TOY GUNS: INVOLVEMENT IN CRIME AND ENCOUNTERS WITH THE POLICE

A RESEARCH PROJECT MANDATED BY THE UNITED STATES CONGRESS
PUBLIC LAW 100-615

POLICE EXECUTIVE RESEARCH FORUM
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EXECUTIVE SUMMARY

This project was mandated by the United States Congress in Public Law 100-615. The primary intent of the law was to provide definitive markings on toy and imitation guns to minimize the probability of the gun being mistaken for a real firearm. Among other provisions, the law established marking standards and required that research be conducted to explore the nature of crimes committed by toy guns as well as issues concerning armed confrontations with police where toy guns were involved. The Congressional mandate stipulated that this research would be funded by the Bureau of Justice Statistics, U.S. Department of Justice. Effective June 1, 1989, the Police Executive Research Forum was awarded the cooperative agreement to carry out activities related to the project.

The goal of this project was to document (a) the number of crimes committed by persons using imitation guns and (b) the number of confrontations by police with persons who had imitation guns which were either thought to be or purported to be real.

Research Methods

The research process began with a comprehensive search of news stories reporting any toy gun incidents. These were reviewed to ascertain issues and trends in the incidents. Based upon this, a conceptual framework for the problem was developed as the basis for data collection. Information was gathered from two primary sources: survey research and site visits at law enforcement agencies.

Survey Research. A survey was developed and pretested which collected data on the experiences of police departments with toy gun incidents. The survey was sent to all municipal police and consolidated police departments serving populations of 50,000 or more inhabitants; all sheriff’s departments with 100 or more sworn employees; and all primary state police agencies. The total survey response rate was 70% with a usable response rate of 65.5%.

Questions on the survey solicited information about the police agencies’ experiences with officers using deadly force and less than deadly force against people with imitation guns as well as information on robberies and assaults wherein imitation guns were involved. This information was solicited in three different categories of imitations: toy guns; replica guns; and BB, pellet and starter’s guns.

Law Enforcement Agency Site Visits. The purpose of the site visits was to examine experiences and incidents of law enforcement agencies on a detailed basis. The site visits were conducted in “clusters” to maximize data collection. Agencies were identified through news reports and/or self-reports which indicated experiences with imitation gun incidents. These departments would serve as the foundation for the visits. Additional departments in the region were also visited to learn about their experiences with toy guns. This approach gave the researchers a broader range of site experiences on which to base discussions of trends. Beyond experience with toy gun incidents, criteria for site selection included jurisdiction size, geographic distribution, and agency type. A total of 27 law
enforcement agencies were visited for the project representing all agency types included in the study.

Characteristics of Police-Toy Gun Encounters

As the problem and issues were examined, it was determined that in order to meet the spirit of the study’s mandate, the problem would have to be broken down into more operational components. Broadly viewed, circumstances involving toy guns can be categorized for study based on the nature of the incident or nature of the weapon.

Nature of the Incident...

- Commission of a crime with an imitation gun being intentionally used as an instrumentality of the crime.

- Mistaken encounters when a citizen and/or officer encountered a person with a toy gun but, as a result of the gun’s appearance and the circumstances of the incident, the people involved reacted as if the gun were real.

- Officer-involved shootings in non-criminal situations where the circumstances facing the officer reasonably appeared threatening and/or criminal.

- Commission of a crime and/or the brandishment of a toy gun as a real weapon resulting in an officer-involved shooting. In these cases the suspect was involved in a crime (or a criminal attempt) and attempted to dissuade officer intervention by acting as if the imitation weapon were real.

Nature of the Weapon...

- Toys. These are imitation weapons designed with the specific intent for playing. They include a wide array of game types such as a child using the toy in concert with his/her imagination (e.g., “cops and robbers”); the use of water guns; toy guns designed for some type of “target practice”; and the more sophisticated games such as “laser tag.”

- Pneumatic Guns. Types of guns using pneumatic pressure to propel some type of projectile. The propellant system may be either through an internal pump, hand operated by the person using the gun or one using a compressed CO2 air cartridge.

- Replica Guns. Guns that are replicas of actual weapons. Replica guns are full size “working” reproductions of firearms. Replicas are manufactured so they are unable to fire.

Major Findings

- Between January 1, 1985 and September 1, 1989, 458 police departments (65.5% of the study population) reported 5,654 robberies known to be committed with an imitation gun. Robbery investigators interviewed estimated that, on an average, 15% of all robberies were committed with imitation guns.

- In the same time period, police departments reported 8,128 known assaults with imitation guns.
• Police departments reported 31,650 imitation guns were seized between January 1, 1985 and September 1, 1989 as being involved in some type of crime or incident. (This number does not include recovered stolen imitation guns.)

• One hundred eighty-six police departments reported 1,128 incidents where an officer warned or threatened to use force and 252 cases where actual force had been used based on the belief that an imitation gun was real. Pneumatic guns and realistically shaped toy guns pose the greatest threat to mistakes in the use of force by the police.

• During site visits officers discussed one “Shoot/Don’t Shoot” training scenario where a suspect appears with a gun and says something to the effect, “don’t shoot, it’s a toy.” When the officer relaxes, the suspect shoots the officer. This is one illustration of training and why officers are taught to assume that all objects that look like a firearm are real weapons. Officers pointed out that many people with real handguns have the front sight ramp colored orange to aid in aiming the weapon. This could be a confusing element to an officer in light of the orange toy gun markings. Our research found that a number of gun manufacturers offer optional barrels for guns wherein the front sight is colored red or orange. In nearly all the cases examined where officers used deadly force against a person who turned out to be carrying a toy gun, it was found that officers followed police procedure properly—no investigations resulted in criminal charges or discipline. Drug Enforcement Administration agents have reported seizing toy guns (most frequently water guns replicating Uzi and Tech 9 weapons), air guns, and replicas during drug raids. Nearly all such items were seized at “crack houses.” Bureau of Alcohol, Tobacco, and Firearms agents have reported encountering replicas, starter’s pistols, and some BB and pellet guns which have been seized. Generally, BATF agents have encountered these items either in “task force drug raids” or as a result of law enforcement officers bringing the weapons to ATF for inspection.

Circumstances Related to Police Officers Use of Force When Mistaking an Imitation Gun for a Real Gun

The research indicates that in cases where officers have used deadly force against a person with an imitation gun, five factors cumulatively interact which affect the officer’s decision to fire:

• The Nature of the Call Dispatch. The information given to the officer from the dispatcher, the tone of the dispatcher’s voice, and the locale of the call can all contribute to both heightened awareness and heightened stress inferring a life-threatening incident at the call.

• Expectations of the Officer. Based on the information received from the dispatcher, knowledge of problems in the area, nature of the neighborhood, observations of the officer enroute to the call, and a wide range of other experiential factors, the officer develops defined expectations of what might be encountered at the scene of the call. Usually, as a safety factor, the “worst case scenario” is expected.

• Environment at the Scene of the Incident. Upon arriving at the scene of the call or incident, the officer will evaluate the behavior of the “players” and observations of possible threats. These build on both the nature of the dispatch and the officer’s expectations and can place the officer in a situation wherein the likelihood of using deadly force will increase.
• *Shape/Design of the Gun.* A finding repeatedly in every incident was that the shape or design of the gun was a paramount factor in the officer’s decision to shoot. Many of the imitation guns are modeled after real weapons. Even those made of plastic and with some degree of coloration are frequently indistinguishable from real guns, particularly under low light conditions.

• *Actions of the Person(s) Involved in the Incident.* In the shooting incidents examined by the researchers, the factor ultimately influencing the officers’ decisions to shoot was the actions of the individual. The actions were more than simply pointing the weapon, but included such things as overt threatening movements, shouting, and even acting like they were going to shoot at the officer.

Site visit interviews and comments on some surveys indicated that there had been crimes or police encounters with imitation guns which *did* have markings. However, the data were insufficient to determine the proportion of all incidents involving guns with markings or to distinguish between the types of guns (i.e., toy, pneumatic, or replica).
When making initial contacts with police departments for this study, we would say, "We are conducting a study of toy guns and crime...." The immediate reaction in many cases was, "Toy guns?! We have enough problems with the real thing to worry about toys." As the police departments began to research their experiences we found that attitudes began to change. That is, there were more crimes committed and officer confrontations involving toy guns than most police personnel realized. To be sure, the toy gun incidents are in no way comparable in number to the violence with real firearms. Nonetheless, many of the confrontations between police officers and persons with toy guns seem to have unusually tragic elements.

