Aircraft Division History

Fifteen years after Governor Henry Caulfield signed into law Senate Bill 36 creating the Missouri State Highway Patrol on September 14, 1931, the Patrol purchased its first aircraft. The first of two war surplus, Stinson L-5, single engine aircraft were purchased on August 28, 1946, forming the nucleus of the Patrol's aviation history. Members originally assigned to operate these aircraft were Trooper Hugh A. Wallace, serving as senior pilot, Sergeant Ralph H. Eidson and Trooper Robert F. Boyland.

By the early 1950s, the original aircraft were replaced with two Cessna 180s and one Cessna 190. The Cessna 190 was stationed in Lee's Summit and used for traffic control and observation for special events, as well as executive transportation for Patrol personnel. The Cessna 180s were stationed in Sedalia and Jefferson City. These aircraft would respond to requesting troop locations to assist road officers patrolling two-lane roadways, observing and identifying vehicles with drivers making dangerous passes. Statutes listing absolute maximum speed limits for different types of Missouri highways for day and night travel were not passed until 1957.

Aviation capabilities were expanded in 1959, when the Patrol purchased its first helicopter, a new Bell 47G model helicopter. This aircraft was operated continuously from 1959 until 1988, accumulating a total of 8,596.8 hours. Sergeant Bill East, the first member to have full-time flying duties, was assigned to fly this aircraft, responding statewide to calls for service from Jefferson City. Eventually, N5176B was assigned to Troop C and flown by Troop C pilots as N96MP.

Aircraft Division Created

In 1961, while serving his fourth term as superintendent, Colonel Hugh H. Waggoner created the Aircraft Division. Sgt. Bill East was promoted to lieutenant and appointed as the Aircraft Division's first director. In 1961, four years after statutes were passed limiting vehicles speed, aircraft were actively used to observe, detect, and assist with enforcing the speed limit. Speed blocks were painted on highways in several areas of the state and a plane from Jefferson City was scheduled for enforcement.

For years, Patrol aircraft and pilots occasionally flew ranking state officials, and in 1961, a Beechcraft Baron was purchased specially to provide executive transportation for Governor John M. Dalton. In June 1965, an Aero Commander was procured to fly Governor Warren Hearnes. The Patrol provided gubernatorial transportation until the beginning of Governor Bond's first administration in 1973.

On June 8, 1970, Colonel E.I. "Mike" Hockaday directed assignment of Patrol plane 76Q to Troop B, Macon, to conduct experiments in traffic law enforcement.

Until this time, 76Q had been stationed in Jefferson City, where it was used primarily for speed enforcement on major highways in various troop locations. Seven objectives were established to:

1. Determine if stationing of an airplane in one troop for exclusive use would increase utilization of equipment and manpower.

2. Create scheduling procedures to have pilots available for enforcement flights during high accident and violation times.

3. Increase use of aircraft patrols on supplementary routes.

4. Use aircraft to target and detect a variety of hazardous traffic violations.

5. Publicize activity of aircraft enforcement to achieve a psychological deterrent effect to reduce traffic law violations.

6. Conduct surveys and experiments to broaden the usefulness and to develop new traffic enforcement techniques.

7. Compare traffic data and accident statistics of the troop with concentrated aircraft enforcement to troops without aircraft enforcement.

At the conclusion of this period, July-September 1970, of concentrated aircraft traffic enforcement activity, data was analyzed against the previous year's statistics. The data indicated Troop B's accident and injury rates were significantly lower than other troops. After evaluating the seven identified objectives of the three-month period of aircraft traffic enforcement, it was recommended by the review board to continue the project for one more year. This project seems to have been the foundation providing for the Aircraft Division's growth and resulting in the assignment of fixed-winged aircraft in eight out of nine troops for enforcement operations.

Listed are the troops and the year of assignment of an airplane dedicated for traffic enforcement to each:

Troop A	1973
Troop B	1971
Troop C	1964
Troop D	1977
Troop E	1974
Troop G	2000
Troop H	1990
Troop I	1994 (reassigned to Troop G 2000)

Aircraft Division's Mission

Since the Patrol's original aircraft were acquired in 1946, it has been the Aircraft Division's intent and goal to provide support and enforcement service to road members, criminal investigations, and emergency services to Missouri's citizens. Traffic enforcement flights were routinely flown to enforce motor vehicle traffic laws, with enforcement expanded in 1961 to concentrate on motor vehicle speed limit violations.

