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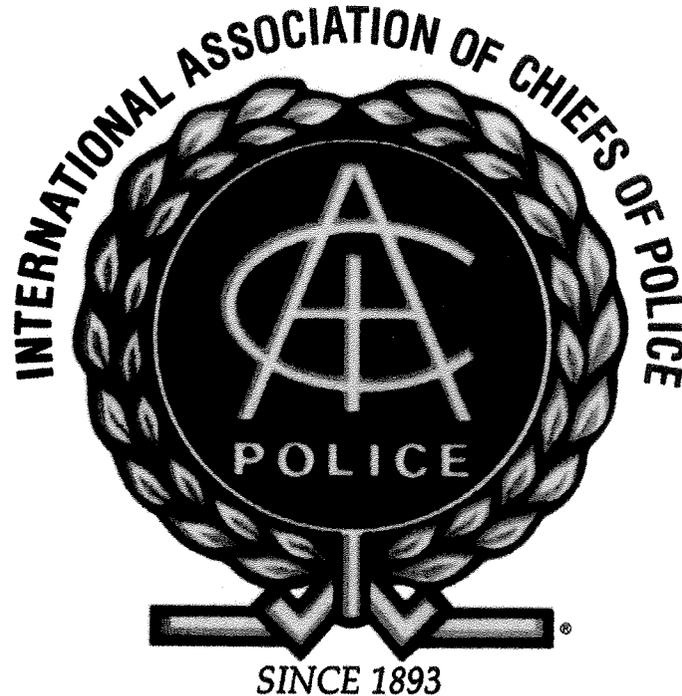
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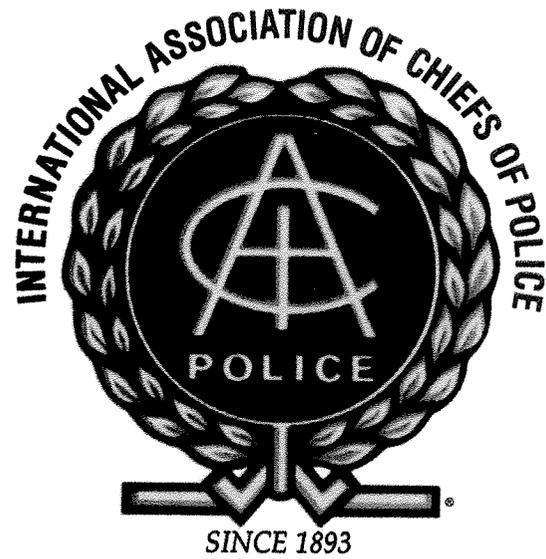
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**THE CUTTING EDGE OF TECHNOLOGY:
ENHANCING LOCAL AND STATE LAW
ENFORCEMENT'S UNDERSTANDING AND USE
OF EMERGING TECHNOLOGY
AWARD #2005-DE-BX-K001**



**Project Closeout Report
2005-2007**



ABSTRACT

I. ABSTRACT

The International Association of Chiefs of Police (IACP), through its **Cutting Edge of Technology: Enhancing Local and State Law Enforcement's Understanding and Use of Emerging Technology** project, and in partnership with the Office of Science and Technology is committed to addressing the information needs of local police agencies as they assess and acquire new technology. This project has been a leader in providing law enforcement leadership with the tools and resources to expand the use of technology, train practitioners, and reduce departmental risk and liability.

In previous years, the Cutting Edge project has made significant contributions to the law enforcement profession through publications and activities such as:

- The Executive Brief, *Electro-Muscular Disruption Technology, A Nine-Step Strategy For Effective Deployment*
- The Resource Guide, *Digital Imaging For Safe Schools: A Public Safety Response to Critical Incidents*
- An online survey that identified major technology priorities for law enforcement
- The Executive Brief, *Managing Police Pursuits: Findings From IACP's Police Pursuit Database*

During year five, of the project, the IACP sought \$274,875 to continue the Cutting Edge project, with deliverables focused on further development of comprehensive digital in-car camera minimum performance specifications and a mobile video camera product certification and testing program.

Working with staff from the In-Car Camera/Video Evidence Project, industry representatives, law enforcement executives and practitioners, and our federal partners, the IACP has developed benchmarks for quality and precision for digital in-car video systems and have laid the groundwork for developing the testing and certification program to ensure that the equipment tested has been evaluated by independent laboratories to be verified as meeting the minimum performance specifications for operation consistent with the evidentiary use of recorded sounds and images.



SUMMARY

II. SUMMARY

The rapid deployment of digital video cameras in police patrol vehicles has heightened the need for the development of performance specifications for these devices. The ability to assess the true capabilities of these systems will enable law enforcement agencies to deploy video equipment that protects and holds accountable officers and managers; collect video evidence that will meet the demands of the courts; and ensure efficiency and economy in all phases of the mobile video system lifecycle.

Since the publication of the IACP Brief on “The Use of CCTV/Video Cameras in Law Enforcement” (March 2001), much has been written regarding the proper use of these systems in patrol vehicles. What is evident is that these systems have a high degree of acceptance and use in law enforcement agencies nationwide. They are a proven, effective tool for officers and administrators alike in enforcing the law impartially and with a high degree of respect for public safety and security.

Once a department reaches a decision to purchase and deploy in-car camera systems, the task of determining system requirements, vendor selection, and training needs for those who will use the new system is critical in the final outcome of the program. During the planning and evaluation phase of video equipment selection, much attention will be given to the placement of equipment, operational guidelines, and community and officer acceptance. What is often absent, however, are recognized standards against which equipment can be measured to allow law enforcement administrators to clarify program choices among the many competing products and services offered by vendors.

