

## Property Drone Consortium (PDC):

The PDC represents companies in the insurance, roofing as well as construction industries that rely on structural inspection for safe and reliable continued operations. Many positive societal benefits of UAS can be envisioned in these industries – with UAS being able to safely undertake tasks that are of great use to humanity, but difficult or dangerous for humans to access. The ability to simply and accurately understand a property is critical to many sectors. Individuals, homes, insurance, and safety all benefit from UAS access professionally. The PDC recognizes that UAS benefits are not confined to just these industries, but offer a multitude of benefits to agriculture, infrastructure, emergency management, and across the whole scope of property assessment.

One potential use of UAS in pre-catastrophe applications is for structural inspection. Site visits often present hazards to the inspectors – climbing a roof to assess roof damage can result in falls with serious injuries and death. The UAS will keep these inspectors out of harms way. They will further be able to access more targets in a given day helping the populace as a whole.

While aerial imagery collected from manned aircraft and helicopters can provide some level of visual detailing of a roof or other structure, it is often expensive, not of sufficient resolution or temporally viable for access.

The use of UAS for such inspections can reduce cost, as well as reduced probability of injury – at a faster turnaround.

An electric utility could examine its assets such as poles and look for encroachments that could pose hazards, such as tree branches that could bring down wires in high winds.

Engineers could prepare and identify infrastructure such as bridges, levees or dams that need attention in order to withstand a severe event.

Emergency Operations Centers may be able to cost effectively have access to very current imagery of their entire jurisdiction and all critical areas.

UAS could potentially save lives when an impending catastrophic situation exists. In instances of severe weather, such as tornados, UAS may one day be able to be in the air in relatively close proximity to a tornado for transmission of real-time data to emergency operations centers and meteorologists on the ground. Again enable the populace with the best and most current content to understand their personal and property risk.

In the case of wildfires, where it may be too dangerous for manned aircraft to gather images and data regarding the path of a fire, a UAS could provide detailed imagery, video and life-saving information to firefighters on the ground below. That data and imagery could allow them to accurately and strategically set the proper fire breaks and position resources in the right locations to stop the fire and save homes and lives.

The potential exists with UAS, in coordination with manned aircraft for it to get into the airspace over a disaster-stricken area rapidly. This means that emergency responders can efficiently allocate resources,

determine if there is a need to recruit additional resources and identify access points and areas in need of more immediate response.

The impact goes beyond initial emergency response. Data and imagery gathered by the UAS post-event will aid insurance companies in determining whether to call a CAT without waiting to rely on feedback from a boots-on-the-ground team conducting physical inspections. This means that homeowners and business owners will have faster resolution of claims through immediate aerial inspection of damage.

These are just a few examples the PDC envisions as to how UAS can provide tremendous societal benefit – undertaking work that is dangerous for or inaccessible to humans.