The researchers have endeavored to take this problem and describe it based on the issues which emerged during the research process. Because quantitative data on this topic have been difficult to obtain due to limitations in police records systems, many of the issues discussed are illustrated in "boxed scenarios" from interviews during the site visits. The scenarios are presented to illustrate issues discussed in the text of the report. The data presented in this report were not easily generated by the responding departments. Many police agencies conducted manual searches of their incident reports, others physically searched property room records, while still others went through the laborious process of surveying their officers and then developing responses to our questions. Thus, while the data presented in this report may not be as robust as we initially hoped, it represents the most comprehensive information available on the subject.

Throughout the report certain products and manufacturers are discussed to illustrate issues and concerns. The reader should not draw any value judgments about the companies or products, per se. Rather, the discussions should be viewed only as examples of the issues in question.

Conclusions drawn from this research effort reflect the opinions of the authors based on...
interpretations of the collected data, interviews, and content analysis of documents and reports. These conclusions should not be construed to be the opinions or position of the Bureau of Justice Statistics or the U.S. Department of Justice.

The researchers are most grateful to the police executives who helped us in this study and particularly thank those law enforcement chief executives who opened their departments and availed their staff to us for the site visits. Especially important has been the support and flexibility provided by Dr. Robert Trojanowicz, Michigan State University and Dr. Richard Holden, Central Missouri State University. Their assistance truly facilitated the smooth and timely completion of this project. We also extend our gratitude to the staff of the Police Executive Research Forum who assisted us in making arrangements and facilitating logistics on typically short notice. We particularly thank Lexta Taylor for his rapid work in assisting with important arrangements and Jennifer Brooks for her usual reliable assistance on a wide variety of matters.

The time commitment and advice of our Advisory Board members have been important ingredients in formulating the final report. Their enthusiasm and selfless contributions are truly appreciated. We also thank our BJS Project Monitor, Paul White, for his valuable insights and assistance from the design concept through completion of the final report.

Finally, we would like to express our special appreciation to Captain Paul Connor of the Las Vegas Metropolitan Police Department. Captain Connor went “the extra mile” in his preparation for our site visit and set important standards that have helped us immensely throughout this entire project.

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INTRODUCTION

Over the past several years news reports have surfaced about tragic incidents where a person who was in possession of an imitation gun was mistakenly shot by a police officer who observed the imitation and thought it was real. Similar news reports have appeared about robberies which were committed with toy guns. An incident which particularly brought the imitation gun issue to the forefront of attention occurred when a man held a gun on KNBC-TV (Los Angeles) reporter David Horowitz during a live newscast in August 1987. The man threatened to kill Mr. Horowitz unless he read a statement about "space creatures and the CIA." The gun turned out to be a pneumatic pistol known as an "air soft" gun. In a search of primary news service stories between January 1, 1987 and October 31, 1989, the researchers located stories on 38 separate incidents involving imitation guns.

At the heart of the controversy is the fact that a significant number of imitation guns have been manufactured to look realistic and have subsequently been involved in crimes or confrontations. In fact, some of the toys and imitations are specifically manufactured as models of real guns. Guns for which realistic looking models are particularly popular include the Uzi machine pistol and both the Colt and Smith & Wesson .357 revolver models.

The publicity associated with the toy gun incidents and concomitant public concern prompted federal legislation requiring that toy guns have a "blaze orange" marking. Questions remain concerning how many incidents involving toy guns have occurred and whether the marking requirements are effective. The Congress, anticipating these issues, mandated in Public Law 100-615 (see Appendices 1 and 2) that this study be conducted to examine the relationship between toy or imitation guns and crime. Specifically, Section 4 Paragraph (d) of that law required that the U.S. Department of Justice, Bureau of Justice Statistics "... conduct a study of the criminal misuse of toy, look-alike, and imitation firearms, including studying police reports of such incidences and shall report on such incidences relative to marked and unmarked firearms."

Advisory Board

Because of the diverse nature of this problem, an Advisory Board was established as a resource to assist the research team. The role of the Advisory Board was to review the
survey, status reports, and interpretations of the research team. It was the concern of the researchers to present a balanced perspective of the problem and ensure accuracy in all aspects of the report. As a result, the Advisory Board includes persons from different groups and experiences which provide a balanced view of the issues. Advisory Board members are:

- Dr. Helen Boehm, Children’s Advertising Review Unit, Council of Better Business Bureaus
- Detective Don Cahill, Prince William County (VA) Police Department
- Mr. Paul Estaver, National Institute of Justice
- Mr. William Moulder, Chief of Police, Des Moines Police Department
- Mr. Thomas B. Nelson, President, Collector’s Armoury, Inc.
- Mr. Robert Reid, Vice President of Marketing, Daisy Manufacturing
- Dr. Stanley I. Warshaw, Associate Director for Industry and Standards, National Institute of Standards and Technology
- Mr. Paul White, Project Monitor, Bureau of Justice Statistics (Ex-officio)

Research Methods

The first step in the research process was to define the specific issues and goals which needed to be examined to meet the Congressional mandate. This necessitated that the researchers identify the types of toy gun incidents which have occurred and analyze them for trends or similarities. This was initially done through a content analysis of news stories selected through a Lexis®/Nexis® computer search of news stories. (See Appendix 3 for news sources.)

With this analysis serving as the foundation, two primary data collection methodologies were developed and used: survey research and law enforcement agency site visits.

Survey Research. A survey was developed which collected data on the experiences of police departments with toy gun incidents. The survey was sent to all municipal police and consolidated police departments serving populations of 50,000 or more inhabitants; all sheriff’s departments with 100 or more sworn employees; and all primary state police agencies. Of the 699 agencies in the study population, a total response rate of 70% was received based on 489 responses. Thirty-one questionnaires were not included in the analysis because they were either improperly completed, received too late, or returned without being completed. In these cases the agency acknowledged receiving the survey but chose not to participate. As a result, the usable response rate was 65.5% (458 responses—Figure 1). By all measures of survey research, this is an above average response rate. (Appendix 4 shows responses by census region of the country.) Excluding the state police agencies, the police departments surveyed cover slightly over one-third (33.6%) of the U.S. Population as reported in the 1988 Statistical Abstract of the United States. With respect to police activity, since the agencies surveyed represent the
largest jurisdictions in the country, police responses to calls and involvement in incidents would represent the highest levels.

Figure 1

RESPONSE RATE BY TYPE OF LAW ENFORCEMENT AGENCY

![Pie chart showing response rates by type of law enforcement agency]

Questions on the survey solicited information about the police agencies' experiences with officers using deadly force and less than deadly force against people with imitation guns as well as information on robberies and assaults wherein imitation guns were involved. This information was solicited in three different categories of imitations: toy guns; replica guns; and BB, pellet and starter's guns.

Analysis of the survey data for this report is in univariate form (i.e., frequencies and percentages). The reader will note variances in the number of responses to each question because not all the respondents answered all questions. The questions for this survey were extraordinarily difficult for the law enforcement agencies to answer simply because police departments typically do not maintain data stratified by the identifying character of "toy gun" (or similar notation). As a result, most agencies resorted to some form of manual records check and/or solicitation of information from officers.

Law Enforcement Agency Site Visits. The purpose of the site visits was to examine experiences and incidents of law enforcement agencies on a detailed basis. The 27 agency site visits were conducted in "clusters" to maximize data collection. Agencies were identified through news reports and/or self-reports which indicated experiences with imitation gun incidents. These departments served as the foundation for the visits with additional departments in the region also visited to explore and discuss experiences with toy guns. This approach worked quite well giving the researchers a broader range of site experiences on which to base discussions of trends. Beyond experience with toy gun...
incidents, criteria for site selection included jurisdiction size, geographic distribution, and agency type. (Those agencies visited are listed in Appendix 5.)

