



Hoist of 10-year-old girl from Sugarloaf Mountain, Frederick

Maryland State Police Aviation Command

The State of Maryland enjoys a unique **multi-functional** Aeromedical Evacuation, Search & Rescue, Aerial Hoist, and Airborne Law Enforcement capability, provided by the Maryland State Police Aviation Command (MSPAC). **The MSPAC provides four distinct helicopter missions utilizing one type of aircraft and crew. This 4 for 1 ratio makes the MSPAC a leader in cost effective aviation support in a latest technology public aircraft operation, using the modern AW-139 medium-twin helicopter.**

- From seven operating bases, MSPAC provides a 25-minute **Aeromedical Evacuation** (Medevac) response to a Trauma Scene in support of the Maryland's world renowned Integrated Emergency Medical Services (EMS) Systems.
- Aviation Command crews are first called by the United States Coast Guard for **Search and Rescue** and **Medevac from Cargo and Cruise Ships** within the Chesapeake Bay, the Potomac River, and up to fifteen miles into the Atlantic Ocean.
- MSPAC provides land based Search & Rescue and **Aerial Hoist** capability critical in our Western and Coastal regions.
- MSPAC helicopters provide **Law Enforcement and Homeland Security** support to all jurisdictions and law enforcement organizations in Maryland and neighboring states.

MSPAC services are funded partly by a surcharge of \$14.50 per year added to vehicle registration fees. This surcharge provides funding for Maryland's coordinated EMS System, including the ambulances, fire equipment, and trauma units across the State.

History of the MSPAC Helicopter

Following the crash of Trooper 2 in 2008, the decision was made to provide Marylanders with the safest helicopter, across all mission requirements. With the previous Dauphin helicopter, the only option for a hoist was to lower a rescue device and hope that the victim could get themselves into the basket. Today, from a fully autopilot coupled hover, we have the ability to send a Rescue Technician/Paramedic down to assist in medical care and prepare the victim for hoist. In the previous aircraft, the Forward Looking Infrared Camera (FLIR) was largely ineffective. Today we have a highly capable day/night/infrared camera that has proved extremely accurate in locating missing children, elderly patients, lost hikers, distressed boats, and fleeing felons. Previously, we could only transport one seriously injured patient; in the current Agusta Westland

AW139 helicopter we can provide superior inflight medical care for two trauma victims, and hoist multiple victims, before flying to the hospital.

In the past, when flying at night the pilot could not use Night Vision Goggles (NVG) and had to fly "unaided" into confined landing zones. Today, we fly an aircraft that is fully NVG compatible and the pilots use Night Vision to greatly enhance the safety of night flying. Before, in bad weather, and when flying in the clouds, the single pilot had to manually manage his GPS navigation using an aftermarket navigation system. Today, we fly with a state of the art Global Positioning Navigation System with a moving map display and a terrain avoidance system that is fully integrated with the aircraft's 4-axis autopilot system. This system is comparable to modern airliners, and is capable of autonomous flight through a full instrument approach to a runway or a hospital landing pad.

Finally, the AW-139 helicopter is staffed by two experienced pilots, affording our Trooper/Paramedics and passengers the maximum protection from single pilot errors, disorientation, medical incapacitation, or task saturation during complex missions.

While the selection of the new AW-139 helicopter to replace the **25-year-old Dauphin** was visionary for its time, the AW-139 has now become one of the most prolific MedEvac, Military, Search and Rescue, and Law Enforcement aircraft around the world. Most recently, the United States Air Force selected the military variant of the AW-139 to replace all of the helicopters flying in support of the National Capital, and the Nation's nuclear missile sites throughout the United States.

Aviation Command Troopers

At the heart of the Aviation Command are our dedicated Maryland State Police Trooper / Rescue Paramedics. Working as a team, two highly trained Troopers provide Advanced Life Support trauma medicine from the scene of an incident to the hospital. The Trooper team provides the ability for the helicopter to seamlessly transition between Law Enforcement, to Medevac, to Search and Rescue or Aerial Hoisting.

Aviation Command Civilian Pilots

The target pilot for the Maryland State Police Aviation Command is an experienced twin turbine engine helicopter pilot with overwater, mountain, hoist, tactical, instrument (flying in clouds), off-field landing, and multi-pilot background. *The MSPAC is not a flight school; the Command demands highly competent, FAA Commercial/Instrument Rated pilots as a starting point for integration into the Command's complex mission.* By the time a military trained helicopter pilot completes their obligated service, they normally have the requisite flight hours, maturity, and experience to join MSPAC.

Aviation Command Civilian Aircraft Mechanics

Diligently working behind the scenes to provide MSPAC a **99.6% aircraft availability**, from all 7 Aviation Sections throughout the State, are the dedicated men and women of the Aircraft Maintenance Division. These FAA-licensed professionals ensure the airworthiness of the aircraft flown by our aircrews and passengers. Without their skilled services, no hoist would be performed, no medevac completed, no search or rescue possible, and no criminal apprehended with aviation support. The men and women of the MSPAC Maintenance Division are an integral part of the 50-year mission of the world recognized Maryland State Police Aviation Command.