AMERICAN CIVIL LIBERTIES UNION FOUNDATION OF COLORADO

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February 26, 2004

Gerry Whitman, Chief of Police
Denver Police Department
1331 Cherokee, Room 402
Denver, Colorado 80204
By United States Mail and facsimile to 720-913-7029

Dear Chief Whitman:

The Denver Police Department merits praise for its efforts to explore the use of less lethal weapons and to reduce the number of occasions in which police officers need to resort to firearms. The ACLU fully supports those efforts. It is in that spirit that I write to request that you re-examine and revise the Denver Police Department's policy with regard to the use of tasers. This re-examination is particularly critical at this time, as the Denver Police Department has already purchased hundreds of M26 Advanced Tasers from Taser International, Inc., and I understand there are plans to purchase more.

For reasons that I will explain in this letter, the Denver Police Department should forbid officers from using the taser in situations that do not present a true threat to human life or a threat of serious bodily injury. In addition, the Denver Police Department should tighten the reporting requirements in its use-of-force policy to ensure that officers fully report all pertinent details whenever this electroshock weapon is deployed.

Tasers are associated with an increasing number of in-custody deaths.

Tasers are often promoted to the public on the ground that they can save lives in situations where police would otherwise use deadly force. There is no question that tasers are less lethal than a revolver. But the public is much less aware that police departments around the country, including the Denver Police Department, are authorizing and encouraging officers to use tasers in situations where no one would claim that lethal force is even arguably justified.

Nor is the public generally aware of an increasingly-common and tragic result: more and more individuals are dying in police custody shortly after they have been subdued with electroshock weapons. These incidents raise serious questions about whether

tasers, contrary to their proponents' claims, may be lethal in certain situations. They also raise questions about the propriety of policies that authorize officers to use tasers when there is no serious threat of substantial physical harm.

There is no central national registry that tracks the incidence of in-custody deaths that occur in connection with the use of electroshock weapons. Nevertheless, from gathering isolated reports from numerous sources, the ACLU of Colorado has noted a disturbing trend. As more and more law enforcement officers in the United States and Canada have become equipped with tasers and stun guns, there has been a steady increase in the number of in-custody deaths associated with their use. The ACLU is aware of three such deaths in 2001; ten in 2002; and sixteen in 2003. There have been four more already this year. In over 90% of these cases for which the ACLU has information, the deceased was not brandishing any weapon, nor were law enforcement officers using the taser as an alternative to firearms.

In light of this rash of in-custody deaths associated with a device that is promoted as saving lives, law enforcement agencies should be concerned not only about the potential risk to the lives of suspects, but also about the potential for legal liability. Several of the recent taser-related deaths have already resulted in wrongful death lawsuits, and more are undoubtedly on the way. The DPD should take a close look at whether the claims made for the taser's safety are sufficiently trustworthy to justify the current use-of-force policy, which permits officers to use the weapon on suspects who present no threat to life or limb.

The proponents of tasers, some of whom have a strong financial interest in persuading police departments to buy as many of the devices as possible, discount the possibility that electroshock weapons are potentially lethal. A promotional brochure on Taser International's web site states that "the Advanced Taser's low electrical amperage and short duration of pulsating current, ensures a non-lethal charge." A training document produced by the company contains a question-and-answer section that poses the question: "Should the ADVANCED TASER be used on a person under the influence of alcohol or drugs?" The answer, according to Taser International, is that "the ADVANCED TASER can be used in this circumstance without fear of permanent injury to the suspect."

Tasers may be lethal to persons with certain medical conditions.

The proponents of tasers have not adequately addressed the evidence that use of electro-shock devices may be dangerous or even lethal to persons in a severely agitated or psychotic state, persons who have ingested high levels of certain street drugs, and individuals with heart disease.

In a commonly-cited article published in 1991, which Taser International promotes as "a forensic benchmark throughout the industry," Dr. Ronald Kornblum concluded that "the

taser in and of itself does not cause death."[1] The article examined the records of 16 deaths associated in some way with law enforcement officers' use of the taser in the Los Angeles area. It notes that most of the individuals who died had ingested street drugs that could have caused death independently.

At the same time it promotes the Kornblum article, the Taser International web site disputes the author's additional statement that the taser may have contributed to death in one of the sixteen cases. According to Taser International, the Kornblum study should have concluded that "the Taser can be responsibly ruled out as a cause of death in each of the sixteen cited cases."