During the site visits the researchers interviewed officers involved in toy gun incidents; investigators; police commanders; and training personnel. Reports were also reviewed and seized imitation guns were examined. In some cases, the researchers were given weapons seized in toy gun incidents which were no longer needed for evidence. While in the various site visit cities, the researchers also went to stores which sold toy, imitation, or replica guns in order to get a perspective on the national imitation gun market.
II. DEFINING THE ISSUES

As the problem and issues were examined, it was determined that in order to meet the spirit of the study’s mandate, the problem would have to be broken down into operational components. Broadly viewed, circumstances involving toy guns can be categorized for study based on the nature of the incident or nature of the weapon. As will be discussed in detail later, between January 1, 1985 and September 1, 1989 a total of 15,162 imitation gun incidents were identified. During this same period there were 31,650 reported imitation gun seizures by the police where there was some type of crime or encounter.

This breakdown was used for study because the researchers found in some cases the circumstances were the dominant elements of the incident. In other cases, the design and appearance of the imitation gun seemed paramount. It is not inferred that these categories are mutually exclusive; rather they are used to help illustrate the dynamics of the phenomenon.

Nature of the Incident

Incidents involving toy guns could be classified in four ways depending on the type of encounter and outcome (Figure 2). The order of discussion reflects logical convenience rather than frequency or seriousness, per se.

The first type of incident was the commission of a crime with an imitation gun being intentionally used as an instrumentality of the crime. Generally, the suspect would brandish the gun as if it were a real weapon. The most common crime was robbery. However, kidnapping, rape, assault, drug dealing, and disorderly conduct offenses were also identified.

SEATTLE, WASHINGTON - A man walked into a restaurant across the street from the Seattle police headquarters, pulled a gun from under a coat, and demanded all the money from the cash register. As soon as the robber fled, the police were called. The victim excitedly swore to the officer that the robber had a shotgun because of the large bore of the barrel. Later in the day the thief was located and arrested. When the police examined the seized weapon it was found to be a CO₂ powered paintball gun.

SOURCE: Officer interviews during site visit.

The second type of incident found could be classified as mistaken encounters. These occurred when a citizen and/or officer encountered a person with a toy gun but, as a result of the gun’s appearance and the circumstances of the incident, the people involved reacted as if the gun were real.
Figure 2

POLICE ENCOUNTERS BY THE NATURE OF THE INCIDENT

- Commission of a Crime
- Mistaken Encounters
- Officer-Involved Shootings in Non-Criminal Situations
- Commission of a Crime and/or Brandishment of a Toy as a Real Weapon-Result in Shooting

Figure 3

GUN CLASSIFICATIONS BY NATURE OF THE WEAPON

- TOY GUNS
  - Manufactured for Child's Play
- IMITATION GUNS
  - Manufactured for Sporting Purposes
- REPLICA GUNS
  - Manufactured as Collector's Items
OVERLAND PARK, KANSAS - A desk clerk at a Ramada Inn observed a man walking through the front lobby about 1:00 AM carrying a "submachine gun." The clerk called the police to report the man with a gun. Officers arrived and lured the man out of the room with a call from the front desk. As the man walked out of the room, he was surrounded by SWAT team officers with guns drawn. A search of the room turned up a black "Uzi Water Laser" toy gun. The clerk, who clearly observed the gun in the brightly lit lobby was certain it was real. SOURCE: Officer interviews and review of incident reports during the site visit.

A third category of occurrences were the officer-involved shootings in non-criminal situations. In these incidents the circumstances facing the officer reasonably appeared threatening and/or criminal. As a result of multiple factors the officer used deadly force against a person. Yet, a follow-up investigation showed that a crime was not occurring. As illustrated below, the incidents identified in this category most frequently involved either a mistake of fact or erratic behavior of a person who was psychologically unstable.

LEE'S SUMMIT, MISSOURI - A Missouri Highway Patrol Officer stopped a car in mid-afternoon for speeding and crossing the median on a divided highway. When the car stopped, the driver got out and ran away as the trooper shouted for him to stop. When the man was about 70 feet away, he stopped, turned toward the trooper and displayed what appeared to be a blue steel .38 or .357 revolver. The trooper drew his weapon while ordering the man to drop the gun. Instead, the man raised the gun pointing it at the trooper who then fired. The man ran a short distance, turned, and began walking toward the trooper who again ordered the man to drop the gun. Once again the man raised the gun to eye level and pointed it at the trooper. The officer fired his last round and the man fell dead. After seizing the weapon it was learned the gun was a pellet pistol modeled after a .357. A follow-up investigation found that the deceased had suffered severe depression and had been under psychiatric care about four years. SOURCE: Review of an incident report submitted by the agency.

The final incident type is the commission of a crime and/or the brandishment of a toy gun as a real weapon resulting in an officer involved shooting. In these cases the suspect was involved in a crime (or a criminal attempt) and attempted to dissuade officer intervention by acting as if the imitation weapon were real. These incidents typically involved some form of overt behavior prompting the officer's decision to shoot.

ATLANTA, GEORGIA - One evening members of the Atlanta police "Red Dog Squad," a special tactics unit, were working an area of the city in response to complaints of drug dealing. The officers were frisking a man when a woman walked up and told them that the man did not have any drugs. At that point the woman pulled out what appeared to be a chrome-finished semiautomatic pistol and pointed it at a female officer. Another officer, who was standing within five to ten feet told, the woman to drop the gun. She did not move the weapon and the officer shot her. It was later determined the gun was a metal toy. SOURCE: Review of an incident report submitted by the agency.
As illustrated by the above scenarios, fundamental distinctions can be made between the incident types which are useful for both analytic and descriptive purposes.

Nature of the Weapon

This categorization became problematic. Weapon types transgressed the various incident types. Moreover, while clearly not firearms, many of the guns were also not "toys" in the traditional sense. The guns found in the incidents may most accurately be described as imitations. In some instances the weapon was not included in Public Law 100-615 requirements for distinctive markings. Yet, police officials were adamant about their concern for these types of weapons. Because of these dilemmas, imitation weapons were categorized into three groups (Figure 3):

- Toy Guns
- Pneumatic Guns
- Replica Guns

Toy Guns. The first group of weapons is simply toys. These are imitation weapons designed with the specific intent for playing. They include a wide array of game types such as a child using the toy in concert with his/her imagination (e.g., "cops and robbers"); the use of waterguns; toy guns designed for some type of "target practice"; and the more sophisticated games such as "laser tag."

There is a wide variety of toy guns available in the market—to too many to completely address in this report. Instead, the researchers have identified selected toy guns as illustrations. These were selected because of their prominence in identified incidents; because their characteristics illustrate the issues encountered during the course of the research; and/or because the guns are widely available.

In an attempt to get a perspective of the types of toy guns available on the market, the researchers visited toy gun stores in cities throughout the country. Some stores were national or regional chain stores while others were locally owned. Some variation existed in the inventory depending on the region of the country and, it appeared, depending on the attitude or philosophy of the stores' management. Despite these anomalous variations, some clear trends emerged concerning the availability of various types of toy guns. A number of manufacturers (notably domestic companies) have stopped making toy guns which replicate real weapons. Some foreign companies still appear to be making these
types of toys, however. Despite the change in manufacturing trends, there are still toy guns in store inventories which replicate real weapons. These were observed—and in some cases purchased—in the toy stores visited by the researchers. The comments below are based on noted observations in toy gun availability from retailers integrated with information gained from police officers who have had encounters with persons in possession of toy weapons.

The LARAMI Corporation manufactures several models of toy guns resembling real weapons. Among the most popular appear to be waterguns and cap guns which strongly resemble Uzi automatic pistols (see Illustration 1). Other popular LARAMI models are the MAC-11 Cap Gun; TEC-9 Z-Matic Cap Gun; Uzi Rifle Z-Matic Cap Gun; Beretta Z-Matic Cap Gun; the Magnum Series cap guns (three guns in the series—see Illustration 2 for one illustration); and the MAC-10 WaterLaser™. All of these LARAMI toy guns have significant detail and clearly replicate real weapons—a factor evident not only in their appearance but also by their names. LARAMI has changed its production of these toys by making the guns brightly colored and incorporating the barrel markings. In many cases, however, the design of the toy gun has remained the same.

