166 NETWORK WARFARE SQUADRON

MISSION

The 166 NWS works performs offensive and defensive cyberspace operations, analysis, planning and operations support activities. It delivers world-class "tip of the spear" cyberspace operations capability for the war-fighter by employing extraordinarily talented cyber operators, analysts, planners, intelligence support and linguists.

The Network Warfare Defense Flight provides defensive network warfare operations support addressing Air Force, joint service and national mission requirements. The NWD Flight conducts network warfare operations, specifically providing in-depth diagnostic analysis of computer and network intrusion incident data in support of the DOD, the national security community and various law enforcement agencies.

The Network Warfare Offense Flight conducts integrated offensive network warfare operations to fulfill Air Force, joint and national mission requirements. The NWO Flight conducts network warfare operations by assembling configurable teams of highly skilled and certified mission planners, operators, analysts, and linguists to achieve mission objectives.

The Network Warfare Operations Support Flight provides planning, intelligence and policy capabilities in support of offensive and defensive network warfare operations to fulfill Air Force, special operations, joint and national mission requirements. The NWOS Flight supports network warfare operations by providing highly skilled cyber planners and intelligence analysts to achieve mission objectives and the supported the commander's desired effects.

LINEAGE
166 Network Warfare Squadron
Activated, 1 Oct 2008

STATIONS

New Castle ANGB, DE

ASSIGNMENTS

COMMANDERS

HONORS
Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

EMBLEM

MOTTO

NICKNAME

OPERATIONS
The concept for a network warfare unit at the Delaware ANG dates back to 1999 when groundwork began. Operations began May 2005 with the establishment of Detachment 1, Headquarters Delaware ANG. The 166th NWS was officially stood up 01 Dec 2008 with three flights consisting of 60 total members, 26 of whom are full time.

The squadron is operationally aligned with the 67th Network Warfare Wing and performs its mission at the Delaware ANG base in New Castle, Del., and at the National Security Agency at Fort Meade, MD.

The Air Guard leads among reserve forces in developing offensive cyber capabilities. It operates two 100-person squadrons that are capable of launching cyber attacks. They're Maryland's 175th Network Warfare Squadron and Delaware's 166th Network Warfare Squadron. Both squadrons support the National Security Agency, but Guard officials in Delaware and Maryland declined to discuss what the units do. As cyber operations and units expand, the active-component services are struggling to attract and retain qualified cyber troops. But that's proving to be less of a problem for the Guard. In an address at a CyberFutures Conference in March, Gen. William Shelton, the chief of the Air Force Space Command, called the shortage of cyber recruits for the Air Force "a serious national security issue." Shelton said far too few U.S. college graduates now are earning technical degrees. Of those who do, too many are foreign nationals who are ineligible to work in U.S. national security. And too many others "aren't the kind of folks that would necessarily take well to military life," he said. Pay is another problem. "There's no way that the military can compete

with civilian salaries" for cyber professionals, said Wyatt, the Air Guard director. But pay disparity creates opportunities for the Guard. By joining the Guard, cyberwarriors can keep their high-paying civilian jobs and still serve in the military. That formula seems to be working. The authorized personnel end-strength of Rhode Island's 102nd is 50 airmen, but "we're currently stacked at 58," said Marshall, the operations officer. In Washington state, where the 143rd Information Operations Squadron is being created from a combat communications squadron, "we're demographically blessed," says Dravis, the wing commander. The 143rd's headquarters sits about two miles east of Interstate 5, which runs from Canada to Mexico along the West Coast. In western Washington, the I-5 corridor is dotted with high-tech industries—Microsoft, Cisco, Boeing, T-Mobile, supercomputer-maker Cray and dozens of software companies. "We pull extensively from them," Dravis says. "We have significant experience levels walking into our units." The Los Angeles area is another "hotbed of cybertech," says Col. Stephen Beck, commander of the California Air Guard's 162nd Combat Communications Group. The group's new 261st Information Operations Squadron is based in Van Nuys, just north of L.A. In addition to numerous high-tech companies, many with ties to the military, the area has "tons of universities and two dozen cyber-research centers, all within an hour or two drive," Beck says. Similar demographics exist for the 175th in Maryland. As it expands, it expects to draw from high-tech companies clustered around Washington, D. C., and Baltimore. The locations are no coincidence. The three units were selected for cyber missions because of their proximity to cyber-savvy populations, Wyatt said. But proximity isn't always essential. 2012

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