

# NATIONAL INSTITUTE OF JUSTICE

## *Office of Science and Technology*

# NIJ's Less-Than-Lethal Program: An Overview

NDIA Non-Lethal Defense V

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David G. Boyd, Ph.D.  
Dir, Office of Science & Technology  
National Institute of Justice  
202-616-5527  
david@ojp.usdoj.gov

# MISSION OF NIJ

- **The science arm of the Department of Justice**
- **Has no operational mission**
- **Three major areas of responsibility**
  - **Dissemination of research findings**
    - **Office of Development and Communications (ODC)**
  - **Behavioral research**
    - **Office of Research and Evaluation (ORE)**
  - **Physical science research**
    - **Office of Science & Technology (OS&T)**

# OS&T PORTFOLIOS

- ❖ Protective Systems Technologies
- ❖ Crime Prevention Technologies
- ❖ **Less-Than-Lethal Incapacitation**
- ❖ Communications Interoperability / Information Sharing
- ❖ Learning Technologies / Education & Training
- ❖ CyberCrime
- ❖ Investigative and Forensic Sciences
- ❖ Critical Incident Management / Counter Terrorism Technologies
- ❖ Standards

# Less-Than-Lethal History

- **1965 – 1968: Riots**
  - **Water Canons and Rubber Bullets**
- **1969 – 1974: War Protestors**
  - **Water Canons, Rubber Bullets, and Tear Gas**
- **1985: Supreme Court Case *Tennessee vs Gardner***
  - **Juvenile (15 years old) shot for a \$12 robbery**
- **1986: Attorney General Established LTL Program in DOJ**
- **1987: NIJ Receives Funding for LTL**
  - **Initiates first LTL Project**

# Less-Than-Lethal Technologies Program Genesis

## 1986 Attorney General's Conference on LTL Weapons

Tennessee vs. Garner raised the stakes for use of force!

- Brought together State and local law enforcement, the DOD, scientists, and academicians
- Resulted in strong recommendations that continue to guide the program:
  - Define operational requirements
  - Consider a weapon's acceptability to line officers
  - Test and evaluate new weapons *thoroughly*
  - Disseminate information to the public *carefully* and *candidly*
  - Consider liability issues at the design stage
  - Establish guides for use
  - Consider how to bring the weapons to market
  - Facilitate cooperation between scientists, LE, and manufacturers

# Less-Than-Lethal Technologies

## What We've Done...

### Projects from the early years...

- Researched the applicability of LTL in jail and patrol situations
- Identified police/citizen encounters where LTL technology could be used
- Investigated the use of “sticky” foam to incapacitate arrestees
- Demonstrated technology using strobe lights to disorient suspects
- Developed an air bag restraint for police vehicles
- Collected and analyzed data on fleeing vehicle interdiction

# Less-Than-Lethal Technologies

## What We've Done...

### Projects from recent years...

- Developed the Electric Stun Projectile (Sticky Shocker)
- Developed and Assessed the Green Laser Dazzler
- Supported Development of the Capture Net – now WebShot™, a commercial product
- Developing the Ring Air Foil Projectile (RAP) for Criminal Justice Applications
- Developed the RoadSpike™, now a commercial product
- Evaluating a number of electrostatic, microwave, and RF Vehicle Stopping Technologies
- Developing Blunt Trauma and Electric Shock Health Effects Models
- Assessing the Effects of Oleoresin Capsicum (OC) Spray

# Less-Than-Lethal Technologies

## What We'll Do...

- Continue the evaluation of LTL technologies
- Continue the development of LTL modeling and simulation tools
- Continue development and evaluation of new LTL concepts for use by Law Enforcement and Corrections Agencies
  - Minimize the risk of death and injury to law enforcement and corrections officers, suspects, prisoners, and the general public
  - Reduce civil and criminal liability suits against agencies