Earlier versions of the LARAMI toy guns (both water pistols and cap guns) were generally black, with no distinctive markings. Later models followed with blaze orange barrel markings with many current models being completely colored in blaze orange or other bright color. Despite this effort by the manufacturer to make the guns clearly marked as toys, the guns have retained their distinctive shape comparable to their real counterparts. As evidenced by the findings in this research effort, the coloring alone may not be sufficient.

LARAMI also markets alternate toy gun designs. For example, the “Water Cannon” uses hand generated pneumatic pressure to spray water. The color is blue and white (in the model observed in toy stores) but more importantly, the shape and configuration of the toy gun is “non-traditional.” That is, the water gun does not look like a real gun and is therefore “less threatening” than the designs of the guns mentioned above. Similarly, the company’s Pulsar™ watergun has a distinctive shape that does not look real, yet retains qualities appealing to children for play. (See Illustration 3.)

The BARTON MAKS CO. is another manufacturer which models its toy guns after real weapons. For example, its toy MAC-11 is a bright blue gun with an orange barrel. However, its shape is virtually identical to the distinctive lines of its real counterpart. Similarly, they manufacture a bright green M-16 rifle which is slightly down-sized but nonetheless retains the distinctive shape of the M-16 (or Colt AR-15). BARTON MAKS CO. also makes
Illustration 1

LARAMI Water Pistol Modeled After the Uzi Automatic Pistol
(Seized in Las Vegas, Nevada Involving What Appeared to be a Kidnapping)†

†This gun is made of black plastic with no markings signifying it is a toy.
Illustration 2

Sample Cap Pistol in the LARAMI Magnum Series†

†This gun is made of plastic, the grips and cylinder are black, the body of the gun is maroon and the plastic collar on the end of the barrel is orange.
Illustration 3

LARAMI Nontraditionally Shaped PULSAR™ Water Pistol†

†This gun is made of a bright pink plastic. Not shown is a black plastic "water clip" which is inserted in the grip.
the “Big Shot Water Rifle” which has blue and white markings but is shaped like a downsized Winchester shotgun. In the dark the watergun could reasonably be mistaken for a sawed-off shotgun.

EDISON™ GIOCATTOLI manufactures a toy revolver called the “Super Shooter” and a package called the “Ranger Target Set.” The guns are produced in multiple bright colors, yet the shapes of the guns in both sets unmistakably look like .357 magnum revolvers. In light of what was learned from officers who encountered toy guns under low light and limited visibility conditions, the profile of the guns could clearly appear threatening.

While the problems of gun shape remain with respect to encounters with police officers, attempts at change by manufacturers do have positive points. First, they signify an awareness of the problem and have gone beyond the minimal standards for marking established by Congress. Second, the brightly colored toy guns described above would not be nearly as likely to be used in robberies as have so many toys in the past. While one may argue that the realistically shaped toy guns may be painted to look more real, there is no way to actually project that. (See the later discussion on gun “markings.”) This is not, however, to diminish the importance that shape of the toy gun plays in encounters with police officers.

Certainly it is possible to manufacture a toy gun which has market appeal yet has a distinctively different shape to significantly minimize the threat of the weapon during a potential encounter with the police. For example, KENNER makes a toy called the “Water Zapper™.” This watergun is marketed in the GhostBusters™ product line and has a unique shape that one would not likely confuse with a real gun. Another example is from the “Lazer Tag” line of WORLD’S OF WONDER. Their laser gun called the StarLyte PRO™ has a unique “futuristic” design with large handles that does not resemble a real gun. Despite this, the toy is designed to effectively meet the objectives of the “Lazer Tag” game. Similarly, the CharterKing Ltd.™ paint gun called the “Wipe Out™” and EnterTech’s “Motorized Blasters” watergun both have distinctive configurations not resembling real guns, yet they fully meet the objectives of play. Illustrations 4 and 5 respectively illustrate other toy gun models—the Future Cop “Laser Sound Pistol” manufactured by ARCO Toys Ltd./Mattel and the “Flash Blaster Z-Matic” Wild Cat manufactured by LARAMI. As can be seen, both of these toys have distinctive shapes which can be differentiated from real guns.

These observations are not meant to be an exhaustive review of all toy gun manufacturers or their products on the market. Rather, it attempted to define trends in the industry along with prominent and popular examples.

Pneumatic Guns. Types of guns which transgress the toy gun and real gun distinction are those using pneumatic pressure to propel some type of projectile. The
Illustration 4

*Future Cop* “Laser Sound Pistol”—ARCO Toys Ltd./Mattel†

†This gun is made of white plastic.
Illustration 5

"Flash Blaster Z-Matic" Wild Cat — LARAMI Corporation†

†This gun is made of a dark red plastic with the collar on the barrel tip being bright orange.
propellant system may be either through an internal pump, hand operated by the person using the gun or one using a compressed CO₂ air cartridge. Most commonly thought of in this category are BB and pellet guns, however, other pneumatic guns are available. The fastest growing in popularity are “paint-ball sports”—a thriving recreational industry with sophisticated pneumatic guns and equipment.

While clearly not firearms, the pneumatic weapons may neither be classified as a toy. They are powerful enough to cause injury, yet the pneumatic guns can be purchased over the counter by virtually anyone and are likely to be in the possession of adolescents. (Most jurisdictions have a state law or local ordinance requiring a person to be eighteen years old to purchase a pneumatic gun.)

Common in the industry is the pneumatic gun classification used by Daisy manufacturing. Their BB guns are classified into three categories:

- **Youth Line**—These are pneumatic guns with a muzzle velocity of less than 350 Feet Per Second (FPS) and targeted for use by youths aged 10-16 years old with adult supervision.

- **Power Line**—Pneumatic guns with a muzzle velocity greater than 350 FPS and targeted for use by people older than 16 years of age. Daisy recommends that youths age 16-18 use the gun only with adult supervision.

- **Adult Precision**—These guns have the same characteristics as the Power Line guns, however they are more expensive and are manufactured for competition shooting.

Despite the care the pneumatic gun industry has taken to “target” the guns for specific uses, the public attitude appears to be that pneumatic weapons do not pose a threat similar to firearms. Thus, possession and use of the pneumatic guns without adult supervision are relatively common.

With respect to pneumatic guns, the marking provisions of Public Law 100-615 apply to “air-soft guns firing nonmetallic projectiles” but not to “traditional B-B, paint-ball, or pellet-firing air guns that expel a projectile through the force of air pressure.”

“Air-soft” guns were originally produced by the Japanese as a sporting alternative to firearms and traditional pneumatic guns which are virtually unattainable for private citizens under Japanese law. Typically, the “air-soft” gun is a facsimile of a firearm with a small spring piston or air propellant capable of shooting only lightweight plastic projectiles at a rather low muzzle velocity of around 150 Feet Per Second. In some cases the air propellant and projectile are encased in individual “bullets” with the action on the guns working the same as they would on the real firearm. Some of these model designs have been manufactured as traditional pneumatic guns that will fire BB’s and pellets. Air-soft guns are manufactured to look virtually identical to many real guns, notably “assault” weapons—such as the AR-15 rifle; the Mini-Uzi automatic; the H&K MP5K machine gun; the Walther MPK and MPL machine guns; the U.S. M3 “Grease Gun”; and the TECH-9 automatic, among others. The pneumatic BB gun illustrated in Illustration 6 is but one example designed to look like the Intratec 9mm Luger semiautomatic assault handgun. The gun not only closely resembles the real weapon, the BB gun has “Interdynamic ... 9mm Luger” printed on the side. (This particular gun was seized in Houston involving a potential assault.) Importation of nearly all air-soft guns stopped in 1987, although some guns are still available in back inventories just as some are still in use which were
Illustration 6

*Interdynamic 9mm Luger* BB Gun Modeled After the Intratec 9mm Luger Semiautomatic Handgun (Seized in Houston, Texas)†

†This gun is made of black plastic with no markings signifying it is a pneumatic gun.
previously purchased. (The cease of importation was a marketing decision by retailers, not a function of legislative prohibition.)

