



National Institute of Justice

R e s e a r c h P r e v i e w

Jeremy Travis, Director

August 1998

Pursuit Management Task Force

A summary of the Pursuit Management Task Force's Report on Police Pursuit Practices and the Role of Technology

In recent years, few areas of police practice have raised as much public comment, concern, and debate as vehicular pursuits. The National Institute of Justice's (NIJ's) Office of Science and Technology created the Pursuit Management Task Force (PMTF), in August 1996, to conduct a multidisciplinary effort to define police practices and the role of technology in high-speed police pursuits. The PMTF was asked to look at the entire range of pursuit issues, including preemption of pursuits, control of pursuits in progress, and termination of pursuits. Members of the task force included senior law enforcement officers from local, State, regional, and Federal agencies.

The PMTF's report provides the following:

- A comprehensive assessment of current techniques and technologies related to pursuits.
- Recommendations regarding technology development and commercialization.
- An overview of legal issues related to pursuits and related technologies.
- Recommendations for legislative action.
- Information obtained from questionnaires and surveys completed by agencies, line officers, and the general public related to pursuits and technologies.

Due to resource and methodological constraints, the scope of the study was restricted to nine western States—Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington. While the geographic area of focus did not depict a national data representation, the task force believed that the quality of data received from the various participating Federal, State, and local agencies could be applied generally to agencies nationwide.

The task force was structured to provide technologists and administrators with a law enforcement needs-based assessment of useful technical approaches to enhance

pursuit policies and practices. The building or enhancing of cooperative and constructive relationships between law enforcement, entrepreneurs, and technologists was seen, potentially, as a key component in the development, commercialization, and use of pursuit-related technologies.

The PMTF focused upon four areas to reach its goals:

- Current operational practices, procedures, and policies related to pursuits throughout the western United States.
- Community issues and concerns, including surveys of civilians and line law enforcement officers throughout the western United States.
- Legal issues pertaining to pursuits and related areas.
- Vehicle-stopping technologies, including technologies currently available, under development, and potentially available.

Implications for change in the approach to police pursuits

The PMTF surveyed heads of law enforcement agencies throughout the western region to determine the current "state of the art" in pursuits. Some 1,420 questionnaires were mailed, and 419 (29.5 percent) were completed and returned. The task force found a wide array of pursuit policies in use among the responding agencies. With only one exception—spike strips (tire deflating devices)—few of the responses addressed areas related to technologies, primarily because few agencies had technologies to use.

The PMTF contracted with a firm to conduct and analyze the surveys from the community members and law enforcement officers to determine their attitudes and beliefs about pursuits and related technologies. The public opinion survey revealed strong support for

reasonable pursuits. The survey further revealed, however, a high degree of “don’t know” answers regarding the application or suitability of various types of pursuit technologies. Line officers likewise strongly supported reasonable pursuits, with strong agreement for effective supervision of such pursuits. The officers also expressed a preference for spiked strips and electrical vehicle-stopping technologies.

In conjunction with the surveys, the task force also conducted a literature search for information regarding police pursuits and found, as many previous researchers have, that there still remains a surprisingly widespread lack of data on the subject. The task force found that much of the available information was based upon small sample data polls, coupled with large sample extrapolations and professional “estimates.” In view of these findings, the task force noted a need to develop more appropriate methods for the collection of data. Moreover, the PMTF found that accurate information about pursuits also needs to be provided to the public in order to overcome misconceptions and stereotypes, as well as to garner support for development and use of technologies.

Legal issues related to pursuit technologies were also examined, including the reasonableness of seizures, product design negligence and safety standards, adequate warnings of product dangers, and negligent use. In addressing these issues, the task force provided practical recommendations for limiting liability by ensuring product safety in design and use.

Because of the implications for public and officer safety, the task force also recommended legislative actions related to pursuit policies. Among the issues addressed were adequacy and potential for deterrence of criminal sanctions against persons who use vehicles to flee from officers, the need for limited immunities for officers and agencies engaged in reasonable pursuits and/or non-negligent use of pursuit termination technology, the need for uniform methods for pursuit data collection, laws to enhance police access through motor vehicle registration data, and the need to continue allocating resources for the research, development, and marketing of pursuit-related technologies.