Patrol pilots and aircraft actively flew medical relays, relaying blood, organs, and patients during the '70s and into the late '80s. With improved medical care readily available to all regions of the state and the availability of EMS helicopters to transport patients, the Patrol discontinued medical flights in 1988. Retired Sergeant A.J. Stricker stated some of the most rewarding flights he flew where transporting premature infants to Columbia for expert neonatal care. Sgt. Stricker fondly dubbed these infants "Prop Wash Babies", creating a certificate with Patrol Wings to give to the parents.

Over the years, including the first aircraft acquired by the Patrol, United States Department of Defense (DoD) programs have provided the Patrol with aviation resources to conduct the Patrol's airborne mission. In the early '90s, the Patrol's aviation assists were greatly augmented when the DoD reallocated excess military aircraft to law enforcement agencies with an active drug enforcement program. Lieutenant Rich L. Rehmeier was instrumental in acquiring numerous aircraft, including multi-engine piston, multi-engine turbine and turbine rotorcraft. Patrol pilots, providing aviation services to municipal, county, and federal law enforcement agencies for all aspects of airborne law enforcement, have flown these aircraft more than 13,000 hours since 1992.

The war on drugs has been a home front battle for Missouri with the Patrol being the leader in the detection, apprehension, and prosecution of individuals involved with manufacturing and distribution of illegal narcotics. Aiding with the War on Drugs has been an Aircraft Division priority mission. Rotorcraft resources are allocated annually to assist troop marijuana eradication officers, aiding with the location of cultivated cannabis. Multi-engine aircraft are available to transport arrested drug couriers to their intended destinations. These flights provide timely transportation of Patrol, county, and federal investigators to nationwide destinations to continue investigations of inter-state narcotic distribution organizations. Since 1988, Patrol aircraft have flown personnel to 39 of the lower 48 states to conduct criminal investigations or perform administrative functions. Since 1988, Washington, Idaho, Montana, Wyoming, North and South Dakota, Vermont, Delaware, and Maine are the only states remaining to be visited by Patrol aircraft.

Hazards to Airborne Law Enforcement

Law enforcement by nature is a hazardous occupation and being in airborne law enforcement does not insulate the member from threats. Trooper J. N. Greim (E) was fatality injured on July 13, 1945, while riding in a private plane searching for two fugitives near Corning, AR. His pilot died in the crash. Sergeant Frank Stephens and Sergeant Lewis Bounds escaped death when the helicopter they were operating crashed just north of the Jefferson City Airport on July 31, 1978. Pilot Corporal Mark A. Tovar and Sergeant Tony D. Selvey sustained injuries after their helicopter experienced component failure and crashed on approach to the Cassville, MO, airport on October 6, 1993.

Sergeant William V. “Bill” Cottom made a safe emergency landing on U.S. Highway 54 near Brazito, MO, on February 13, 1994, after his aircraft engine had a catastrophe failure. Helicopter N90MP was struck with a blast of 00 buckshot fired by a bank robbery suspect on May 19, 1994, with pilots Sergeant A.J. Stricker, Sergeant Greg L. Word, and Troop F Special Emergency Response Team member Trooper Dave H. Mease on board. Sergeant David C. May (E) and his passenger were fatality injured when Sgt. May’s helicopter crashed on May 19, 1999, while assisting with a Special Olympics function. Sgt. Cottom walked away from the wreckage of a November 7, 1989, helicopter crash east of Farmington, MO. Sergeants David A. Callaway and Matt K. Funderburk were seriously injured when the helicopter Sgt. Callaway was piloting had a component failure and crashed shortly after departure from the Springfield Downtown Airport on August 7, 2002.