There are several models of pneumatic pistols (as opposed to air-soft guns) manufactured to look like real firearms. For example, Crosman makes an air rifle capable of shooting either BB's or pellets called the “AIR 17” that looks like the Colt AR-15 (military M-16) assault rifle. Similarly, the Crosman model Z-77 CO₂ gun is a facsimile of the Uzi machine gun, complete with folding stock. The Benjamin single shot pneumatic pistol looks similar to the AMT .22 magnum automatic pistol or the Israeli made Desert Eagle 9mm automatic. Beeman's P1 air pistol design virtually replicates several models of the .45 automatic handgun. Similarly, Crosman’s Model 357 CO₂ pellet pistol is almost indistinguishable from the Colt Python .357 magnum revolver. In this same product line is the Crosman 38T CO₂ pellet revolver which looks very similar to the Colt MK111 .357 magnum. Many other configurations of pneumatic pistols exist which look similar to a real firearm, particularly in light of their metallic construction (such as the one illustrated in Illustration 7).

Market trends have affected the sale of some of these models to the point that manufacturers have stopped their production. Nonetheless, models are still available in both wholesale and retail inventories as observed by the researchers during site visits.

As in the case of toy guns, the national perspective on the availability of such guns was fairly consistent. BB and pellet rifles do not appear to have been a problem with respect to robberies or threatening situations between citizens and police officers. However, BB and pellet pistols pose a different problem. There are a number of recorded robberies committed with these weapons just as there are recorded shootings by police officers wherein a person confronting the officer was holding a BB or pellet pistol. These pistols, more so than toy guns, have the appearance of a real firearm. As noted above, some are manufactured to replicate actual firearm designs. Regardless of this replication, the issue again becomes one of design.

The appearance of the pistols, coupled with the fact that persons possessing the guns are usually somewhat older than those possessing toys, complicates the dilemma. It has been suggested by police officials that BB and pellet pistols be redesigned to look less like firearms. One suggestion was to have distinctive functional protuberances—such as an air compression chamber or the chamber to hold “ammunition”—which would signify the pistol was a BB or pellet pistol. While it is recognized that this design may be in conflict with marketing
Illustration 7

*Marksman Repeater* BB Pistol Manufactured to Resemble a Semiautomatic Handgun
(Seized From a Robbery in Las Vegas, Nevada)†

†This gun is made of black metal.
concerns, perhaps a reasonable design alternative could be reached. Many of the paint-ball guns have this unique configuration. While the gun has realistic-looking characteristics, the “magazine” holding the paint-balls is distinctive. Whether or not this design change is feasible for BB and pellet pistols is beyond the scope of this report. The fact remains, however, that law enforcement personnel interviewed in this project had significant concerns about the realistic-looking appearances of pneumatic pistols.

Replica Guns. Some of the weapons used in robberies and confrontations with police officers were not toys, per se, but replicas of actual weapons. Replica guns, according to the Collector’s Armoury 1989 Catalog of Military Collectibles (page 3), are:

“... full size realistic reproductions of classic firearms. However, they are completely safe and cannot be made to fire real ammunition. They look, feel, weigh and function like the expensive originals [emphasis added]. You can spin the cylinders, work the slide actions, load dummy shells into the clips, and even ‘field strip’ these models. They are made of over 30 precision cast and machined metal parts. ... Nearly exact duplication has produced realism down to the last detail [emphasis added]. There’s just a hair’s breath of difference in measurements to prohibit the parts from being interchanged with components from a real firearm. ...”

With this degree of realism noted in the advertising literature, there is no reason to expect that police officers or robbery victims could distinguish between a real gun and a replica. Indeed, a number of robberies, shootings by police, and near shootings have involved people in possession of replicas.

The gun shown in Illustration 8 was the weapon used in the Las Vegas incident. It is a replica of the Colt .44 caliber Single Action Revolver. The replica, manufactured by “MGC Manufactory”, is of metal construction, has moving parts, and the approximate same weight as the Ruger Blackhawk.

As noted in the above catalog description, the replicas not only look real, they are of similar weight and “function” similar to real firearms. For example, on a replica of an automatic handgun, the slide, trigger, magazine, cartridge feed, and ejector systems all work just as they do in the actual weapon. However, the replica weapon does not have a firing pin and the barrel is at least partially plugged. This realism makes it difficult for police officers to
determine if a gun is real, even when they are examining it.

The marking requirements in Public Law 100-615 apply to replicas "... of any original firearm which was manufactured, designed, and produced since 1898 ...." Thus, replicas of contemporary firearms must have at least the minimum prescribed markings. Law enforcement personnel felt that this was insufficient given the realism of the replicas and the ease of altering the markings.
Illustration 8

*MGC Manufactory .44 Caliber Replica of the Ruger Blackhawk* (Seized in Las Vegas, Nevada following an Officer-Involved Shooting)

†This gun is made of a black metal with the grips being brown plastic.
III.
The Dynamics of Toy Gun Incidents

Based on the interviews and reviews of reports, the researchers found that incidents involving toy guns have five critical factors which will influence the outcome of the confrontation (Figure 4). These factors have an interactive—almost cumulative—effect predating a police officer’s reaction:

• Nature of the Call Dispatch
• Expectations of the Officer
• Environment at the Scene of the Incident
• Shape/Design of the Gun
• Actions of the Person

Nature of the Call Dispatch. Many of the incidents where police used deadly force against a person who possessed a toy gun were the product of a call to the police such as an armed robbery, “man with a gun”, or a “nature unknown” disturbance. In these cases, the dispatcher was responsible for obtaining as many facts as possible about the incident and passing this information along to the officers responding to the call. When the possibility exists that a party is armed, the responding officers are so advised. This information places the officer in a heightened state of apprehension under the assumption that a gun does, in fact, exist. Whether that gun may be a toy is not even a factor in the equation. The point to note is that the officers will have a predetermined mental state to expect a gun, thus the officers’ reactions will be “programmed” to deal with this threat.

MIAMI, FLORIDA - A Miami police officer was dispatched to a disturbance and advised that a potentially violent woman was armed. Upon arriving at the scene, the officer encountered a woman talking irrationally and holding a revolver. The officer talked to the woman, trying to get her to drop the gun. Suddenly the woman pulled the gun up and pointed it directly at the officer. Having his weapon drawn, the officer immediately shot and killed the woman. The woman, who it was later learned was mentally disturbed, was holding a plastic toy gun. SOURCE: Officer interviews and review of incident reports during the site visit.

Expectations of the Officer. Based on what an officer has been told by the dispatcher or what is learned about a situation from other sources, the officer begins to develop expectations about the incident. These expectations are necessary for rapid decision-making and response. When the officer’s expectation is based on information that there is a reasonable likelihood of encountering an armed person, the officer may be more predisposed to use deadly force.

KING COUNTY, WASHINGTON - While on patrol a King County police officer was dispatched, with his sergeant, to a domestic disturbance. While approaching the apartment they heard a woman scream and rushed
forward. As they started to enter the apartment a woman shouted, "He has a gun!" As the officer and sergeant walked in, guns drawn, they saw a man pointing what appeared to be a .45 caliber automatic pistol in their direction. They shouted twice for him to drop the gun before he put it down. After confiscating and examining the gun they learned it was a CO₂ pellet pistol. A few weeks later, the same officer was driving his patrol car down a highway when a young man in a convertible Jeep in front of him turned and pointed what appeared to be an Uzi automatic pistol at the officer. With backup from the Washington State Patrol the officers conducted a felony car stop with guns drawn. As they were getting out of the car, the young man shouted "It's a fake!" The officers found the gun to be a water pistol manufactured to look like an Uzi. Under both circumstances, the officers expectation was that the guns were real. The officer said that even though he had two incidents dealing with imitation guns in a short amount of time, he still had to assume anything pointed at him resembling a firearm was real.

SOURCE: Officer interviews during the site visit.

Environment at the Scene of the Incident. Beyond what an officer is told about an incident and the expectations he/she may develop, observations of facts and circumstances at the incident scene are strong predictors of officer behavior. For example, an officer may not be predisposed to use deadly force until assessing the environment. Indicators may then be observed to change the officer's threat assessment of the incident. Conversely, an officer may perceive circumstances which appear more threatening thus heightening his/her perception of danger. These environmental cues—ranging from geographical location, appearance, time, weather conditions, etc.—are important determinants in the officer's response to the situation.

