Firefighter UAV¬

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The Firefighter UAV (FF UAV) applications range from aerial imagery to firefighting support for minor fires in remote areas. It aims to make unmanned flights a regular part of the firefighting business by mitigating the deployment of helicopters and ground fire trucks. Several flight tests demonstrated that the FF UAV's unique design configuration has successfully provided real-time aerial footage of a fire while simultaneously releasing fire-retardant to put out a minor fire. The FF UAV performs in two successive phases: first, it aims to fly to a designated location as fast as possible using GPS waypoints navigation, and to provide live video footage of a fire. Second, the FF UAV payload mechanism is activated to release a fire-retardant on the target. Phase one is achieved by blending First-Person-View (FPV) technology with an onboard auto-pilot system that captures live video footage and aerial data which are wirelessly transmitted to a ground station. In phase two, the FF UAV's innovative capsule bay doors are remotely activated to release a fire retardant. With further development in the field, the FF UAV could eventually become a vital member of the firefighting fleet.

Awards Won: