

UAS (Drones) and Fire Management



Key Messages and Talking Points

June 2016

Key Messages

If you fly a drone over a fire, air operations could be suspended until the risk of a mid-air collision with a drone is resolved.

When firefighting aircraft are grounded for any reason, fire crews lose access to a valuable resource which can adversely affect the safety and efficiency of the overall firefighting effort.

Regardless of your motivation, flying a drone near a wildfire is putting someone else's life in danger. Your hobby is not worth another person's life.

Fire aviation experts believe that if drones continue to be flown over fires, it is only a matter of time until a collision occurs between a drone and a firefighting aircraft.

Drones are very hard to spot by firefighting flight crews because they are relatively small and slow flying.

Unauthorized drones have no communication with firefighting flight crews.

Talking Points

In early 2016, industry sources are estimating that over 500,000 drones have been sold in the U.S. in recent years. This number could actually be closer to 1 million because it's difficult to track sales statistics.

The Federal Aviation Administration requires all UAS users to register their UAS.

Registration is simple and can be completed online at FAA.gov– it costs only \$5 and is valid for three years.

People who complete the registration process receive a certificate and an FAA registration number which must be marked on all unmanned aircraft that meet the registration weight requirement.

UAS users must have their FAA certificate with them when flying their device.

Failure to register with the FAA could result in one or a combination of the following: a civil penalty of up to \$27,500; a criminal fine of up to \$250,000; imprisonment for up to three years.

Drone incursions into airspace around active wildfires are increasing.

Last year, 21 airspace conflicts were reported within the wildland fire community.

So far, in 2016, there have been at least 12 known UAS airspace conflicts reported within the wildland fire community (updated 6/22/16).

Firefighting aircraft including leadplanes, helicopters, airtankers and smokejumper paracargo fly as low as 150 feet above the ground, which is the same altitude that many hobbyist drones fly.

Drones have limited sense-and-avoid capabilities. Operators can only “see” in a single direction in relation to the drone—the direction the onboard camera is pointed. In other words, in spite of well-meaning efforts to fly safely, a drone can be unwittingly flown into the path of a piloted aircraft.

While helicopters engaged in firefighting operations are slower than the aerial supervision and retardant-dropping aircraft, the air movement dynamic created by the rotor system of a helicopter creates a unique collision hazard. A small drone can literally be sucked into the rotors of a helicopter.

Law enforcement can take action against a private citizen or commercial business flying drones illegally over a wildfire.

On lands managed by the BLM, the federal regulation that applies to drones interfering with a fire is 43 CFR 9212.1(f). This section of the Code of Federal Regulations outlines acts that are prohibited related to starting a wildfire, or interfering with the efforts of firefighters to extinguish a fire.

Violating this regulation can have consequences. For example, in Idaho, the fine for violating this regulation is \$500 and/or a Mandatory Appearance. The fine will vary by state.

If the officer determines the violation is egregious or there are other factors the officer thinks a judge should consider related to the violation, the officer has the authority to issue a violation notice with a “mandatory appearance.”

This type of citation requires the violator to appear in court to settle the issue in front of a judge.

Whenever and wherever possible, government agencies, the aviation community, hobby drone organizations, drone manufacturers, and the news media should urge hobby drone operators to avoid flying drones near wildfires.