

North Carolina DOT Gets Permission to Fly UAS at Night

The N.C. Department of Transportation now has the ability to operate its drones at night. On June 19, the Federal Aviation Administration granted NCDOT a waiver for the federal regulation that prohibits nighttime drone use.

The department plans to use the waiver for a number of missions; some include inspecting airport lightings and markings, performing natural disaster response to events like hurricanes, and mapping vehicle crashes on roadways. In addition, the department can respond to mission requests day or night.

“We’re excited about the many possibilities that having the night waiver allows us to explore,” said Basil Yap, the Division of Aviation’s Unmanned Aircraft Systems (UAS) program manager. “It enables us to expand our research and educational outreach capacities to benefit people across the state.”

According to Division of Aviation UAS program engineer Darshan Divakaran, a benefit of having the waiver is the ability to better utilize existing drone capabilities. “Thermal/infrared imaging is more effective at night when the temperature drops. The waiver will give us more flexibility to delve into this application,” says Divakaran.

NCDOT will also use the waiver to assist the public directly. For example, NCDOT’s drones can live-stream video of traffic conditions to commuters so they can make more informed decisions about driving during inclement weather and other potentially dangerous situations.

The Division of Aviation is now training its drone operators in principles of night UAS flight. The training covers human factors and regulations and best practices for night flight, as well as a test.

NCDOT also plans to develop standardized operating procedures for night flight that it can use to instruct local governments and state agencies in safe night flight procedures. More information about the NCDOT resources available can be found on the [NCDOT UAS resource page](#).