DALLAS, TEXAS - A store in Dallas had been the target of several robberies. As a result, the owner began hiring off-duty Dallas police officers for security. The officers were told of the repeated armed robberies and advised to "always be on alert" because they could reasonably expect a robber. One evening, a man entered the brightly lit store, pulled a gun and ordered that all the cash be given to him. As the robber started to leave, the off-duty officer, weapon drawn, confronted the man and ordered him to stop and drop the gun. The man then raised his gun and the officer shot him. Later, as the gun was inspected it was found to be a starter's pistol.

SOURCE: Officer interviews during the site visit.

Shape/Design of the Gun. In discussing the markings and appearance of toy guns with officers who had confronted them, invariably the officers would mention the shape of the gun. The concern expressed by officers was that toy gun designs were so realistic that they could not distinguish the imitation from a real gun even under good light conditions. When the officer confronted a person under poor visibility conditions, particularly when the person was moving and/or acting in a threatening manner, the identification of the gun as being real or not was virtually impossible.

LAS VEGAS, NEVADA - An officer responding to a silent alarm at a liquor store, observed through the front window the robbery in progress. The officer, whose view was unobstructed in the brightly lit store, saw the man move a group of seven people to a back room as the man brandished a gun stuffed in his waistband. Another officer, unaware of the robbery call,
Police Involvement With Toy Guns...

In most gun confrontation instances, all the officer saw was a “gun shape” or “special characteristic” on the imitation which looked like a real gun. The most commonly cited “special characteristics” were the distinctive shapes of the Uzi and MAC-10 weapons, and the ribbed barrel on the Colt Python and Diamondback models. It appears that these guns—perhaps because of these characteristics—have had a large number of imitation guns model their design.

The caveat given by most officers interviewed was that while markings may be beneficial, shape and design of the weapon should be given even more serious attention.

**Actions of the Person.** In every case where officers used deadly force in a toy gun confrontation, the “triggering element” in the officer’s decision to shoot was the action of the person. In some cases, the person’s surprised physical reaction to the presence of a police officer with gun drawn was of a nature that was interpreted as threatening resulting in the officer’s decision to fire. In a surprising number of other cases, the person intentionally acted in a threatening manner to provoke the officer to shoot.

**INDEPENDENCE, MISSOURI** - One evening the police department received a call on 911 that a man had a gun and was threatening to injure his girlfriend and a child. The police responded and the man, waving the gun, threatened to also commit suicide. An “armed and barricaded” tactical situation then occurred while the police attempted to talk the man into giving up his weapon and surrendering. About 3:00 AM the man began to shout and act in a threatening manner as if he were going to shoot the officers nearest him. The officers fired, injuring the man. While the man was down, the officers approached him and only then saw the gun was a toy. After the man was taken to the hospital, the girlfriend was interviewed saying that the man “wanted to die” and his intent was to act violent “so the police would kill him.” **SOURCE:** Officer interviews and review of incident reports during the site visit.

When these dynamics interact—as they have at least 40 times in the past two years—the tragic result is that a police officer shoots a person who is holding a toy. In most cases, the shooting was fatal. The incident is, as a matter of law, a “mistake of fact.” Yet, the social impact is frequently enormous. These dynamics are further complicated by the increased presence of real guns and shootings on our nation’s streets.

One should not lose sight of the fact that the toy gun shootings can have several victims. The person who is injured or killed is the obvious victim. Similarly, that person’s family will be victimized by the incident, perhaps asking themselves what they could have done to prevent the tragedy. The police officer can also be a victim. In a number of cases identified in this research, the officer was placed on psychological disability, sometimes
never to return to work. In these instances, the officer's family will also be a victim. When the officer does return to work, he/she may be haunted by the incident resulting in slower decision and response times in incidents involving guns. Finally, citizens reporting suspicious circumstances which ultimately lead to a toy gun shooting may also be victims. The citizen may question whether he/she did the right thing in calling the police or ask themselves whether they should have gotten more facts before reporting their suspicions.

The dynamics of toy gun-related shootings are complicated and should not be dismissed as anomalous accidents.

Figure 4

FACTORS PREDICATING A POLICE OFFICER'S REACTION DURING A TOY GUN ENCOUNTER
The survey attempted to document the experiences law enforcement agencies have had with imitation guns. As noted previously, this was a formidable task for the departments since reporting systems typically are not "key-word coded" to identify the involvement of imitation guns. The records which do exist are based on three sources:

- There was an officer-involved shooting and an imitation weapon was seized during the course of the internal investigation.

- Cases of assaults and robberies when the gun in question was seized or could be clearly determined by a victim or witness that it was an imitation. (Some cases were identified where the victim stated the gun was a toy, yet the robber/assailant was sufficiently intimidating to victimize the person.)

- Anecdotal experiences of officers involved in imitation gun cases. This was found to be an extraordinarily rich resource because many officers had toy gun encounters, yet there was no record of them unless there was a concomitant crime or use of force incident.

Despite these limitations, data were received on the survey questions seeking documentation on robberies, assaults, and officer-involved incidents from January 1, 1985 through August/September (depending when the survey was completed) 1989. The reader will note that the numbers of responses vary on the questions based on the number of agencies (recorded on the respective tables) indicating experiences and access to data on the incidents. In light of the information received from the site visits, the researchers believe that the reported data are very conservative except for cases where actual force was used by officers in an imitation gun incident.

Imitation Guns and Robberies

A somewhat curious occurrence has been the use of imitation guns in robberies. The data on these crimes indicate that this occurs more frequently than one may generally assume. For example, in Houston, a review of reports indicates that on the average at least two robberies a month are known to have been committed with an imitation gun, with the actual number of imitation gun robberies assumed to be higher. A robbery investigator in King County, Washington estimated that 10% - 15% of the approximate 200 robberies he investigates each year were committed with imitation guns. Based on a review of police reports and interviews with investigators, it appears that robbers use toy guns under two circumstances.

First, the thief believes that use of an imitation gun may mitigate punishment if he/she is captured and charged with the crime. In many states, however, the robbery statutes will treat an imitation gun the same as a real gun as long as the victim "was in fear." As a common illustration, the Texas statutes have two robbery offenses: Robbery and Aggravated Robbery, the latter of which involves the use of a firearm (as well as other
circumstances). If a robber uses a toy as an instrumentality of the robbery and the victim is in fear, then the perpetrator may still be charged with the more serious crime. Thus, in this case the robber’s logic does not bear out in law. On the other hand, in Washington, state statutes have robbery, first degree robbery, and first degree robbery with a firearm. While a person with an imitation gun could be charged with a first degree robbery, he/she could not be charged with first degree robbery with a firearm. While these are issues of law, investigators told the researchers, as a practical matter, prosecutors will generally charge a person with a lesser offense if a toy gun is used, regardless of the victim’s degree of fear. Similarly, it is likely that during the sentencing stage, a judge or jury may mitigate the robber’s sentence if a toy was used instead of a real firearm.

The second reason a robber may use a toy is because the thief, for some reason, cannot obtain a real gun. It appears from a review of reports, that the criminal prefers to use replicas or pneumatic guns because of their more realistic appearance. Robbers also appear to have some form of psychological displacement about the realism of a toy gun. That is, if the gun is similar to a real weapon, the person seems to adopt a feeling of power and manipulation as if the gun is real. This gives the thief more confidence enabling him/her to control the robbery more firmly despite the fact the gun is an imitation.

Results from the survey show that robberies by imitation guns are occurring on a daily basis in the United States (see Table 1/Figure 5). Somewhat surprisingly, toy and pneumatic guns are the most commonly used “weapon” with the more realistic replica guns being used in proportionately fewer cases. Possible reasons for this are (1) the replica guns are not marketed nearly as broadly as the toys and pneumatic guns and (2) the cost of the replicas are significantly higher than the other types with some replicas approximating the cost of working firearms.

Despite the survey findings, the researchers infer, based on what was learned during the site visits, that more robberies are committed with imitation guns than the data show. On an average, robbery investigators consistently estimated around 15% of the robberies were committed with guns that were toys, pneumatic, replicas, or starter’s pistols.

