

From: Robert Jackson

To: Behnam Ghaffari

Date: May 13, 2019

Subject: Request for Info - File # 0258-EX-CN-2019

Message:

Carnegie Mellon University (CMU) was asked several questions with respect to 0258-EX-CN-2019, including: Justify the need for 60 months vs 24 months license.

CMU is seeking approval of this application to continue its work with remote sensing using radio technology and CMU-created sensing platforms. For example, CMU uses 3D printers to create a protective frame to hold sensors and radios. CMU has created sensors that measure changes in intermittent stream depth and water flow volumes and speed. These are placed in streambeds and monitored remotely. Similarly, CMU has created sensors that measure traffic volumes and speeds. These are sometimes embedded in freeway entrance or exit ramps. The goal is to develop long-lasting, battery-powered devices that are embedded in a single location for as long as five years.

Therefore, a single experiment in one location could last five years if the batteries survive. One of the experimental goals is to minimize battery use through efficient sensing and radio transmission. With a shorter license term, the devices would need to be removed mid-test and the research goal frustrated.

Answers to the other questions are forthcoming.

Robert H Jackson
Attorney for Carnegie Mellon University