Aircraft Division Summary

As the Patrol celebrates 95 years of history, the Aircraft Division is currently operating 16 aircraft located in eight troop locations. Two twin-engine aircraft (N2MP a Beechcraft King Air 200 and N116MP a Beechcraft Queen Air BE65), a single-engine Cessna 210 (N92MP), two Bell OH-58 DOD helicopters (N177MP and N283MP), and a Bell 206BIII helicopter (N90MP) are stationed in Jefferson City. Troop A operates N94MP, Troop B operates N81MP, Troop C operates N95MP, Troop D operates N97MP, Troop E operates N873MP, Troop G operates N79MP, and Troop H operates N91MP, which are all Cessna 182 single-engine, traffic aircraft. Troop C operates N96MP, a Bell 206BIII helicopter; Troop D operates N383F, a McDonnell/Douglas 500E helicopter; and Troop G operates N60MP, a Bell OH-58 helicopter. Fifteen full- and part-time dedicated law enforcement pilots professionally operate these aircraft for proactive and reactive missions.

The Patrol has provided 80 years of aviation law enforcement service, 65 years as a Patrol division, to Missouri citizens. The Aircraft Division has operated at least 55 aircraft in the past 80 years with 118,740 hours of confirmed flight time. As the Patrol celebrates its 95 years of landmark service, the Aircraft Division will

continue to provide aviation law enforcement services to fulfill the mission of “service and protection”.

2000-2010

Beginning January 2003, the Aircraft Division provided management and supervision oversight for Office of Administration's (OA) Flight Operations, which consisted of one pilot, one aircraft maintenance specialist, one administrative office support assistant, two twin engine Piper Navajo aircraft, and one Beechcraft King Air twin engine pressurized aircraft. In July 2006, an inter-agency merger was completed with the Missouri State Highway Patrol's Aircraft Division absorbing OA's Flight Operations personnel, equipment, and facilities. For the first time in the history of the Patrol's Aircraft Division, it had the benefit of a full-time aviation mechanic and administrative office support assistant.

As a result of this merger, the Aircraft Division was tasked with officially providing administrative aviation services to all state-elected office holders, appointed state officials, and qualifying personnel. During the merger process, OA's Piper Navajo twin engine airplanes and the Patrol's Beechcraft King Air and Queen Air airplanes were liquidated. The current fleet of aircraft managed and crewed by the Aircraft Division are one 1999 Beechcraft, eight place King Air, one Cessna, 210 Centurion six place single engine airplane, seven Cessna 182, four place airplanes, and six helicopters.

All aircraft based and operated from the Jefferson City Memorial Airport were consolidated into the larger hangar that was originally used by OA Flight Operations. The Patrol's hangar, which was built new after the old hangar was destroyed by the 1993 flood, was sold and removed from the state facilities inventory. Prior to relocating Aircraft Division personnel into the new Jefferson City hangar location, personnel from the Patrol's Construction and Maintenance Division completely renovated and modernized the entire office area. Information Systems Division personnel configured the office area with newer system equipment that greatly improved the speed and efficiency of Aircraft Division office equipment and computers.

In 2009, the Aircraft Division, in cooperation with the Communications Division and the State Emergency Management Agency, purchased and installed a new Forward Looking Infrared camera system with an integrated microwave downlink system on a helicopter based in Jefferson City. Forward Looking Infrared (FLIR) technology creates clear, crisp visible images based on small differences of emitted temperature between different objects. These images are displayed on a monitor mounted in the cockpit of the aircraft carrying the airborne camera system. The camera has three different lenses with the capability of creating color and low light images as well as thermal images. The integrated microwave downlink portion of the system electronically transmits a digital signal to a ground-based receiver enabling incident commanders to have live information on any number of given events. A set of ground-based receivers includes two

portable suitcase units that can be flown in the helicopter and deployed with ground personnel at a remote site for small scale operations. For larger, long-term operations, receiving equipment was installed in the Patrol's mobile command bus, which would be deployed to the site of any large scale natural or man-made disaster for critical incident management. Equipment was also installed in the Patrol's mobile command bus which can, via an Internet protocol address, link live data to Patrol command staff allowing them to maintain real-time connection with current, ongoing, large-scale critical incidents.

A combination of funding sources, drug forfeiture asset funds and grant monies awarded by the State Emergency Management Agency, were used in the purchase, installation, and training for this system acquisition. This technology allowed the Patrol to deploy the newest available equipment for day and night operations and increased the efficiency and effectives of the respective operations.

On October 15, 2010, at approximately 11:10 a.m., the Patrol’s Aircraft Division suffered the tragic loss of Sergeant Joseph G. Schuengel. Sgt. Schuengel was operating a Highway Patrol Bell 206 helicopter, N96MP. While returning to St. Louis-Spirit airport from Jefferson County after completing a traffic enforcement flight, the helicopter crashed on a residential street about four miles southeast of Spirit airport. Sgt. Schuengel was fatally injured in the crash. He is the 28th member of the Patrol to make the ultimate sacrifice.

