changed to Operation Joint Guard.

Back at home station, the conversion of fighters to tankers in the northeast severely reduced the number of air-to-air training sorties available to the 112th. While it was nice to be recognized as the air refueling capital of the ANG, it became clear that air to air intercept "numbers" were at a premium. This precarious situation was remedied with the acquisition and installation of the Modern Tracking System. Following a great deal of coordination and study, the MTS became fully operational in the fall of 1998. During remote operations, the MTS acquires radar data from FAA long-range radars. Joint Surveillance System radars at Gibbsboro, NJ and Oceana, VA provide radar access to the warning areas off the New Jersey and DE, MD and VA coasts via leased landlines. These airspaces typically are very busy with air-to-air activity. The selected radar feed is piped through Washington Air Route Traffic Control Center to the State College ANG Station. An MTS modem converts the signal for display in our Operations Modules. An additional landline is connected to remote radio heads at Cape May Coast Guard Facility, NJ to provide voice communications. In short, the system allows the 112th, call sign Brumal, to control F-15, F-16 and F-18 missions over the Atlantic Ocean—missions essential in the control environment that otherwise would not be available locally.

On 20 July 1995, the unit "came out of conversion," meaning personnel were trained and equipment was ready to conduct the unit's new Designed Operational Capability (DOC) tasked mission with MCE Equipment

In 1996, the unit underwent another ORI much like the one conducted four years earlier. Personnel authorization increases and specific operations crew needs forced the 112th to solicit augmentation from other Ground Theater Air Control System units.

Sea Girt, New Jersey and Bethany Beach, Delaware served as annual training sites from 1997 to 1999. Live flying operational considerations were instrumental in selecting these locations. Both are within a day's driving distance and offer ready access to the warning area airspaces off the east coast.

In August 1998, the 112th completed the move to the new \$9.7M, 22 acre, state-of-the-art military facility at the University Park Airport.

Following the squadron's 50th anniversary in 1999 life continued as an Air Control Squadron. Training requirements were a constant, similar and dissimilar Air Combat Training (ACT), Air-to-Air Refuelings (AAR), Close Air Support (CAS), Data Links and Surveillance missions were conducted on a weekly basis from home station and deployed locations for Annual Field Training. All the maintenance sections necessary to allow the Operations section to function continued to provide top level support to ensure the mission was accomplished. there was a cloud on the

horizon. The military special use airspaces in northern Pennsylvania that the 112th used to conduct its training missions was getting increasingly more crowded and restricted by the never ending growth of civilian air traffic in the northeast corridor of the United States.

Modernization of fighter aircraft radar and their missiles required increasingly larger airspaces to train effectively, airspaces larger that the 112th had available locally to control. New technology called the Modern Tracking System (MTS) enabled the squadron to see remote airspaces off of the east coast by tapping into distant military and FAA radars, displaying the data in the 112th's Modular Control Equipment and control the aircraft flying there. The MTS was a good interim solution to the local airspace problem; the Air Force and the ANG at this time were in the midst of a review of how many Air Control Squadrons were required to meet the existing national requirements. Once the Air Force decided on the number, which was significantly fewer than existed, it was up to the ANG to decide which ACS's stayed and which would go.

Despite the training improvements provided by the MTS, the 112th was selected to be eliminated as an ACS primarily because of the existing problem of poor local airspace available. A new mission had to be found if the 112th was to remain a squadron within the PaANG or have the squadron disbanded and have its manpower distributed among the three flying wings in the state.

Led by the commander, LtCol Dan Douthitt, the squadron launched a proactive quest to find a new mission for the 112th. Several mission possibilities were explored, some closely related to the ACS mission such as a TACS test squadron, or others like missions supporting space command. After over a year of meetings, searching and tumultuous discussions, the Air Operations Center (AOC) augmentation mission was decided on and proposed to the National Guard Bureau as the new mission for the 112th. The AOS is a command and control agency subordinate to the AOC so re-rolling into the AOC augmentation mission seemed to be a natural transition. The AOC is the war fighting headquarters for US Air Forces. The AOC is where the theater Air Force commander, the Joint Forces Air Component Commander (JFACC) is headquartered and where he directs the planning and execution of the air war. While the ANG, NGB and the state negotiated and deliberated the future of the 112th, normal operations and training continued.

These next few years were tumultuous times as the mission conversion process slowly churned on. Trying to lean forward into the new mission several members attended the Joint Aerospace Command and Control Course (JAC2C) to serve as the cadre of instructors for the proposed AOC augmentation unit mission. The likelihood of conversion to the new mission continued to solidify, but the official notification of the mission change was always just a bit out of reach. This period of not being entirely an Air Control Squadron, and not an Air Operations Squadron, was difficult. The various maintenance sections continued to train while operations functions were winding down. Some squadron members would look forward to the new mission while other dreaded the conversion as the way of life as it had been known was about to change drastically.

2001 - The squadron received word that the AN/TPS-75 radar would be taken from the 112th in

July 2001 and given to another ACS that was not slated for a new mission. On April 17 2001, the 112 ACS, Call sign BRUMAL Control, controlled its last mission. A-10s from the 111FW at Willow Grove, PA conducted Air Combat Training (ACT) in the DUKE Military Operations Area (MOA) then climbed up into the KINZUA Air Traffic Controlled Airspace (ATCA), to refuel with a KC-10 from McGuire AFB, NJ. The Operations crew consisted of Major Mark Shields, Captain Aaron Vance, Captain Brian Lehew and SMSgt Ralph Myers. Maintenance support was provided by Major Rick Miller, TSgt Chris Bloom, TSgt Lori McCullough, and SSgt Matt Morgan.

September 2001 - 11 squadron members were activated for one year to perform duty at the Northeast Air Defense Sector (NEADS). Over the next year, another 30 squadron members volunteered to go to NEADS in support of Operation NOBLE EAGLE (ONE) to perform Homeland Air Defense. These 112th members put their new AOC mission skills on hold while at NEADS to performing the traditional ACS duties of surveillance, weapons control and maintenance support functions. The new mission would have to wait for a bit longer.

2002 to 2003 - Despite the ongoing support of ONE missions with squadron personnel, the squadron conversion continued throughout 2002 and 2003, albeit at a much slower pace. Equipment was turned in piece meal to depot or handed over to other squadrons. Maintenance personnel started to find jobs with other ANG units in Pennsylvania or other states, while more operations personnel were hired, especially pilots and navigators who were needed for the new mission. Rather than transfer to other units, some maintenance personnel decided to cross train into operations where they now are very productive and integral to the success of the squadron.

On October 21, 2003, the 112th Air Control Squadron officially entered conversion and became the 112th Air Operations Squadron (AOS), an AOC augmentation unit, the third to do so in the Air National Guard. This turning point launched the 112th on what has developed to be a very lucrative and in-demand mission throughout the USAF. The Chief of Staff of the USAF declared the AOC to be a separate weapons system and required personnel to receive professional, focused, and specific AOC training. A constant stream of new squadron members were being recruited, with them then being sent to attend the new AOC Formal Training Unit (FTU).

2004 - Instead of all 130 squadron members deploying along with massive amounts of equipments hauled on trucks, only the member deployed. The squadron has no mobility equipment, only equipment used for in-garrison training. The AOC equipment owned by the squadron are banks of computers loaded with software necessary to plan and execute the Air Tasking Order (ATO), the 'roadmap" for the theater's air war. Once a member completes the FTU, they must attend several major AOC exercises to become Combat Mission Ready (CMR). The number of people who normally attend these exercises ranges from 1 individual to 30 or 40, rarely more. They depart with their mobility bags and the AOC knowledge in their brains, no large numbers of people, no equipment, no trucks. Because the 112th is an AOC augmentation unit, the squadron supplies only the individuals with the specific skills that the host AOC requires.

