Welcoming remarks by

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NOTE:
Because Mr. Stewart often speaks from notes, the speech as delivered, may vary from the text. However, he stands behind this speech as printed.

Good morning. I'm delighted to see all of you here. We have work to do. These days we have fewer meetings and shorter—but the problems are harder and last longer. Our technology gets better every year—but the ill-gained money and criminal resources it must overcome—the technology of crime—gets bigger, too. I'm glad to report this has been a good year for our side.

Since the last meeting, we've started new tests against Institute standards . . . tests of vehicle tracking devices . . . body-worn transmitters . . . and other equipment essential to defeating drug operations and other wealthy and well-armed merchants of death.

Nevertheless, the old problems don't go away. And some very demanding new problems appear. Among the old problems, we still face that of convincing our officers that their body armor must be worn to help them stay alive. Otherwise they may join a depressing statistic: The number of officers who died for the **lack** of technology.

In the years 1983 through 1987—the last 5 years for which we have the numbers—3 hundred 38 officers were killed. Only 81 were wearing armor! Of the 76 percent who died while **not** wearing armor, 84 percent had gunshot wounds to the torso! And some armormakers want our standards lowered. Others do not deliver the product they say they will.

Among the new problems we've taken on, Congress has given the Department of Justice a role, since assigned to us at NIJ, in a multidepartmental study of what to do about the **undetectable** firearm—what the newspapers call the "plastic gun." It's easy to see why we were named to join the Treasury and Transportation Departments in this study. We helped to develop the first weapon detectors back in 1972, and they worked well. But they work through magnetic detectors, and now the Federal Aviation Administration is facing new threats from **nonmagnetic** firearms.

Congress also gave the National Institute of Justice the job of **evaluating** the marking system issued by the Secretary of Commerce for toy and imitation guns. Our job is to tell them what happens in a police **tactical** situation if there's a question whether a subject's weapon is real!

The Less-Than-Lethal Weapons research progresses. We can expect to see soon the selection of the chemical agent needed for such a weapon and the beginning of large-animal tests to see if it works.

Meanwhile, we still face the problem of ensuring that when a law enforcement agency purchases body armor, allegedly armor that meets NIJ's performance standards—that agency actually gets what it pays for. The difference between what you **contract** for and what's delivered can be shocking. Someday—I pray not soon, but it could be tomorrow—this failure to deliver the armor we ordered and not a substitute

. . . is likely to be tragic.

It's as if we had to wear toy armor . . . and face real guns.

Armor that fails doesn't kill just one officer. It may mean many others will die because they lose faith in armor that could save them—if it met our standard.

Last year our body armor standard point-oh-3 was under challenge from the manufacturers' trade group, the Personal Protective Armor Association. Eventually the P-P-A-A carried its appeal to the Attorney General, claiming that our 1987 standard was unworkable, unfair, so strict it endangered the officers it was designed to save.

That's pretty ironic, that they find that standard so bad. They helped draw it up!

Well, the police officers across the country were ready to stand up and support that standard. I remained steadfast under fire! I knew, and police knew, that today they face MAC 10's and Uzis—not just Saturday night specials!

It was NIJ's research and testing that **created** the armor industry! Now they want to kill that testing and the standards it sets.

The Department of Justice rejected this change. The .03 standard **stands**! But it won't save lives all **by itself.** Manufacturers have to **adhere** to it. Police purchasers have to insist **in writing** that products meet or exceed the NIJ standard! Otherwise, we may not be able to sue the company that sold us the shoddy product. In fact, the POLICE may have to accept the liability for a needless death instead of the manufacturers.

In fact, however, it appears that rather than ensure adherence, the PPAA may move ahead to draft an **industry** standard that may **further** reduce the level of protection afforded police.

Most of you know that this council's Weapons and Protective Equipment Committee has an ad hoc special committee on body armor. That group met six weeks ago and heard from a body armor manufacturer about the inconsistency in the quality of ballistic fabric used by some manufacturers. This armormaker stressed the need there may be for either the Government or the law enforcement community to ensure quality control. Why? Do they really want regulation?

We've tried to do the job with a **voluntary** standard. Do they insist on teeth?

Who **is** responsible for quality control? That is a question we hope to resolve at this meeting.

Caveat emptor! The same armor manufacturer, who was a member of PPAA, explained to the committee that NIJ's body armor compliance program ensures effectiveness only of the armor **tested**—not of any garment a manufacturer produces **after** TAPIC has had it tested and reported it approved.

This armormaker tells us that the quality of woven ballistic fabric commonly found in today's armor is inconsistent from one lot to another. While a vest from one lot that is submitted to TAPIC for testing may **comply** with the NIJ standard, any agency that purchases the same vest from **another** lot may find it performs **very** differently.

If a manufacturer **does** conduct quality control testing of incoming fabric, finds it inferior, and sends it back . . .

