



## ACTD & URBAN TECHNOLOGY OFFICE SMALL UNMANNED AERIAL VEHICLES (SUAVS) | TSPID

The Pathfinder Raven and Pointer are man-portable, quiet SUAVs, which provide real-time video imagery for beyond line-of-sight reconnaissance and surveillance.

### WHY ARE SUAVS IMPORTANT?

The SUAV is primarily a reconnaissance, surveillance, and target acquisition system in support of company and below unit leaders. These SUAV systems are being employed in theater to support route reconnaissance, intelligence preparation of the battlefield, battle damage assessment, direct action, force protection, convoy protection, obstacle detection, surveillance, special reconnaissance, dismounted patrol and targeting for precision and indirect fire munitions. They have proven themselves critical assets, acting as a force multiplier in the conduct of intelligence, surveillance and reconnaissance operations from remote locations, reducing or eliminating enemy contact.



### TECHNOLOGY:

**Raven Small UAV:** Electric powered UAV designed for operation with dismounted operators incorporating day (electro optical) or night (thermal) imagers. Air vehicle weighs 4 lbs. with a wingspan of 4.5 ft, and is capable of 80-minute flights using rechargeable batteries or 100-minute flights with one-time use lithium batteries. Aircraft is capable of a nominal operating range of 10 km under manual, semi-autonomous, or full autonomous operation, and incorporates military P(y)-code GPS capability for navigation. The Raven UAV requires no special equipment during launch and recovery. The system is hand launched by a standing operator and recovered in a deep stall configuration allowing for operation in small complex terrains. The aircraft speed range is 20 to 70 mph.



**Pointer Small UAV:** Electric powered UAV designed for dismounted operators incorporating day (electro optical) or night (thermal) imagers. Air vehicle weighs 9 lbs. with a wingspan of 9 ft, and is capable of 45-minute flights using rechargeable batteries or 90-minute flights with one-time use lithium batteries. Aircraft is capable of a nominal operating range of 10 km under manual, semi-autonomous, or full autonomous operation, and incorporates military P(y)-code GPS capability for navigation. The Pointer UAV requires no special equipment during launch and recovery. The system is hand launched by a running operator and recovered in a deep stall configuration allowing for operation in restricted and complex terrain. The aircraft speed range is 22 to 50 mph.



The Pointer and Raven UAVs utilize the same ground control unit.

**UNCLASSIFIED**