The main computer system used in the AOC is the Theater Battle Management Core System (TBMCS). TBMCS is a collection of computer applications necessary to accomplish the decision

making processes used in the AOC. The current version of TBMCS is 10.1 (version 10.2 would be next in line). This system was installed in what became to be the squadron Training Laboratory on the second floor of operations building. The Operations, Intelligence and Communications flights collaborated in designing and constructing the Training Lab to model it after AOC Combat Operations floors across the world. It is here that the majority of AOC training takes place.

2005 On 09 May 2008, the 112th was officially informed that it would be affiliated with the 11th AF's 611th AOC at Elmendorf AFB, Alaska. The 112th would be the primary source of augmentation for the 611th for exercises, inspections and contingency operations. The relationship with the leadership and members of the 611th continues to grow with 112th members going TDY to Elmendorf and 611th members going TDY to the 112th.

Despite the affiliation with the 611th, it was still difficult to obtain sufficient positions at major AOC exercises to cover all of the 112th's AOC crew duty positions. So the squadron set out to create its own in-house AOC exercise to ensure that the greatest number of squadron members would receive high quality training in all aspects of AOC operations. This required an exercise that encompassed the entire ATO cycle, to include practically every major process that is required to plan, create, distribute, execute and assess the ATO, the master plan for each day's air war. It was a huge undertaking, and as we would later find out, that no other USAF AOC unit had ever done before. The exercise "ARCTIC KEYSTONE 08" was a great success. The exercise had growing pains, but was excellent training for the majority of the squadron. In 2009 ARCTIC KEYSTONE 09 took place, it was a much more robust exercise covering two weeks, and was an even bigger success than the 2008 version.

Within an amazingly short period of time, the skills and abilities of the squadron members became known throughout the AOC community. Individuals were being requested for by name for both exercises and contingency operations. Between 2004 and the present, squadron members supported the following contingency operations; Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), Operation Noble Eagle (ONE- Homeland Security), and Northern Sovereignty Operations (NSO -Alaska NORAD Region) at locations in Afghanistan, Iraq, Kuwait, Qatar, United Arab Emirates, Kyrgyzstan, Guantanamo Bay Cuba, Alaska, Florida, and Washington D.C..

AOC exercises were supported across the country and the world at Shaw AFB, SC; Davis-Monthan, AFB AZ; Elmendorf AFB, AK; Barksdale AFB, LA; Nellis AFB, NV; Hickam AFB, HI; Hurlburt Fld, FL; Langley AFB, VA; Fort Bragg, NC; Fort Hood, TX; Ramstein AFB, GE; Osan AFB, KO; and Mubarack Military City, Egypt.

A new building is being constructed as of this writing for the 112th adjacent to the existing State College Air Guard Station facilities. The PA Army National Guard is the first Guard unit in the nation to receive the Stryker armored vehicle. With the former ACS Vehicle Maintenance and AGE shops going unused, the State HQ decided to house the new Army Stryker maintenance units in the "old" 112 buildings and have a new facility construct for the 112th designed specifically for the AOC mission. The squadron is scheduled to move into the new building in October of 2009.

June 2004 15 personnel for Coalition/Joint Task Force Exercise 04-2, Shaw AFB, South Carolina January 2005 19 personnel deploy for Exercise Blue Flag 05-1, Barksdale AFB, Louisiana July 2005 19 personnel deploy for Exercise Blue Flag 05-2, Nellis AFB, Nevada January/February 2006 13 personnel deploy for Exercise Virtual Flag 06-2, Nellis AFB, Nevada May/October2006 3 personnel deploy to support Operation Iraqi Freedom, Nellis AFB, Nevada May/August 2006 2 personnel deploy in support of Operation Jump Start, Andrews AFB, MD August 2006 17 personnel deploy for Red Flag 06-2.1, Nellis AFB, Nevada 4 September 2006 4 personnel deploy for AEF 3/4, AI Udeid AB, Qatar November/December 2006 6 personnel deploy for Exercise Terminal Fury, Hickam AFB, Hawaii January 2007 2 personnel deploy for Exercise Red Flag 07-2.1, Nellis AFB, Nevada January 2007, 11 personnel deploy for Exercise Red Flag 07-2.1, Nellis AFB, Nevada January 2007 5 personnel deployed for AEF, JADOC, Andrews AFB, MD January 2007, 112th AOS hosts first AOC exercise, Exercise Cyclone Thrust April/May 2007, 8 personnel deployed Exercise Blue Flag 07-2, Davis-Montham AFB, Arizona June 2007, 20 personnel deployed Exercise Blue Flag 07-2, Davis Montham AFB, Arizona July 2007, 14 personnel deployed for Exercise Virtual Flag 07-4 September 2007, 19 personnel for Operation Northern Sovereignty, Elmendorf AFB, Alaska (First deployment of 112th AOS) October 2007, Exercise Eagle Talon/Unified Endeavor January 2008, 18 personnel deployed for Exercise Red Flag 08-2.1, Nellis AFB, Arizona March 2008, Exercise Arctic Keystone April/May 2008, 2 personnel deploy for exercise Austere Challenge, Ramstein AB, Germany

112 Aircraft Control & Warning Squadron Pennsylvania ANG Allotted: 24 May 1946 to ANG Created: 1 April 1949, General Order Number 23 Federal Recognition: 2 May 1949 Reorganized: October 1949, 2 GCI stations; State College and Mifflin County Airport Activated: December 1951 Deployed: 16 January 1952 to Grenier AFB, New Hampshire Mobilized: 1 December, 1951 – 1 December, 1953 Demobilized: 1 December 1953, returned to Pennsylvania control Equipment: SP-1M September 1949

112 Tactical Control Squadron State College, Pennsylvania Redesignated: 15 October 1988 as TCS Control & Reporting Post Manning: 27 Officer, 213 Airmen Commanders: 1979 - 1994 Lt. Colonel James M. Herron Deployment: July 1989 Great Exuma, Bahama Island for counter-drug operations Exercises: June 1989 Exercise Sentry Yankee '89 August 1989Exercise Sentry Independence '89 Sep/Oct 1989 Exercise Display Determination '89, Canakkale, Turkey June 1990 Exercise Sentry Yankee '90, Sea Girt, New Jersey June 1990 Exercise Sentry Independence 90, Volk Field, Wisconsin July 1990 Operation Commodore, Erie Pennsylvania September 1990 Operation ANGIE, Great Inagua, Bahamas Islands May/June 1991 Exercise Ocean Safari, Ovar, Portugal September 1991 Operation ANGIE, Great Inagua, Bahamas Islands February 1992 Operation ANGIE, Great Inagua, Bahamas Islands Awards:

USAF Outstanding Unit Award

Indiantown Gap Military Reservation, PA, 13-17 Aug 1949 Fort George Meade, MD and Palermo, NJ, 12-26 Aug 1950 Twin Lakes, NJ, 11-25 Aug 1951 Benton AFS, PA, 12-26 Jun 1954 Benton AFS, PA, 18 Jun-2 Jul 1955 Bunker Hill AFB, IN and Fort Wayne, IN, 10-24 Aug 1957 Camp Atterbury, IN, 18 Jul-1 Aug 1958 Roslyn ANG, NY, 9 Jul-23 Aug 1959 Aberdeen Proving Ground, MD, 6-20 Aug 1960 Fort Bragg, NC, 17 May-30 May 1963 Onyx Peak, San Bernadino National Forest, CA, 18 Jul-18 Aug 1964 Shaw AFB, SC, Long Island, NY, Syracuse, NY, 10-24 Jul 1965 Camp Dempsey CT, 16-30 Jul 1966 Suffolk County AFB, NY, 29 Jul-12 Aug 1967 Camp O'Ryan, North Java, NY, 13-27 Jul 1968 Worcester, MA, 19 Jul- 2 Aug 1969 Griffiss AFB, NY, 11-25 Jul 1970 Niagara Falls, NY, 14-28 Jul 1973

Air Force Lineage and Honors Created: 23 May 2020 Updated:

Sources Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.