NEWARK, NEW JERSEY - Newark robbery Detective Barry Colicelli, who is also President of the New Jersey Robbery Investigators’ Association (NJRIA), has been tracking robberies committed by toy guns since 1984. Detective Colicelli and his NJRIA colleagues concluded that at least 15%-20% of their robberies are committed with imitation guns. The problem was deemed to be of sufficient importance that the NJRIA worked with the state legislature to pass a law which specifically addressed toy and imitation guns by making it a crime if the guns were used or intended to be used for an unlawful purpose. Detective Colicelli’s experiences show that unusual circumstances occur during imitation gun robberies and encounters. In one case, a robber armed with a real gun entered a Newark bar demanding cash. The disk jockey—outfitted in a cowboy costume, pulled his toy gun on the robber ordering the thief to “drop it.” The robber turned and shot the DJ. In another case, a man brandishing a black Uzi-style water pistol forced a car off the highway. The man then robbed the occupants and squirted them with the watergun before leaving “…adding insult to injury.”

SOURCE: Interview with Det. Colicelli during the site visit.

Yet, unless the gun could be clearly shown to have been an imitation, official records would assume the gun was real. Because of the poor record keeping on imitation gun robberies, the fact that the estimates of investigators are experiential rather than empirical, and the inherent methodological differences between the UCR and this study, the authors feel that estimating the number of imitation gun robberies from those reported in the UCR would have limited value.
Table 1

ROBBERIES COMMITTED INVOLVING IMITATION GUNS BASED ON GUN TYPE

<table>
<thead>
<tr>
<th>Year</th>
<th>Toy</th>
<th>Replica</th>
<th>Pneumatic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989 (9 Months)</td>
<td>443</td>
<td>181</td>
<td>406</td>
<td>1,030</td>
</tr>
<tr>
<td>1988</td>
<td>753</td>
<td>253</td>
<td>612</td>
<td>1,618</td>
</tr>
<tr>
<td>1987</td>
<td>665</td>
<td>179</td>
<td>499</td>
<td>1,343</td>
</tr>
<tr>
<td>1986</td>
<td>482</td>
<td>159</td>
<td>384</td>
<td>1,025</td>
</tr>
<tr>
<td>1985</td>
<td>453</td>
<td>164</td>
<td>21†</td>
<td>638</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2,796</strong></td>
<td><strong>936</strong></td>
<td><strong>1,922</strong></td>
<td><strong>5,654</strong></td>
</tr>
</tbody>
</table>

*Based on 148 agencies reporting robberies known to have been committed with a toy gun.
*Based on 80 agencies reporting robberies known to have been committed with a replica gun.
*Based on 158 agencies reporting robberies known to have been committed with a pneumatic gun or starter's pistol.
†Based on the quantitative trends this number appears to be under-reported, however, a review of the data received did not detect an anomaly.

Figure 5

ROBBERIES COMMITTED INVOLVING IMITATION GUNS BASED ON GUN TYPE
Imitation Guns and Assaults

An "assault" under common law includes not only injury to another but also the creation of a "... well-founded fear of imminent peril, coupled with apparent present ability to execute attempt if not prevented" [Black's Law Dictionary, West Publishing Company (1968), p. 147]. (Emphasis added). While it is conceivable that a person could be physically assailed with an imitation gun, the more likely crime is the "simple assault" where a person is threatened and in fear of injury.

The survey results (Table 2/Figure 6, page 31) show notably more assault incidents with imitation guns than robberies despite the fact that there were fewer agencies reporting assaults on the survey. No meaningful comparisons can be made between these findings and the Uniform Crime Report assault data since the UCR statistics reflect only aggravated assaults.

As a collateral issue of imitation guns and crime, law enforcement agencies reported that between January 1, 1985 and September 1, 1989 they had seized a total of 31,650 imitation guns (Table 3/Figure 7, page 33). This does not include guns which were stolen property, only those which were directly or indirectly involved in some incident (e.g., robbery, assault, domestic disturbance, suspicious person, etc.) where the police took some form of action.

HOUSTON, TEXAS - As soon as police officers stopped a car going at a high rate of speed, a shirtless man jumped out of the car bleeding from the left eye. The man said the driver had a gun, handcuffs, and badge and claimed to be a police officer. The man further said the driver pulled the gun threatening to shoot him, showed the badge and ordered the man to turn over his money. The driver then forced the man into the car, beat him with the handcuffs saying, "I'm the law. You better be cool with the law man or I'll take care of you." The driver continued to threaten the man with his badge and gun. The Houston officers got the driver out to investigate the incident and found the driver—who had calmly remained in the car—had handcuffs, a badge that said "Special Police" and a black Uzi type toy cap gun. SOURCE: Officer interviews during the site visit.

NEW YORK, NEW YORK - While on foot patrol a New York police officer observed a man with the butt of what appeared to be a semiautomatic pistol sticking out of his pants. The officer pulled his service revolver, stopped the man and conducted a frisk, seizing the gun which turned out to be a water pistol. The case involved an official action of a police officer who lawfully stopped and frisked a citizen in the course of an investigation. When asked if he made a report on the incident, the officer stated, "No, it turned out there was nothing to report: you can legally carry a watergun." SOURCE: Officer interviews during the site visit.

Imitation Guns and the Use of Force by Police

The police departments were asked on the survey to report the number of incidents where officers had warned/threatened to use force or actually used force in a confrontation where an imitation gun had been mistaken for a real firearm. A total of 1,128 incidents between January 1, 1985 and September 1, 1989 were reported where officers had warned or threatened to use force (Table 4/Figure 8, page 34). Based on the site visits, the researchers believe that this number may be significantly underreported because the incidents were simply not known to the agency. Repeatedly when interviewing officers, they would talk about incidents they (or their friends) had been involved in where a person was told to drop the gun or be shot. In nearly all the cases, when asked whether a report had been made on the incident, the answer was "no."
In cases where force was actually used it is probable that the data are more accurate since internal investigations typically follow the use of force. The limiting factor may be when simple physical force was used to "disarm" or control a person. The findings show that over the past five years there have conservatively been at least five instances a month where U.S. police officers have used actual force against a person in the belief that an imitation gun they were holding was real and the person was about to use the weapon (Table 5/Figure 9, page 35). The authors did not intuitively expect to find this many incidents.

As in the cases of robberies and assaults, the threatened and actual force incidents tended to involve toy and pneumatic guns two to four times more frequently than replica guns.
Table 2

ASSAULTS COMMITTED INVOLVING IMITATION GUNS BY GUN TYPE

<table>
<thead>
<tr>
<th>Year</th>
<th>Toy</th>
<th>Replica</th>
<th>Pneumatic</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989 (9 M)</td>
<td>567</td>
<td>128</td>
<td>693</td>
<td>1,388</td>
</tr>
<tr>
<td>1988</td>
<td>686</td>
<td>213</td>
<td>1,188</td>
<td>2,087</td>
</tr>
<tr>
<td>1987</td>
<td>601</td>
<td>120</td>
<td>935</td>
<td>1,656</td>
</tr>
<tr>
<td>1986</td>
<td>615</td>
<td>124</td>
<td>780</td>
<td>1,519</td>
</tr>
<tr>
<td>1985</td>
<td>635</td>
<td>110</td>
<td>733</td>
<td>1,478</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3,104</td>
<td>695</td>
<td>4,329</td>
<td>8,128</td>
</tr>
</tbody>
</table>

*aBased on 121 agencies reporting assaults known to have been committed with a toy gun.

*bBased on 65 agencies reporting assaults known to have been committed with a replica gun.

*cBased on 154 agencies reporting assaults known to have been committed with a pneumatic gun or starter's pistol.

Figure 6

ASSAULTS COMMITTED INVOLVING IMITATION GUNS BY GUN TYPE
Table 3

NUMBER OF REPORTED ImitATION WEAPONS SEIZED
BY POLICE BETWEEN
JANUARY 1, 1985 AND SEPTEMBER 1, 1989†

<table>
<thead>
<tr>
<th>Type of Gun</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toy Guns</td>
<td>10,065</td>
</tr>
<tr>
<td>Replica Weapons</td>
<td>2,478</td>
</tr>
<tr>
<td>Pneumatic Guns</td>
<td>19,107</td>
</tr>
<tr>
<td>TOTAL</td>
<td>31,650</td>
</tr>
</tbody>
</table>

†These only involve guns seized in response to a call or complaint to the police and do not represent guns seized as recovered property in thefts.