The promoters of tasers seldom discuss a sharp rebuttal to the Kornblum article that the Journal of Forensic Sciences published a few months later.[2] In that rebuttal, Dr. Terence B. Allen asserts that the logical conclusion to be drawn from the sixteen cases discussed in the Kornblum article is that "certain medical conditions, including drug use and heart disease, may increase the risk that the taser will be lethal." Dr. Allen was the deputy medical examiner in one of the sixteen cases where, according to Dr. Kornblum's article, "death clearly fits into the cocaine category." In his rebuttal, Dr. Allen discusses that particular case and explains his contrary conclusion that "death was an immediate and direct result of the taser."

Dr. Allen further explains that "pathologists in Los Angeles were under pressure from law enforcement agencies to exclude the taser as a cause of death." His rebuttal provides an account of his personal experience with that pressure.

In his rebuttal, Dr. Allen reviews the 16 deaths examined in the Kornblum article and excludes seven cases in which gunshot wounds, physical restraint, or blunt force were regarded as important factors. Of the cases that remain, he concludes, "we have nine individuals who were alive and active, collapsed on tasering, and did not survive. In my opinion, the taser contributed to at least these nine deaths."

Dr. Allen concludes by warning that "pre-existing heart disease, psychosis, and the use of drugs including cocaine, PCP, amphetamine and alcohol may substantially increase the risk of fatality."

As Dr. Allen points out, many of the individuals whose conduct prompts a police response are suffering from psychosis or ingestion of street drugs. In evaluating the potential danger of tasers, law enforcement agencies must consider the evidence that these populations may be at increased risk of adverse consequences that include death. Instead of acknowledging that this evidence warrants caution, however, taser proponents appear to dismiss it entirely.

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[1] R. Kornblum, M.D., S. Reddy, M.D., Effects of the Taser in Fatalities Involving Police Confrontation, 36 Journal of Forensic Sciences, 434-48 (1991).

[2] T. Allen, M.D., Discussion of "Effects of the Taser in Fatalities Involving Police Confrontation," 37 Journal of Forensic Sciences, 956-58 (1992).

The taser may be a contributing cause of death, even when death is not immediate.
Taser proponents are also too dismissive when considering cases in which individuals die more than a few minutes after experiencing the taser's electrical charge. In a news bulletin addressing the subject of in-custody deaths, Taser International CEO Rick Smith states emphatically that "if the electrical stimulation of the TASER were to play a causal role in a death, the death would be immediate." The bulletin states that "if there is a significant delay between the application of the TASER and a death, there is no plausible way the electrical stimulation from the TASER could have been a causal factor." These assertions assume that the only plausible mechanism of death would be a fatal disturbance of heart rhythm -- ventricular fibrillation -- that would occur while the taser's current was flowing through the body.

In arguing that the taser must be exonerated in all cases in which death does not occur immediately, taser proponents overlook the potential role of metabolic acidosis. In a study funded by the Department of Justice, the authors explain the role that tasers may play in contributing to death, even when death does not occur immediately:

> Those who did die after Taser use may have done so because of indirect cardiac effects involving acidosis. These deaths usually have been delayed. Respiratory and cardiac arrest in the cases are reported in the medical literature 5 to 45 minutes after the stunning. Thus, the deaths did not involve the immediate induction of ventricular fibrillation or other disrhythmias by the Taser.
>
> Most deaths following the use of Tasers have involved persons taking PCP or cocaine. PCP and cocaine can lead to fatal arrhythmias or cardiac failure, especially in the presence of acidosis. Dysrhythmias (abnormal heart rhythms) will occur with lower drug levels in the presence of acidosis. Persons who are taking these drugs and are agitated enough to require police action are usually acidotic – their blood pH is lower than normal. Increased muscular activity and decreased breathing, increases acidosis and increases the likelihood of fatal dysrhythmias and cardiac failure.
>
> Therefore, deaths following Tasers use may be due to acidosis. Acidosis may have caused cardiac dysrhythmias or failure in the presence of illicit drugs that are usually present in persons being Tasered. Deaths following Tasers use may be related to the ability of these devices to cause increased

> muscle activity and decreased breathing. Persons being Tasered are usually agitated and hyperactive.[3]

Thus, contrary to the view advanced by taser proponents, the electroshock device cannot be ruled out as a contributing cause of death simply because death is not immediate.