Research and development technologists were provided with information about how pursuits actually occur by developing the concept of pursuit “phases.” The task force identified four distinct phases of a pursuit:

- The prepursuit phase—the time between the officer’s decision to stop a vehicle and the officer’s recognition of the vehicle’s attempt to flee.
- The communication phase—the period between the start of the pursuit and the arrival of assisting officers or resources.

- The resources phase—the period during the arrival of assisting officers and/or resources and an attempt to terminate an in-progress pursuit.
- The postpursuit phase—the period encompassing any actions that occur after the suspect’s vehicle has stopped fleeing or has eluded capture.

The PMTF found that more than 50 percent of all pursuit collisions (as reported by agencies statewide) occurred during the first 2 minutes of a pursuit. More than 70 percent of all collisions occurred before the 6th minute of a pursuit. This information is significant in that it illustrates that a pursuit technology must be able to be very rapidly deployed and used in order to have a significant impact in preventing pursuit-related collisions. Large, complex, or stationary devices, unless used in preemptive mode, appear then to have little potential effect on pursuit collisions because of the delay required to set them up. Technologies were grouped into five categories: electrical, mechanical, chemical, cooperative, and sensory. Types of technologies in each category were reviewed for their usefulness in law enforcement pursuit applications.

No single technology offers a universal solution to pursuits

Technologists were also provided with information from the law enforcement community on various technology deployment platforms such as helicopters, ground chase vehicles, other police units, fixed placements, and specialized vehicles. In view of the high percentage of ground collisions that occur during the first few minutes of a pursuit, standard police vehicles were preferred as deployment platforms for general law enforcement operations. Other deployment platforms were also found to be feasible for applications involving fixed-point security or checkpoint operations such as border and toll crossings, immigration checkpoints, and site operations.

Of the various technologies reviewed, spiked strips were found to be the most frequently used, and currently, the most effective technology readily available. Most of the other reviewed technologies were in the conceptual or precommercial phases and require substantial testing and development. The PMTF identified a group of technologies that are of high priority for additional research, development, and commercialization (refer to full report).

The PMTF found that there is currently no single technology on the horizon that affords a “universal” solution to pursuits. In light of the need for additional research, the task force recommended the continued allocation of resources for pursuit technology research, development, and commercialization as well as resource assistance in the transfer of defense-related technologies to civilian law enforcement for their use. The PMTF also noted the

importance of cooperation among law enforcement officials, technologists, and administrators in the testing and development of these technologies.

Task Force priority recommendations

The PMTF established the following as their highest priority recommendations:

- Adequate resources should be allocated to continue, expand, and accelerate research, development, testing, and commercialization of viable pursuit technologies, and to support continued technology transfers from defense to civilian law enforcement. Particularly, these actions should be undertaken at the local and regional level with law enforcement agencies.
- The following technologies should be identified as high priority and moved quickly and aggressively to prototype stages for evaluation: retractable direct injection electrical systems; radiative electrical systems, including high-power microwave; cooperative systems with law enforcement activation; and auditory/visual sensory enhancements (improved warning devices).
- A national model for collection of pursuit statistics should be developed for the purpose of encouraging

and facilitating research and to expand the body of knowledge relating to pursuits.

- States should consider legislation that ensures that fleeing from a lawful attempt at detention/arrest in a motor vehicle is a serious crime with significant penalties.
- The Federal Government should use the influence and expertise of its offices to further public education about pursuits.
- Research should be conducted to determine methods to improve interagency tactical communications technology.

This Research Preview is based on the full report of the Pursuit Management Task Force (PMTF). The work of the task force was supported by the National Law Enforcement and Corrections Technology Center, Western Region (NLECTC-WR). It was funded by NIJ as Award No. 96-IJ-CX-K007 to The Aerospace Corporation, which operates the Western Region Center.

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FS 000225