



Office of Aviation Services (OAS)

Briefing Paper – For Information



Date: 08/31/2018

Issue/Topic

August 2018 Update on Current OAS UAS Support for Wildland Fire

Key Messages

- OAS UAS Division comprises six (6) positions developed over 12 years through repurposing vacancies and creating organization efficiencies through adoption of international quality management principles (ISO 9001-2015). No additional personnel or funding used.
- Currently, 3 OAS UAS personnel are deployed, providing leadership and support for wildfires, conducting testing of the Ignis Aerial Ignition Payload and supporting the HI volcano response.
- Total DOI UAS use to date = **9,059** flights as of August 31, 2018; **243%** of last year at this time.
- Fire specific UAS flights = **1,036** as of August 31, 2018; **146%** of **FY17 total** (707) and **11%** of total DOI UAS flights. In FY17, fire UAS use was **14%** of all DOI UAS use.
- Call-When-Needed (CWN) contract UAS have been deployed continuously since the beginning of July with positive results and acceptance from Incident Management Teams (IMTs).
- CWN UAS have provided IMT's with previously unavailable real-time infrared (IR) mapping and hotspot detection capabilities.
- CWN UAS have discovered many fires outside known perimeters, providing firefighters with exact locations on each. In one case, a UAS discovered a spot fire in heavy fuel at the bottom of a slope. Firefighters were directed in while it was still small (20'x20') and eliminated what would have become a large new fire. IMT leadership: *"wish we had one of these on every fire."*
- OAS is also supporting first-ever operational use of UAS in the aerial ignition mission. As part of OAS's operational test and evaluation(OT&E) of potential future DOI fleet UAS, OAS worked with several incident management teams in the testing of the Ignis aerial ignition payload. To date there have been **108** flights for aerial ignition testing. Results have been quite successful, including the first-ever night aerial ignition operations. Feedback has been universally positive. The Ignis payload will give fire managers a powerful tool to fight fires and conduct aggressive fuels treatments never before possible in accordance with Secretary Zinke's September 2017 directive. OAS is working with the manufacturer on enhancements identified during the OAS flight test program and is working to get the capability in the hands of the Bureaus this fall.
- DOI's integrated approach to addressing drone incursions on wildfires continues to show results, with increased enforcement emphasis from FAA. To date, there have been **23** incursions, a **28% decrease** over the same time last year. FY17 drone incursions were **14%** less than in FY16.

Background

DOI's "Drones for Good" program is the largest and most diverse UAS program outside DOD.

Current Status

OAS supporting UAS deployments. Our motto: *"What Have You Done For The Field Today?"*

Point of Contact

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