Project at a Glance

Identify factors and training techniques that contribute to:

- Increased military and civilian law enforcement officer safety when confronted with lethal force encounters
- Better prepared military and civilian law enforcement officers for urban warfare situations
- Increased survival of military and law enforcement officers when faced with dynamic, rapidly unfolding and life-threatening encounters

Project Description

The greatest need for this project is experienced by law enforcement officers and the military when they encounter an armed subject, either in a planned situation, such as a raid, or an unplanned situation, such as having a weapon unexpectedly drawn on them on a traffic stop. They need to make the right decisions and perform flawlessly so innocent citizens will remain safe and the law enforcement officer will survive. The need is especially great in close-quarter lethal encounters in urban settings, from routine law enforcement in U.S. cities to combating terrorism around the world including Iraq. The recent shooting of an innocent person suspected of being a subway terrorist in London shows the importance of Lethal Encounter Assessment Project research and the potential problems generated by errors in the lethal encounter.

This research will establish a repertoire of the best researched tactics that law enforcement officers could use in lethal force encounters, the best search and scan pattern an officer could use to detect the threat at the earliest possible moment, the best mind set to make the fastest and most effective decision about what to do, and the level of training necessary to make all of this happen.

The current tactics being trained and used are based on experience, logic or a persuasive personality advocating a particular approach. The intent of this research is to define the parameters of human performance in both assailant and officer and then test the viability of current and proposed tactics. Once effective tactics have been determined, training parameters and standards will be assessed.

The frequency and type of lethal force encounters that law enforcement engages in already have been quantified and are well documented. The Force Science Research Center at Minnesota State University, Mankato has performed preliminary research on the actual body movement speed of these encounters. This “biomechanical” research needs to be further quantified and expanded to determine the limits and nature of human mechanical performance in this type of highly dynamic, rapidly unfolding and life-threatening encounter.
The research will be conducted on the Minnesota State University, Mankato campus in conjunction with the law enforcement research partners. The prime method of research will be with multiple integrated high-speed cameras that will allow 3-D imaging, analysis and modeling of all the motions studied.

**Participating Institution:**
Minnesota State University, Mankato  
www.mnsu.edu  
President Richard Davenport  
Phone: (507) 389-1111

**Project Contact:**
William J. Lewinski, Ph.D.  
Professor of Law Enforcement  
Minnesota State University, Mankato  
Phone: (507) 389-2832  
Fax: (507) 382-4637  
william.lewinski@mnsu.edu

**Project Collaborators**
- Los Angeles Sheriff’s Department
- Los Angeles Police Department
- Tempe, Ariz., Police Department
- Ron Avery’s Practical Shooting Academy
- University of Arizona
- Lasermax
- Mankato Department of Public Safety
- Fox Valley Technical College, Appleton, Wis.
- NASA
- Optical Society of America

**Project Support**
- Americans for Effective Law Enforcement
- International Law Enforcement Educators and Trainers Association
- American Society for Law Enforcement Trainers
- International Association of Law Enforcement Firearms Instructors