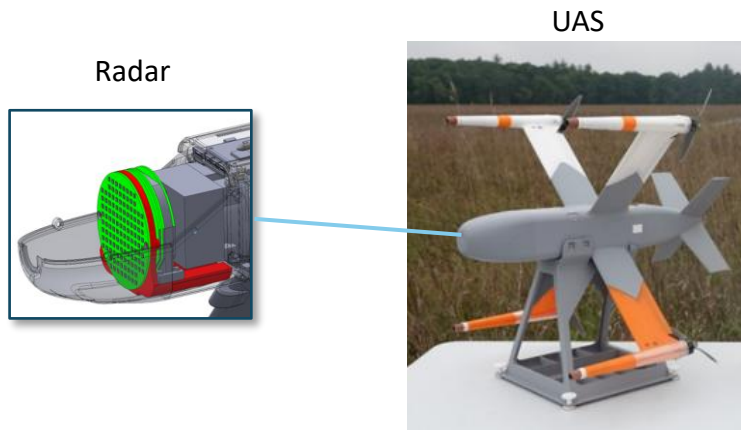


Description of experiment for FCC license

MIT Lincoln Laboratory is developing a small radar that will be integrated into a small uncrewed aerial system (UAS). The UAS system is roughly 0.5m x 0.5m x 0.5m in size. The radar is roughly 8cm x 8cm x 2cm in volume and fits inside the nose of the aircraft as indicated in the image below. The radar is shown as red and green components in the 3D model.



The radar will operate in a pulsed mode and provide information about small flying objects in the vicinity. Exact power and frequencies were provided in the FCC form.

The UAS will be flown at the US Army Fort Devens facility and will have proper authorization from the US Army to conduct flight tests. The UAS will be flying lower than 500m above ground level at all times. The purpose of this test is to assess the performance of the radar under flight conditions and demonstrate the ability to search and track other flying targets. We seek this FCC license to operate the radar during these flight tests.

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