Medical examiners have said that electroshock weapons may contribute to death.
In their efforts to assure law enforcement that electroshock devices are not lethal, proponents have made statements that overstate the claims for safety and inappropriately understate or dismiss the role that tasers may have played in in-custody deaths. For example, a Taser International training manual states that "no deaths contributed [sic] solely to taser," and "No reports of an AIR TASER or ADVANCED TASER causing death." In a statement posted on Taser International's web site, a company spokesperson declares: "First and foremost, the TASER has never had a death directly attributed to it. None."

These assertions overlook the contention, made by Dr. Allen and others, that electroshock weapons can and have played a contributing role in the death of persons whose special vulnerabilities put them at increased risk. These assertions also overlook the fact that other medical examiners have resisted the pressure to "exonerate" electroshock weapons:

- The medical examiner who performed the autopsy of Gordon Randall Jones, for example, told the Orlando Sentinel that taser shocks as well as cocaine contributed to the man's death.[4]

- The autopsy report on Larry Frazier, a prisoner who died in 2000 in Wallen's Ridge prison in Virginia after application of a stun gun, states that "severe physiologic stress, initiated by hypoglycemia and exacerbated by the decedent's prolonged agitation associated with stunning, was sufficient to induce a lethal cardiac arrhythmia."

- According to the autopsy report on Eddie Alvarado, who was tasered five times and died shortly afterwards in Los Angeles in 2002, "death was caused by sequelae of methamphetamine and cocaine use status post restraint and taser use."

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[3] J.M. Kenny, W. Murray, W. Sabastianelli, W. Kraemer, R. Fish, D. Mauger, T. Jones, "Human Effects Advisory Panel Report of Findings: Sticky Shocker Assessment, National Criminal Justice Reference Service Doc. No. 188262 (1999), 31-32, available at http://www.ncjrs.org/pdffiles1/nij/grants/188262.pdf, ("Sticky Shocker Assessment"). In this report to the National Institute of Justice, Department of Justice, the Human Effects Advisory Panel, set up through the Applied Research Laboratory of Pennsylvania State University, addressed several questions relating to the potential human effects of law enforcement use of the Sticky Shocker, an electroshock projectile with electrical characteristics similar to those of stun guns and tasers.

[4] P. Gutierrez, "Orlando police will buy stun guns," Orlando Sentinel, Dec. 14, 2002.

The report further states that there is insufficient medical evidence to exclude the taser as a contributing cause of death.

- In October, 2002, a coroner's inquest in Illinois concluded that Jose Guadalupe Garcia died of electrocution by a stun gun.[5]

- In November, 2003, the coroner of Monroe County, Indiana, released a statement concluding that a prisoner in the county jail died of "a heart attack, drug intoxication and electrical shock" after sheriff's police subdued him with a taser.[6]

In contending that tasers have never been implicated in any fatalities, the proponents of tasers appear to rely on the absence of coroners' reports that conclude that a taser was the sole cause of a death. Law enforcement officials concerned about their departments' potential legal liability, however, should avoid such superficial reasoning. Persons whose conduct are the contributing cause of a wrongful death can be held legally responsible, even when their actions are not the sole cause of the death.

Unresolved questions about safety require policies that limit the taser's use.

In criticizing the use of electroshock weapons, Amnesty International points out that the claims for the taser's safety have not been subjected to rigorous and independent evaluation, nor have the physiological effects of electroshock weapons been sufficiently explored by independent medical experts. Similarly, in the study funded by the Department of Justice mentioned earlier, the authors note that "little data exists regarding how electrical current passes through the human body," and that "the Taser's effects have not been adequately studied."[7]

Unresolved questions about the potential dangers of the taser require that its use be carefully limited. Relying on this principle, law enforcement authorities in the United Kingdom restrict the use of the taser to situations where firearms may be justified.

In contemplation of a trial use of the taser, scientific advisers to the British government surveyed the existing literature and confirmed the incomplete and uncertain state of the medical evidence. The Defense Scientific Advisory Council's Subcommittee on the Medical Implications of Less Lethal Weapons (DOMILL)[8] studied the 26-watt M26 Advanced Taser as well as the earlier generation of lower-powered tasers. DOMILL reported that experimental research was sparse "particularly with regard to the M-26,"

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[5] "Stun gun killed robbery victim," Chicago Tribune, Oct. 5, 2002.

