

Request for Special Temporary Authority

Carnegie Mellon University (“CMU”) requests 180-day Special Temporary Authority (“STA”)¹ to conduct experiments with radar devices installed on uncrewed aircraft systems (“UAS”) beginning October 9, 2026.

CMU plans to study the feasibility of using drones to help first responders locate casualties in the aftermath of a natural disaster. These experiments are part of the DARPA Triage challenge.² CMU will test the radar’s ability to conduct airborne casualty localization, heart rate and breathing rate estimation, and find casualties through walls/debris. The radar to be used in this experiment does not yet have FCC equipment authorization, which is why CMU is applying for an STA.

CMU is already authorized to conduct drone operations in six locations in connection with the DARPA Triage challenge.³ This STA requests authority to (1) add the radar devices to the drones at all locations where CMU can already received FCC authority to operate and (2) add a seventh location to operate the drones with the radar at the Westmoreland Public Safety Training Center in Smithton, PA. As described in CMU’s prior application, the drones will operate in the 3.55-3.7 GHz band.⁴ The radar devices will operate in the 5.8 GHz and 24 GHz bands, and testing will not exceed six months.

The drones will operate at the Westmoreland location consistent with CMU’s existing authorization. CMU will fly below 50 feet Above Ground Level and coordinate with a Spectrum Access System administrator to obtain channel assignments and avoid causing harmful interference to authorized users of the band, including General Authorized Access users. CMU has also confirmed that there are no FSS receive earth stations within the vicinity of the proposed operations. The experiments will last approximately one hour at a time.

The stop buzzer contact information follows:

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¹ See 47 C.F.R. § 5.54(a)(2) (“When an experimental program is expected to last no more than six months, its operation is considered to be temporary and the special temporary authorization procedure outlined in § 5.61 must be used.”).

² See *DARPA Triage Challenge*, DARPA, <https://www.darpa.mil/research/challenges/darpa-triage-challenge> (last visited Jan. 27, 2026).

³ See ELS File No. 0100-CX-CN-2026 (granted Mar. 3, 2026).

⁴ *Id.*