Non-Lethal Laser Weapon Halts Aggressors

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A laser technology being developed by Air Force Research Laboratory employees at Kirtland Air Force Base, N.M., will be the first man-portable, non-lethal deterrrent weapon intended for protecting troops and controlling hostile crowds.

The weapon, developed by the laboratory's Directed Energy Directorate, employs a two-wavelength laser system and is the first of its kind as a hand-held, single-operator system for troop and perimeter defense.

The laser light used in the weapon temporarily impairs aggressors by illuminating or "dazzling" individuals, removing their ability to see the laser source.

The first two prototypes of the Personnel Halting and Stimulation Response, or PHaSR, were built at Kirtland last month and delivered to the laboratory's Human Effectiveness Directorate at Brooks City Base, Texas, and the Joint Non-Lethal Weapons Directorate at Quantico, Va. for testing.

"The future is here with PHaSR," said program manager Capt. Thomas Wegner. He is also the ScorpWorks flight commander within the Laser Division of the directorate.

ScorpWorks is a unit of military scientists and engineers that develops laser system prototypes for Air Force Research Laboratory, from beginning concept to product field testing.

The National Institute of Justice recently awarded ScorpWorks $250,000 to make an advanced prototype that will add an eye-safe laser range finder into PHaSR.

Systems such as PHaSR have historically been too powerful at close ranges and ineffective but eye-safe at long ranges. The next prototype is planned to include the addition of the eye-safe range finder and is planned for completion in March 2006.