2011-2019

On March 27, 2011, the Aircraft Division underwent a change in the management structure of the Patrol pilots. Under this new structure, the pilots were assigned to General Headquarters, under the direct supervision of the director of the Aircraft Division. The pilots continued to operate from the same airport locations, with one exception. The airplane and helicopter located at West Plains were transferred to Jefferson City, with future intentions of transferring the helicopter to Cape Girardeau. The Aircraft Division pilots were still strategically located at various airports around the state to provide statewide support for aviation calls for service.

In August 2011, the Aircraft Division purchased a Bell 407 helicopter, which was assigned to Jefferson City. This aircraft is used for the following missions: Short haul rescue, FLIR (Forward Looking Infra-Red), and searches for wanted individuals as well as missing children and adults. In November 2011, the Aircraft Division took delivery of the Bell 407. This helicopter provides the Aircraft Division with much greater performance capability than the Bell 206. The division was able to equip this helicopter for Search and Rescue (SAR) missions.

In April 2012, the Aircraft Division began extensive training with Air Rescue Systems (ARS) in the Bell 407 helicopter to become certified for short haul rescue operations. Initially, pilots trained by flying a 150-pound weight at the end

of a 100-foot line while learning the skills needed to manage the weight and prevent ‘swing’. During the next two months, pilots continued to sharpen their skills using the 150-pound weight. Eventually, the pilots mastered the skill needed to lift, steady, insert, and extract the weight with strict control.

In June 2012, after a successful check ride with FAA certified ARS instructors, pilots were allowed to put rescuers (troopers) ‘on the line’ for the first time. These rescuers also trained with ARS and learned how to use the equipment and the visual and audio signals needed to safely transport victims. After many weeks of high intensity instruction/training with ARS personnel, the Aircraft Division was certified for helicopter short haul missions. This certification was a significant event. It was the first time in the Patrol’s history that such an invaluable rescue tool was available to the citizens of Missouri and other law enforcement agencies.

In December 2012, the Aircraft Division purchased a Beechcraft King Air 250 to provide personnel transport for members conducting criminal investigations, for command staff officers on administrative functions, and for elected or appointed officials or other qualified state personnel. The King Air provides transportation for up to nine passengers and is capable of cruise altitudes above 30,000 feet.

During 2013, Aircraft Division personnel trained frequently in helicopter short haul rescue techniques. On April 18, a pilot and two rescuers, using helicopter short haul rescue, responded to a flooded area in Texas County and rescued two individuals. The two men, one of whom was a paraplegic, had become separated and trapped by rising flood waters while on a hunting trip.

On October 26, 2013, while on a training flight in Jefferson City, two pilots were forced to make an emergency landing following an engine failure in a Bell OH-58 helicopter. During the landing, the helicopter was heavily damaged. One of the two pilots received a minor injury.

On May 20, 2014, a Bell 206 helicopter, N90MP, was relocated from Jefferson City to Moberly. This was the first time in Patrol history that a helicopter was assigned to Moberly, which resulted in decreased helicopter response times for the citizens of northern Missouri. It is used for criminal and emergency searches and assists other law enforcement agencies.

Aircraft Division pilots completed Water Egress Training in June and July 2014. The training covered topics such as bracing for impact, unlatching cabin doors, and finding reference prior to impact with water. The pilots were trained using an underwater escape trainer with a generic fuselage section representing an aircraft cockpit.

On August 1, 2014, Sergeant Michael D. Hargus was promoted to the rank of lieutenant and designated the assistant director of the Aircraft Division. For the

first time in Patrol history, Aircraft Division management personnel included both a director and an assistant director.

On October 26, 2014, several members of the Aircraft Division completed Fire Suppression Training in Jefferson City using the Patrol's Bell 407 helicopter equipped with a Bambi Bucket. The completion of this fire suppression training allowed the Aircraft Division to provide another important service for the citizens of Missouri.

In June 2016, members of the Aircraft Division began training on a new Augmented Reality System which was installed in the Patrol helicopter. This system is designed to assist Patrol pilots in locating and identifying potential suspects and vehicles by providing location information by simply looking at the map display in the cockpit.