[6] M. Blacher, "Coroner: death was accidental; 47-year-old man died after collapsing at Monroe County Jail," Indiana Digital Student News, Dec. 15, 2003.

[7] Sticky Shocker Assessment, at 4, 6.

[8] The findings of DOMILL with regard to tasers are presented at pages 80-85 of the Patten Report Recommendations 69 and 70 Relating to Public Order Equipment: a Research Programme into Alternative Policing Approaches towards the Management of Conflict, Third Report prepared by the Steering Group led by the North Ireland Office, in consultation with the Association of Chief Police Officers, December 2002 ("Third Patten Report").

and that independent medical research published in authoritative peer-reviewed journals "is even more limited."[9] Regarding the risks of the M26 taser, the British advisers cited "the dearth of information on the potentially adverse electrophysiological effects of the higher current flow in the body, particularly in subjects who may have a predisposition to cardiac arrhythmias arising from drug use, pre-existing heart disease or genetic factors."[10]

The British study noted that "drugs such as cocaine and pre-existing heart disease may lower the threshold for cardiac arrhythmias." It further noted that "excited, intoxicated individuals or those with pre-existing heart disease could be more prone to adverse effects from the M26 taser, compared to unimpaired individuals."[11] The DOMILL study said that research was necessary to explore the cardiac hazards associated with using the taser on agitated persons, drug-intoxicated persons, and persons with heart disease. It concluded, however, that it was not medically essential that the research be completed before approving a trial use of the taser "under the terms of the ACPO Guidance."[12]

The last sentence refers to the Association of Chiefs of Police (ACPO) and the guidelines it formulated for the trial of the taser that began in the United Kingdom in April, 2003. Those guidelines restrict the use of the taser to situations in which officers are authorized to draw their firearms and use lethal force, as specified in the ACPO Manual of Guidance on Police Use of Firearms.[13]

Thus, law enforcement authorities in the United Kingdom recognized that there was insufficient medical evidence to alleviate concerns that the taser may pose a heightened risk to persons with certain vulnerabilities, including persons with heart conditions or persons who are suffering from drug intoxication or severe agitation. Because of these heightened risks, the ACPO guidelines appropriately restrict the use of the taser to situations where firearms are justified.[14] In those cases, despite the potential dangers of the taser, the device nevertheless functions as a less-lethal alternative to the far more certain danger of a police revolver.

In contrast, the Denver Police Department authorizes officers to use tasers even in situations where lethal force is not permitted. The DPD's use-of-force policy currently authorizes officers to use a taser in situations that are classified as "defensive resistance" or "active aggression." According to the policy, "defensive resistance" means the

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[9] Third Patten Report, ¶ 144, at 82.
[10] Third Patten Report, ¶ 149, at 83.
[11] Third Patten Report, ¶¶ 158-59, at 84.
[12] Third Patten Report, ¶ 161, at 85 (emphasis in original).
[13] Patten Report Recommendations 69 and 70 Relating to Public Order Equipment: a Research Programme into Alternative Policing Approaches towards the Management of Conflict, Fourth Report prepared by the Steering Group led by the North Ireland Office, in consultation with the Association of Chief Police Officers, January 2004 ("Fourth Patten Report"), at 67
[14] "Taser use throughout the trial has been deliberately constrained by policy as ACPO felt that the operational benefits of a wider deployment of the taser were outweighed by residual medical concerns identified by DOMILL, particularly in respect of special population groups." Fourth Patten Report, at 67.

suspect is engaging in "physical actions that attempt to prevent officer's control including flight or attempt to flee, but do not involve attempts to harm the officer." The level of "active aggression" is defined as "a threat or overt act of an assault, coupled with the present ability to carry out the threat or assault, which reasonably indicates that an assault or injury to any person is imminent." As the policy acknowledges, neither of these levels of resistance justifies the use of deadly force. Nevertheless, there are serious questions whether the use of the taser in these situations could indeed result in death, especially if the taser is used on suspects who are extremely agitated, psychotic, have ingested large quantities of drugs, or have a pre-existing heart condition. Indeed, the deceased fits one or more of these categories in at least two-thirds of the recent in-custody deaths associated with electroshock weapons.