. . . nothing prevents the weaver from reselling the faulty material to some manufacturer who may **not** test incoming fabric.

Because lots differ, either the manufacturers will have to enforce—successfully!—the performance of the weavers, or . . .

. . . TAPIC or the individual police department may have to select randomly garments from each lot and test them—making sure each **lot**—not just each model—meets the standard,

What good does the standard do if it is not enforced! All agencies **can**—and increasingly many of them do—require that the armor they purchase "meet the requirements" of the NIJ standard.

Big agencies order so many sets of armor at a time that they can compel the manufacturer to supply extra sets of armor—samples from each lot—for the agency to have tested.

Smaller agencies can demand such samples, too. But 80 percent of the nation's almost 12 thousand police agencies have fewer than 25 officers. Almost a thousand local agencies have only one sworn officer. This does not give them a very loud voice in the marketplace.

Smaller agencies can, and many do, depend on the testing programs conducted by larger, neighboring agencies. We may have to aggregate the experience of 12 thousand departments to make sure all are safe and secure!

Even then, however, we have to be cautious when working with a county or municipal purchasing agent who may not be convinced that following the standard is really all that important.

We depend on the experience and good judgment of this council to help us find solutions to this problem of how to achieve and enforce quality control and many other problems as well.

Let's look next at the new problems I mentioned. The undetectable firearm question requires no immediate action, but we must keep an eye on the issue.

Last November, Congress passed "The Undetectable Firearms Act of 1988."

The concern was that certain small firearms could be carried undetected past the kind of metal detectors then in use at airports. It made such weapons illegal and, at the same time, ordered research on the question.

The Bureau of Alcohol, Tobacco, and Firearms is developing a test exemplar—a 3.7-ounce stainless steel test item shaped roughly like a handgun. Stainless steel was chosen because it usually is not magnetic! Meantime, the North American Arms .22-caliber revolver is specified in the law as the standard test item, and several other small pistols are being used in tests as covering the gamut of weapons that might cause problems. You can see the list while we're here.

Meanwhile, the Federal Aviation Administration has a contractor running these firearms through the best metal detectors. At the present time, several detectors are sensitive enough—or can be made sensitive enough—to meet the requirements. But then, of course, weapons technology is evolving, too, so the best detectors of today may soon be obsolete.

It appears right now that the security needs of the Department of Justice may well be met by present equipment. Once the test exemplar is available, this can be checked out. The Marshals Service has the greatest need for detection equipment, and through using two of the three most sensitive detectors now available—and a lot of painstaking care and patience by their officers on duty at courtrooms . . .

The Marshals detected

55 thousand 9 hundred 10 weapons!

being taken into

courtrooms in fiscal 1988. *(55,910)*

Of these, nearly 25,000 were firearms.

But our problems at Justice and the problems of the FAA at the airports are quite different. So long as we don't let many weapons slip through, we really don't have to worry so much about "detecting" guns that prove not to exist. If we get a positive reading, the subject is merely pulled aside for a hand-detector search or a manual patdown, and if the original positive was false—well, our officers apologize and the subject has a story to tell his friends.

At an airport, it's a different matter. They can't tolerate letting any potential hijack weapon slip through, and if their machine reads positive too often when it detects false teeth or a pocket calculator, this is intolerable for economic reasons. If they require too large a number of extra searches, it slows the boarding of the aircraft, and there goes the schedule.

After all, the detector senses the presence of four ounces of metal—not specifically a gun. The FAA tests seem to indicate, however, that current equipment can be used to tell the difference. We have a staff recommendation that, for the Justice Department, extra detectors might be purchased and kept in storage against the day when they might be needed.

One reason the Marshals do so well is that they also use X-ray equipment to spot concealed weapons. The accuracy of x-ray detection of weapons seems to depend more on the skill of the operator than on the quality of the equipment. So it may be we need some advanced x-ray training programs.

To kick off the toy gun evaluation, we assembled on February 22 an impressive focus group, including some of you present today, to take a preliminary look.

The draft regulations provide that a blaze orange plug be in the barrels of toy and other replica guns.

Alternate markings are provided if necessary. For a water gun, air-soft gun, or light-emitting gun, all of which require an opening where the plug would otherwise be, a blaze-orange marking could be affixed on the outer barrel—from the muzzle to at least 6 millimeters behind it.

There are other provisions, such as for replicas used on the stage or in films, or for completely transparent toys, or solid but brightly colored toys—but that covers most of it.

Note, however, that 6 millimeters is less than a quarter of an inch.

Our panel was at first encouraged by a mail survey that showed 80 percent of police thought the blaze-orange markings would be an improvement over the present state of affairs. Then we tried a simulation! I jumped up with a handgun with that little orange plug in it and they didn't see any orange plug! If it hadn't been a simulation, 80 percent of the police present would have plugged me!

