

Naval Air Station Patuxent River, MD

Helicopters

Brief history of helicopter operations at Naval Air Station (NAS) Patuxent River (PAX).

In April of 1949 the United States Navy formally established the rotary wing section of the flight test division at what was then called Naval Air Test Center, Patuxent River Maryland. In 1975 the rotary-wing test section was renamed the Rotary Wing Test Directorate and in 2002 was formally established as an air and test evaluation squadron. The United States Test Pilot School (USNTPS), which was established in 1945 added a rotary wing syllabus in 1961.



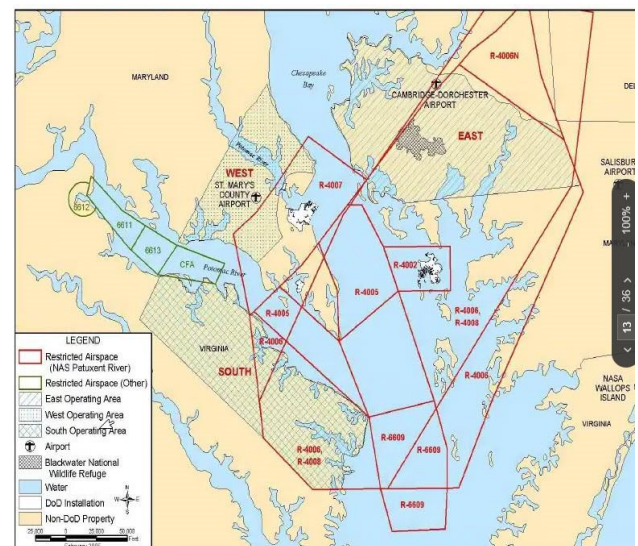
U.S. Navy Search and Rescue (SAR) Helicopter MH-60S Conducting Low Level Form Flight (Photo Credit to Liz Wolter)

Why does NAS Patuxent River conduct so many helicopter operations?

NAS PAX is the U.S. Navy's headquarters for the research, development, test and evaluation of Navy aircraft, aircraft components and related systems needed to carry out their military mission. Helicopters are an integral part of tenant squadrons HX-21 and VX-1 in addition to the curriculum of the USNTPS and the Air Operations Search and Rescue (SAR).

Why do helicopters fly over or near people's homes?

All flights are required to comply with FAA altitude regulations as published in the Code of Federal Regulations (CFR) and those found in the NAS PAX River Air Operations Manual. Flight paths follow standards set by the FAA, and whenever possible testing and training operations are conducted over water or along shoreline areas. However, at certain times, the weather, winds, or construction occurring on the installation may require aircraft to alter their route. Helicopters at NAS PAX follow published operating routes. The maps of these operating routes indicate a general route pilots may take and there is leeway provided within the operating of each route. Conducting routine training and test events are essential for the precision and safety of our military men and women and the success of their mission. All testing and training events are carefully monitored, logged, and approved based on mission need.



Map of Helicopter Operating Areas

Fact Sheet

What are typical flight altitudes for helicopters?

Helicopters typically operate between 1,000 and 3,000 feet. In the local area, helicopters generally transit to operating areas at an altitude between 500 to 800 feet. Once in the operating areas helicopters generally fly above 500 feet.



*CH-53k Stallion performs refueling tests
(Photo credit to Victoria Falcon)*

Why are helicopters allowed to fly lower than fixed wing aircraft?

Helicopters and fixed wing aircraft often operate simultaneously and must have assigned airspace to avoid collisions. Higher altitude airspace is typically assigned to fixed wing aircraft. Naval Air Station Patuxent River's Air Operations Manual provides procedures and rules for all pilots and aircrew who fly in local airspace. The Air Operations Manual requires helicopters to fly at 500 feet or below (at times) for safety reasons such as while in transit to certain operating areas.

Title 14 of the Code of Federal Regulations, Section 91.119 titled *Minimum Safe Altitudes: General*, details the minimum safe operating altitudes for both fixed wing and rotary wing aircraft. The regulation states that helicopter operations MAY be conducted below the minimum altitudes (500 feet) set for fixed-wing aircraft provided each person operating the helicopter complies with any routes or altitudes specifically prescribed for helicopters by the FAA.

Why do helicopters hover and why do they appear to hover over populated areas?

On occasion the parameters of testing or training may necessitate a helicopter perform maneuvers requiring the helicopter to "hover" or stay in one spot for a duration of time. Hovering maneuvers are typically executed within the confines of NAS Patuxent River, Outlying Field (OLF) Webster Field, or over water. When hovering over water, helicopters stay approximately 300 yards from the coastline and aircrews ensure that boats are cleared from the immediate vicinity during operations. Helicopters may sometimes appear to be hovering over land when in fact they are not. This illusion is due to the relatively slow airspeed at which the helicopter may be operating at the time.

Are helicopter operations safe?

Safe aircraft handling and operation is taken very seriously by pilots, instructors, and members of aircrew at NAS PAX. On multiple occasions pilots and aircrew at NAS PAX have earned the annually awarded Chief of Naval Operations (CNO) safety award. This prestigious award recognizes a squadron for earning excellence in aviation safety by maintaining Class A mishap-free safety records throughout the fiscal year and making significant contributions to the Naval Aviation Safety Program. In addition to receiving recognition for having an outstanding safety record, many NAS PAX pilots are seasoned Fleet aviators who have experienced multiple deployments, upper-level qualifications, and have logged thousands of flight hours.



*UH-72 Lakota Training Helicopter for the U.S.
Naval Test Pilot School
(Photo credit <https://www.navair.navy.mil/>)*