The DPD's policy should be revised and tightened. Tasers should not be authorized, as they are currently, when a suspect's resistance level is categorized only as "defensive resistance." Nor should the use of tasers be authorized solely because a suspect's behavior fits the category of "active resistance." In light of the unresolved questions about the taser's safety and the increasing number of deaths associated with its use, the DPD should restrict it, as the United Kingdom does, to situations in which a suspect poses a true threat to human life or safety. At a minimum, the DPD should ensure that tasers cannot be deployed against persons who are unarmed, unless their actions pose a substantial risk of inflicting serious bodily injury on themselves or another person.

Even if there were not serious questions about the taser's safety, the DPD's policy nevertheless requires review and revision to ensure that it does not authorize unnecessary force. By authorizing officers to use the taser on suspects who manifest "defensive resistance," the DPD policy permits and encourages a use of force that can be disproportionate, excessive, and unreasonable. The taser by its nature does not permit officers to adjust the amount of force they apply to the needs of the particular situation. It delivers a 50,000-volt electrical shock that causes immediate, overwhelming and excruciating pain. That degree of pain will often represent far more force than is reasonable or necessary to handle many situations that could be categorized as "defensive resistance" or "active resistance." This is especially true in light of the default five-second duration of an M26 taser shock and the training that advises officers to deliver the full five-second jolt in every case. Thus, officers will deliver a minimum five-second shock even when resistance ceases and compliance is achieved after one second or even one-half second. As the literature from Taser International confirms, there is a tremendous difference between being exposed to a one-second burst from the taser and being subjected to the full five seconds. Indeed, police officers who voluntarily accept a taser shock during training sessions receive a shock that lasts, at the most, only for one second. Most officers receive only a one-half second shock and many receive it for only one-fourth of a second.

Officers should be required to report all uses of the taser.
The Denver Police Department's use-of-force policy requires (appropriately) that a report be drafted for each "use" of the taser. Yet the policy does not make it clear that "use" of the taser includes occasions when it is deployed but not fired. According to the Taser International web site, it is common to deploy the taser by simply creating a display of sparks or by training the weapon's laser sight on a suspect. Although compliance with an officer's demands is sometimes achieved in that manner without firing the device, it should still be regarded as a use of force that must meet the department's criteria and must trigger the responsibility to fill out a use-of-force report. The policy should make this clear.

In the United Kingdom, for example, the regulations governing the trial use of the taser specify clearly that the term "use of the taser" includes:

> "drawing of a device in circumstances where any person perceives the action as a use of force or threat of a use of force, whether or not this is accompanied by a verbal warning, sparking of the device or placing of the taser sight red dot onto a subject."[15]

The Denver Police Department should add a similar clarification to its policy.

Reports should include all pertinent information.
The Denver Police Department's use-of-force policy should also provide more specificity about the information that officers must include in their reports documenting the use of the taser. Because the electrical effect of the taser can vary depending on the distance between the taser darts and places where they attach, the report should document the location of the taser darts. Because a taser can be fired multiple times, the policy should clearly state that officers must document each separate burst of electricity. When the taser is discharged multiple times, the officer's report should also include facts demonstrating that each successive firing was justified by a continued need for the application of force. Because officers are able to cut the flow of electricity before the standard 5-second burst is complete (even though their training advises against it), their reports should also document the duration of each burst of electricity. The report should contain all facts necessary to enable supervisors to confirm that officers applied only the amount of force that was reasonable and necessary.

In conclusion, the ACLU applauds the Denver Police Department's efforts to reduce police officers' use of lethal force. With regard to electroshock weapons, however, there is not a sufficient body of independent and unbiased evidence of their safety, and there is evidence that they may be dangerous and even lethal to certain categories of persons with

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[15] Patten Report Recommendations 69 and 70 Relating to Public Order Equipment: a Research Programme into Alternative Policing Approaches towards the Management of Conflict, Fourth Report prepared by the Steering Group led by the North Ireland Office, in consultation with the Association of Chief Police Officers, January 2004 ("Fourth Patten Report"), at 68.

whom the police are likely to come in contact. The DPD's use-of-force policy should therefore be revised to 1) limit more narrowly the situations where the use of the taser is authorized; and 2) require more detailed reporting of each use of the taser.

I would be pleased to discuss these issues with you in more detail, and I can also provide you with copies of any of the documents mentioned in this letter.

Sincerely,

Mark Silverstein,
Legal Director, ACLU of Colorado

cc: Public Safety Review Commission
Mayor's Police Task Force