So our evaluation will have to consider the visibility of the markings — including bad-weather and obscured-light situations — and whether recognizing the new markings will conflict with an officer's previous training on how to act when faced with apparent deadly force.

There's some hint that if there IS a toy-gun problem for police, it is increasing. Abt Associates conducted a very limited study of three large newspaper coverage areas over a 3-year period and found that most reports of toy-gun incidents, including 20 fatalities, came in the last 2 years. The BJS will be conducting a study, parallel to ours, to ascertain how big a problem it is to discern a toy gun from a real one and the frequency of incidents where toy guns are used for criminal purposes. Some police chiefs fear the only effect of the markings will be to increase police liability . . .

. . . or give a criminal who has a

real gun, marked as a toy,

– – – a free first shot!

In any event, we will be running surveys and tests and building a data base that should help us advise the Secretary of Commerce soundly and wisely as to what kind of markings we eventually need.

The research on Less-Than-Lethal weapons is more encouraging than we might have expected considering budget limitations. As you know, we set out to review older military research to ascertain if there were likely chemical agents that could quickly—within a very few seconds—immobilize a subject without being life-threatening either to the subject or to his captives.

A subject who looks clean today is more dangerous than ever. He may be high on drugs. And no matter how great the provocation, if we fire . . . it's likely to create liabilities due to wrongful death.

When the chemical of choice is determined, it will need to be tested on what the scientists call "large animals"—you'll remember we used sheep and goats to test Kevlar armor in the early 1970's.

Then two more issues have to be studied. First, can the immobilizing agent be controllable for general use? Will it be too risky to use around the agèd? Will it be a threat to those with asthma or chronic bronchitis? Second, of course, we will have to study the constitutional issues.

A delivery system must be perfected—right now, we expect it will be something like little paint bombs that will burst on impact and **anesthetize** anyone near.

But faced as we are with all these issues and more, the opening of this advisory council meeting brings with it a great deal of encouragement when we recall some of our worries last year. This is a larger, broader-based group. You know that I urged—and we generally agreed—that this council could function better, if we could increase its membership by adding more State and local law enforcement administrators.

That we certainly have done. Seven more police chiefs have joined us—

(Names listed here for you to handle as desired)

Sam Baca from Albuquerque,

Jerry Baker, Huber Heights, Ohio

Lee Brown, Houston,

Reuben Greenberg, Charleston, N.C.

Morris Redding from Atlanta,

Robert Sauer, Hanover Park, Illinois

Robert Wadman, Omaha. . . .

and also we've added Major Ross Morris, of the Washington State Patrol.

Not only do we benefit from their presence, but they—and a number of you—have taken to heart the last year's plea that you bring along or send along your appropriate technical people to join in the necessary technical discussions at these meetings.

We've grown in another way, too, that I think promises well for our accomplishing the legitimate purposes of this council.

We want to make sure our counties and municipalities and States pay attention to the real, life-and-death issues that this Advisory Council, by its very nature, continually spotlights. And we've noted here this morning that even a seasoned police chief may not always convince the city procurement office or the county purchasing agent that—

IT REALLY DOES MATTER

—whether the body armor, or the handcuffs, or the portable radio, or the semiautomatic pistols they buy for your department meet the minimum performance standards established by the National Institute of Justice—

—or merely something a salesman said was "just as good, and I can give you a real good price on it!"

Well, if we continue to get the word out, no budget-cutting purchasing agent is going to hoodwink our law-enforcement agencies. And to help make certain this never happens, we now can depend on some union leaders to support their members' right to the **best** equipment, the **safest** conditions, the **highest quality** in the tools and weapons and protective equipment they use.

We've had Robert Kliesmet with us, president of the International Union of Police Associations, AFL–CIO. This year, we've added leaders of two other unions—

—Kenneth Lyons of the International Brotherhood of Police Officers . . .

—Dewey Stokes of the Fraternal Order of Police.

I think it's safe to say that the leaders of these three unions—the AFL-CIO affiliate and the two independents—willalways agree that their members deserve the best equipment on the market—equipment that meets the NIJ Standards!

We have also added Donald Baldwin of the National Law Enforcement Council, a coalition of 15 executive heads of major law enforcement organizations.

Finally, a few words about Noel Bufe. It must be on record somewhere how long he's led the Traffic Institute at Northwestern—but it's a lot harder to say how long he's been an outspoken and effective leader of this Advisory Council.

I guess we can only say, "since the memory of man runneth not to the contrary." That's a long time!

He has served as chairman, and vice chairman before that. He pushed for the expansion of the council to include State and local executives. For all these years he's been teaching the principles of the Technology Assessment Program to those who studied under him at the Traffic Institute, to those whom he met when they served on State planning or advisory bodies, to those of us at these meetings if we ever got tired.

Join me now, then, all of you, as I present to

—Dr. Noel C. Bufe —

this Certificate of Appreciation,

—and our heartfelt thanks for all these years of service.

3,125 words