

Keystone Aerial Receives Nighttime UAS Waiver for Thermal Inspection and Mapping

Philadelphia, PA - On March 1st, Keystone Aerial Surveys, Inc. ([Keystone](#)) received an FAA Part 107 waiver authorizing it to fly nighttime small Unmanned Aerial Systems (sUAS) missions. This exciting new development is perfectly timed with Keystone's newest acquisition: a [FLIR®](#) VUE Pro R thermal camera. Keystone is excited about being able to offer calibrated thermal data from its sUAS (or manned aircraft) for inspection, emergency response and mapping. The timing of the waiver is no coincidence, Keystone submitted its detailed waiver application months ago in anticipation of the delivery of the FLIR camera. "We understood early on that one of the most useful times of the day for thermal imagery collection is in the first few hours after dark," noted David Day, Keystone's Executive Vice President. "Keystone invested the time necessary to understand safe and legal night drone operations in order to put systems in place to assure we would be compliant with FAA rules." As with all waivers, there are rules and limitations to ensure safe operations within the National Airspace that Keystone will strictly abide by.

The FLIR® thermal camera, equipped with a 13mm lens, has a resolution of 640 by 512 pixels and a field of view of 45 by 37 degrees. The camera is able to record NTSC compatible video with the still frames containing accurate, calibrated temperature data embedded into every pixel. This adds radiometric data-gathering to Keystone's expanding sUAS applications. The use of thermal imagery from UAS is a valuable tool for many types of surveys and inspections. "Keystone is committed to providing safe and legal UAS services to its clients," said John Schmitt, Keystone's President, "The addition of this waiver and our first thermal sensor continues our commitment to providing quality services that meet our client's changing needs."



The night flying waiver awarded to Keystone is for a time period of four years, upon which it is renewable. The Keystone's UAS team has received multiple FAA Airspace Authorizations, and now this night flight waiver, as it continues to navigate the Part 107 landscape.

About Keystone

Keystone Aerial Surveys, Inc. (Keystone), established in 1963, specializes in providing high-quality aerial surveys throughout North America. Keystone has flown millions of survey miles throughout the United States on projects with varied specifications. Keystone maintains four permanent locations; Philadelphia, PA (headquarters), Tyler, TX, Tucson, AZ and Los Angeles, CA. Keystone owns and operates twenty-one aircraft, eight large-format digital sensors, an Optech Galaxy and Gemini LiDAR systems, eight metric film camera systems and six UAS systems. Learn more about [Keystone's capabilities](#).

Keystone UAS

Keystone owns and operates multiple sUAS systems; both fixed-wing and rotorcraft or Vertical Take-Off and Landing (VTOL) aircraft. The fleet includes an Altavian Nova F6500, a DJI Matrice, SteadiDrone Mavrik X8s, and DJI Inspire 1s among others. Having multiple systems and pilots allows for quick deployment as

well as redundancy and immediately translates to reliability, often uncommon in the UAS marketplace. The combination of sensors and platforms gives Keystone the flexibility to meet the needs of the many unique applications including mapping, inspection, construction monitoring, real estate and precision agriculture. Learn more about Keystone's [UAS Division](#).