ARS is an advanced mission management and mapping system designed to augment full motion video in real time with geospatial information. The system uses addresses, roadways, businesses, etc., and overlays them on the video images from the forward-looking infrared camera. This system also makes it easier to operate the camera, because instead of looking away from the camera to look at a map, all the information appears on the screen. This technology is a significant addition to Patrol's resources. The high-definition images from the camera are clearer, day or night, making it easier to locate and identify missing or wanted persons, and in some cases, evidence.

"The ARS has made such a drastic change for the Patrol in so many ways," said Sergeant David C. Dinges (Q/AD). "It's brought our technology up-to-date where it should be. On nearly every flight I have been on, it has made a difference in apprehending criminals. We are able to monitor vehicles and criminals from the air allowing law enforcement on the ground to keep a safe distance, especially during high speed interactions".

On August 20, 2016, the Patrol was conducting an aircraft operation on Interstate 70 in St. Charles County. During the eight-hour operation, the pilot checked two separate motorcyclists traveling at a high rate of speed. When troopers attempted to stop the motorcycles, both motorcyclists refused to yield to the troopers and pursuits ensued. The pilot could follow both motorcycles and guide officers to their locations using the ARS. One of the motorcycle operators was arrested and additional felony drug charges are being sought.

"The ARS allowed officers involved a high-speed incident to discontinue traveling at high speeds and allow the helicopter to monitor the violator, thus preventing serious injury to officers and the public," said Sergeant Michael E. Broniec (C).

On February 24, 2017, Troop A requested support from the Aircraft Division in locating a missing 49-year-old male who had been camping near Truman Lake. Lieutenant Michael D. Hargus and Sergeant Dustin T. Metzner responded to

assist in the Patrol's helicopter. At approximately 4 a.m., on February 25, the Patrol helicopter crew located the missing person using the FLIR camera on the lake near a partially submerged sand bar. The crew then directed marine enforcement officers to the person's location where they extracted him and transported him to awaiting emergency medical personnel. The person suffered serious health effects from being exposed to the cold that night but made a full recovery.

Throughout 2017, the Aircraft Division continued to support the troops during aggressive driving operations using the FLIR and mapping system installed on the Patrol helicopter. During these operations, the helicopter assisted ground officers in 26 vehicle pursuits by providing valuable oversight and safety information using the mapping system. Because of the efficiency of the helicopter and camera system during these pursuits, 23 drivers were apprehended safely.

During 2017, to increase the cost effectiveness of aircraft operations, the Patrol sold three of the highest flight time Cessna 182s and a KingAir C90.

On January 23, 2018, the Aircraft Division began on-duty evening shift coverage every Tuesday through Saturday evening from 4 p.m. to midnight. Previously it was more likely the flight crews would respond from an off-duty status during these times. Because of these shift changes, two pilots are on duty and available to respond to calls for service resulting in a faster response time and more efficient use of the FLIR mapping system throughout the state.

On May 25, 2019, flood waters from the Missouri River covered the Jefferson City Memorial Airport. The high river level resulted in approximately four feet of water inside the Aircraft Division hangar and closed the airport for several weeks. Patrol aircraft were moved to the Columbia Airport. Offices for division personnel were moved to the Missouri State Emergency Management Agency Warehouse in Jefferson City.

On June 24, 2019, an MX-10 FLIR camera with tactical flight officer control station was installed in a Cessna 182. This fixed-wing platform with a high-definition camera provides many services to the public and other law enforcement agencies, including surveillance, hazardous moving violation and vehicular pursuit support, and searches for criminals and missing persons. When the Patrol's helicopter or airplane has been deployed above a suspect, the flight crew is able to report the location of the fleeing vehicle to officers on the ground, allowing those officers to terminate a pursuit and follow at a safe distance. This approach increases safety for the motoring public, while still providing the opportunity to apprehend a fleeing driver. During 2019, the Aircraft Division assisted with 43 vehicular pursuits resulting in an apprehension 39 times, which is a 90 percent success rate.

2020-present

In the spring 2020, the Aircraft Division transported shipments of Remdesivir to treat hospitalized COVID-19 patients. Both helicopter and fixed-wing aircraft were used. These deliveries provided another opportunity for the Aircraft Division to serve Missouri's citizens during a health emergency.

In May 2020, work began at the Aircraft Division hangar to repair the damage caused by the 2019 flood. The hangar floor was prepared and a new epoxy coating applied. New lighting and a closed-foam wall insulation were installed. A storage area, to be used for maintenance support tools, was restructured. Floor-based shelving was elevated to protect the equipment from future flood waters. These changes were designed to provide greater security and flexibility for valuable tools and equipment during the next flood event at the airport. Flood resistant materials used during this remediation project can be easily cleaned and repaired. This will decrease the time required for recovery and reduce the cleanup cost compared to traditional materials after future events. On October 7, 2020, Aircraft Division personnel moved office furniture and equipment into the new office space and Patrol aircraft returned to the hangar.

Throughout 2020, Aircraft Division flight crews, utilizing advanced technology from the camera and mapping systems, assisted ground officers with 43 vehicular pursuits, with 40 of those resulting in an apprehension. This 94 percent success rate was achieved because of the strong partnership between flight crews and ground officers, who worked closely together to serve and protect. In 2021, this effort continued successfully with 73 vehicular pursuits resulting in 70 of them ending in apprehension.

During 2021, six troopers completed an Aircraft Division familiarization program. This program allowed interested members the opportunity to experience aircraft operations and was conducted several times throughout the year. This program occurred over a three-day period and included a traffic enforcement flight, a hazardous driving enforcement operation, and an aircraft familiarization training flight.

The cockpit instrumentation of several Patrol aircraft was updated during 2021 with the installation of new communication and navigation radio equipment. This advanced GPS moving map technology increases flight safety and reduces risk, especially during the critical phases of flight. It also provides additional communication options with ground officers during law enforcement missions.

Throughout the fall of 2021 and into 2022, Aircraft Division flight crews assisted with hazardous moving violation details, driving while intoxicated saturations, auto theft details, and criminal surveillance. These details continued to result in a successful apprehension rate and were performed in addition to the calls for criminal searches and searches for missing persons.

During 2022, two long-serving, dedicated pilots, Lieutenant Michael D. Hargus and Sergeant Jeffrey G. Noack, retired.

On July 1, 2022, Sergeant Bradley D. Holman was promoted to lieutenant and designated the assistant director of the Aircraft Division. For the first time in Patrol history, the Aircraft Division hired its first female pilot, Trooper Callie A. Volle, on July 3, 2022.

As with previous years, throughout the remainder of 2022, the Aircraft Division flight crews continued to assist with hazardous moving violation details, driving while intoxicated saturations, auto theft details, and criminal surveillance. These missions continue to be successful in locating fleeing suspects.

In August 2022, the Aircraft Division assisted with nearly a two-week manhunt in Adair County, near Thousand Hills State Park, for a homicide suspect. The crews of 93MP provided overhead-watch for the SWAT teams and assisted with searching the densely wooded hilly terrain. In October, 93MP provided overhead watch and traffic information for the three-day Garth Brooks concert event at Thunder Ridge Nature Arena near Branson, MO. This was the first big event at this venue. Also in October, 93MP assisted numerous fire departments at a large natural cover fire in Wooldridge, MO. Due to the fire covering thousands of acres, the crew of 93MP assisted with coordinating the positioning of fire units which was crucial to containing the fire.

On June 20, 2023, the Aircraft Division took delivery of a new Bell 407GXI helicopter (95MP). This new helicopter is equipped with a FLIR (infrared) camera and supports the same type of missions as 93MP.

As of June 2023, the division operates a King Air 250, a Cessna 210, three Cessna 182s, and two Bell 407 helicopters from Jefferson City. One Cessna 182 and one Bell 206 helicopter are assigned to Bolivar.

Division Directors:

- Lt. Bill East, 1961-1976
- Lt. James R. Davis, 1976 - 1980
- Lt. William J. Turner, 1980 - 1988
- Lt. Michael B. Pace, 1988 - 1990
- Lt. Richard L. "Rich" Rehmeier, 1990 - 1998
- Lt. William V. Cottom, 1998 - 2002
- Lt. Gregory L. "Greg" Word, 2002 - 2011

- Lt. David K. Striegel, 2011 - 2013
- Capt. David K. Striegel, 2013 to 2024
- Capt. Bradley D. Holman, 2024 to present