Issue/Topic
Positive Mission Effects of Interior’s Expanded Visual Line of Sight (VLOS), Extended Visual Line of Sight (EVLOS), and Beyond Visual Line of Sight (BVLOS) Authorities

Key Messages
- DOI is the recognized leader in the safe and responsible integration of unmanned aircraft systems (UAS), having flown over 18,000 flights across >25 different mission applications in almost every State, with zero public complaints.
- DOI has demonstrated millions in savings from the use of UAS and a proven rule of thumb that UAS can perform missions in 1/7th the time and at 1/10th the cost of traditional methods.
- Following months of close collaboration, the FAA bestowed expanded operating authorities on DOI that have greatly extended DOI’s ability to use UAS.
- Previously, a UAS operator was limited to VLOS; limited coverage to ~194 acres\(^1\).
- Now DOI can extend VLOS out to 2NM, resulting in a 5,388% increase in coverage area (10,651 acres). The FAA has also granted DOI the authority to use multiple observers, extending visual line of sight. With just two visual observers, at 2NM intervals, coverage increases 21,851% from traditional VLOS to 42,602 acres.
- FAA also granted DOI BVLOS authorities at six National Parks (Grand Canyon, Yosemite, Sequoia Kings Canyon, Big Bend, Denali, Glacier Bay) opening an additional 12.9 million acres to BVLOS UAS operations. This would enable some currently contracted DOI UAS the ability to map entire parks on single flights.

Background
Generally, the Federal Aviation Administration (FAA) to VLOS limits UAS operations. This constrains the available coverage area to approximately 194 acres per operator. By establishing a reputation as the leader in safe and responsible UAS operations in the U.S. and following months of close collaboration, the FAA bestowed DOI with extended VLOS, EVLOS, and BVLOS authorities that no other agency or company enjoys. These greatly expand the bureaus’ UAS mission capability.

Current Status
- Interior has greater current UAS operating authorities than any other U.S. agency or company.

Point of Contact
Mark L Bathrick, Director, OAS: mark_bathrick@ios.doi.gov

1 The U.S. has no VLOS distance standard. The European standard is 500m (1,640’), used here.