The need for performance specifications is especially important with the growing popularity of digital recording systems. Many of these systems have yet to undergo rigorous field testing by an independent scientific body, an important consideration if the recorded information is to be used as evidence in court. In addition, the proprietary recording and storage formats developed by many vendors can greatly limit an agency’s ability to subject the recorded video evidence to forensic examination or, in some cases, even to view or duplicate the images. Compression schemes applied by some digital recording devices or storage systems can severely degrade image quality, and in some cases can render the video unsuitable for admission as evidence in court.

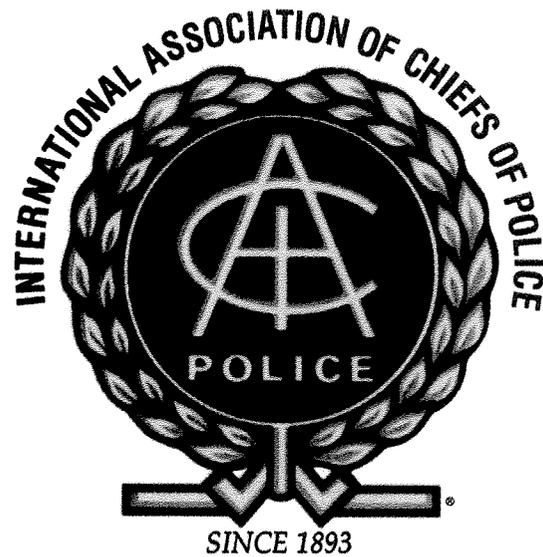
There is a recognized need in the law enforcement community for the development of minimum performance specifications and a testing and certification program to support law enforcement acquisition, deployment and maintenance of in-car video systems. Based on the recommendations from the inaugural meeting of the Digital Video Standards Advisory Panel meeting, IACP has modeled the specifications program for in-car video systems on the successful specifications program developed by the IACP for speed measuring and automated enforcement devices. This program is administered by the IACP through a cooperative agreement with the US Department of Transportation, National Highway Traffic Safety Administration (NHTSA). This program utilizes a technical advisory group to advise and make recommendations to the IACP Highway Safety Committee regarding performance specifications for these systems.

For year five of the Cutting Edge of Technology project, the IACP sought \$274,875 to continue the project, with deliverables as follows:

1. Development of comprehensive digital in-car camera minimum performance specifications and the testing and certification program

This task has two primary objectives:

- Develop minimum performance specifications for in-car digital video recording systems; and
- Develop a testing and certification program for in-car digital video recording systems



GOALS AND ACCOMPLISHMENTS

III. GOALS AND ACCOMPLISHMENTS

Funds for completion of this project were awarded to IACP on September 16, 2005.

Grant Goal for the Project:

Development of comprehensive digital in-car camera minimum performance specifications and the testing and certification program

During the project period, the IACP convened the Digital Video Standards Advisory Panel and the Executive Committee of the panel on the following occasions:

- September 2005 – The Advisory Panel met in conjunction with the IACP Annual Conference in Miami, FL. The panel achieved the following results:
 - Established working groups to address specific specification requirements;
 - Established goals for the panel and the structure and operational procedures;
 - Discussed general requirements including homeland security and system interoperability requirements.
- March 2006 – The Advisory Panel and Executive Committee met and continued deliberations by the four working groups to develop performance specifications.
- May 2006 - The Advisory Panel and Executive Committee met and continued deliberations by the four working groups to develop performance specifications.

In addition, IACP staff attended and provided a project update to the IACP Communications and Technology and Criminal Justice Information Sharing Committees during the IACP Law Enforcement Information Management (LEIM) Conference in Grapevine, Texas in June 2006

IACP staff presented a workshop, “Digital Video Systems” at the LEIM Conference in June 2006.

IACP staff presented a workshop, “Digital Imaging for Safe Schools” at the LEIM Conference in June 2006.

IACP published the Framework for Digital In-Car Video Systems Minimum Performance Specifications in June 2006. The Framework document was released for 60-day public review and comment between June 30 and August 30, 2006.

Throughout the contract period, IACP staff provided technical assistance in the form of dissemination of Cutting Edge publications to agencies throughout the United States. The following is a summary of the publications provided to law enforcement and others during the contract period:

- *Electro-Muscular Disruption Technology: A Nine-Step Strategy for Effective Deployment*
 - In 2nd reprint of Executive Brief (500 copies)
 - Electronic distribution (Jan 1, 2006 to June 30, 2006): 1704 copies
 - Hard copy distribution (Jan 1, 2006 to June 30, 2006): 500 copies
 - Total distribution (Jan 1, 2006 to June 30, 2006): **2204 copies**

- *Digital Imaging for Safe Schools: A Public Safety Response to Critical Incidents*
 - Electronic distribution (Jan 1, 2006 to June 30, 2006): 1936 copies
 - Hard copy distribution (Jan 1, 2006 to June 30, 2006): 282 copies
 - Total distribution (Jan 1, 2006 to June 30, 2006): **2218 copies**

During the contract period, IACP staff received a number of requests for technical assistance from agencies. The following agencies requested assistance with developing digital imaging programs:

- DeWitt, NY Police Department
- Rowlett, TX Police Department
- West Bridgewater, MA Police Dept
- Ft. Thomas, KY Police Department
- Town of Wingate, NC
- Dublin City Schools, Dublin, OH
- Kenton County Schools, KY
- Lower Merion, PA Police Department
- West Point, NY
- Tipton, IN Police Department
- Santa Ana, CA Police Department
- South Orange, NJ Police Department
- Riverside, IL Police Department
- Livonia Police, MI Police Department
- Lodi, NJ Police Department
- Polk County, FL Sheriff's Department