Figure 7

NUMBER OF REPORTED ImitATION WEAPONS SEIZED
BY POLICE BETWEEN JANUARY 1, 1985 AND SEPTEMBER 1, 1989†

†Percentages in Figure 7 represent proportion of each type of gun seized.
Table 4

INCIDENTS WHERE AN OFFICER HAS WARNED OR THREATENED THE USE OF FORCE BASED ON THE BELIEF THAT AN IMITATION GUN WAS REAL

<table>
<thead>
<tr>
<th>Year</th>
<th>Toy</th>
<th>Replica</th>
<th>Pneumatic</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989 (9 Months)</td>
<td>91</td>
<td>59</td>
<td>113</td>
<td>263</td>
</tr>
<tr>
<td>1988</td>
<td>106</td>
<td>59</td>
<td>124</td>
<td>289</td>
</tr>
<tr>
<td>1987</td>
<td>72</td>
<td>103</td>
<td>106</td>
<td>281</td>
</tr>
<tr>
<td>1986</td>
<td>61</td>
<td>28</td>
<td>67</td>
<td>156</td>
</tr>
<tr>
<td>1985</td>
<td>55</td>
<td>23</td>
<td>61</td>
<td>139</td>
</tr>
<tr>
<td>TOTAL</td>
<td>385</td>
<td>272</td>
<td>471</td>
<td>1,128</td>
</tr>
</tbody>
</table>

*aBased on 82 agencies reporting incidents known to have been committed with a toy gun.
*bBased on 32 agencies reporting incidents known to have been committed with a replica gun.
*cBased on 72 agencies reporting incidents known to have been committed with a pneumatic gun or starter’s pistol.

Figure 8

INCIDENTS WHERE AN OFFICER HAS WARNED OR THREATENED THE USE OF FORCE BASED ON THE BELIEF THAT AN IMITATION GUN WAS REAL
Table 5

INCIDENTS WHERE AN OFFICER HAS USED ACTUAL FORCE (DEADLY OR LESS THAN DEADLY) BASED ON THE BELIEF THAT AN Imitation GUN WAS REAL

<table>
<thead>
<tr>
<th>Year</th>
<th>Toy a</th>
<th>Replica b</th>
<th>Pneumatic c</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989 (9 Months)</td>
<td>16</td>
<td>6</td>
<td>23</td>
<td>45</td>
</tr>
<tr>
<td>1988</td>
<td>31</td>
<td>14</td>
<td>27</td>
<td>72</td>
</tr>
<tr>
<td>1987</td>
<td>45</td>
<td>10</td>
<td>31</td>
<td>86</td>
</tr>
<tr>
<td>1986</td>
<td>7</td>
<td>1</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>1985</td>
<td>6</td>
<td>4</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>TOTAL</td>
<td>105</td>
<td>35</td>
<td>112</td>
<td>252</td>
</tr>
</tbody>
</table>

a Based on 31 agencies reporting incidents known to have been committed with a toy gun.
b Based on 15 agencies reporting incidents known to have been committed with a replica gun.
c Based on 39 agencies reporting incidents known to have been committed with a pneumatic gun or starter's pistol.

Figure 9

INCIDENTS WHERE AN OFFICER HAS USED ACTUAL FORCE (DEADLY OR LESS THAN DEADLY) BASED ON THE BELIEF THAT AN Imitation GUN WAS REAL

![Bar chart showing the number of incidents from 1989 to 1985 for toy, replica, and pneumatic guns.](chart.png)
Figure 10
COMBINED TOTAL REPORTED ROBBERIES AND ASSAULTS

Figure 11
COMBINED TOTAL OFFICER WARNING ABOUT FORCE AND USE OF FORCE
V.

OBSERVATIONS ON REQUIRED MARKINGS FOR TOY GUNS

Public Law 100-615 states, in part, that "... each toy, look-alike or imitation firearm shall have as an integral part, permanently affixed, a blaze orange plug inserted in the barrel of each toy ... Such plug shall be recessed no more than 6 millimeters from the muzzle end of the barrel of such firearm." During the site visits the researchers explained the nature of the required markings and then showed an illustration of a toy gun with the markings. (Ironically, the toy gun used to illustrate the required manufacturer's markings was used in a Las Vegas liquor store robbery.) These observations were consistent with the findings of the National Institute of Justice study on the visibility of the markings under experimental test conditions. According to the NIJ findings...

Under the conditions represented by the experimental test, pistols with [the prescribed] marking are practically indistinguishable from a real pistol.

(Carlson, K. and Finn, P. Test of the Visibility of Toy and Replica Handgun Markings, NIJ sponsored project, Abt Associates Inc., Cambridge, MA, p. 20.)

Reactions to the markings by police personnel included "ineffective"; "ridiculous"; "ludicrous"; "that won't make any difference"; and several more colorfully descriptive comments. In all of the site visits, every person the researchers spoke with expressed the belief that the minimal marking standards were insufficient. Those giving this response included officers involved in shooting incidents; officers encountering toy guns in calls; investigators; training officers; planning and research personnel; police supervisors; and administrators. The reasons for these reactions were based on (Figure 12):

- Ease of Altering the Markings
- Circumstances of the Gun-Related Calls
- Police Officer Firearms Training

Ease of Altering the Markings. Nearly all of the officers expressed the concern that the blaze orange markings could easily be painted by a criminal in order to make the gun appear real for purposes of using it in a robbery. The concern was expressed that if gun designs remain similar to that of real firearms, then the colored markings were merely an inconvenience that could be easily remedied.

As a test of this concern, one of the researchers purchased two toy guns: One was shaped similarly to the Colt Python or Colt Diamondback with the distinctive ribbing down the...
barrel. This cap gun was maroon in color except for the grip and cylinder which were black. The gun had a blaze orange plastic "collar" about four millimeters long over the muzzle end of the barrel. The researcher removed this collar in about 15 seconds—a task which could have been done faster had care not been taken to avoid breaking the plastic.

The other toy was a watergun manufactured to resemble a MAC-10 automatic pistol. This particular gun was made of a bright blue plastic. The researcher taped half of each weapon with masking tape in order to compare the painted side with the manufactured side. The researcher's six-year-old son was then given black spray paint and told to "paint the gun." This experiment exemplified both the concern of the officers and the importance of shape. The difference in appearance of both toys was dramatic with the painted side making the guns look real even in daylight conditions.

Circumstances of the Gun-Related Calls or Incidents. Another concern with the markings was that under circumstances when officers confront people with guns, simple markings may easily escape the officer's attention due to the threat inherent in the incident. This is particularly true under low light conditions and when the shape of the gun is similar to a real firearm. In such incidents the officer's attention is devoted to many different facets of public safety, self-protection, maintaining control of the incident, and resolving the incident. The officer's focal concern is not on the gun, per se, but on the person holding the weapon and their actions.

The concern was also expressed that with a gun design that looks real, but with minimal identification markings, one could still not be assured that the gun was a toy. Particularly in cases of robbery, there have been instances when victims have said that they thought the gun was a toy by its appearance, yet, the gun looked sufficiently real that they felt endangered. In Houston, for example, the victims in one robbery said the weapon was a red cap pistol. In another robbery the weapon was identified as an orange watergun. Yet, in both instances the victims were in sufficient fear to comply with the robber's demands.

The fact that some toy guns are simply marked by a blaze orange plug or orange collar around the barrel is further complicated by the coloration of front sights on real guns. It has long been a practice of police officers and sportsmen to color the front sight ramp on firearms red or orange as a means to more rapidly and distinctly aim the weapon. As a result, some gun manufacturers have made handguns with barrel options that have the front sight colored orange during the manufacturing
process. For example, in various gun stores throughout the country, the researchers found blaze orange or red front sights on such real weapons as the AMT .22 magnum automatic pistol; Colt .357 Cobra revolver; I.A.I. .380 Back-up Revolver; Ruger Redhawk .44 magnum revolver; Smith & Wesson Model 586 .357 magnum revolver; and the Taurus model 669VR .357 magnum revolver. As can be seen, a wide range of gun manufacturers have this sight option available. Moreover, most of these guns observed by the researchers had the sides of the front sights colored red or orange as well as the sight ramp. If a police officer confronts a person in an "armed circumstance" and sees only a glimmer of orange on the barrel, the officer may well assume that the coloration comes only from the front sight, rather than being indicative of a toy gun.

Figure 12

REASONS OFFICERS FEEL TOY GUN MARKINGS ARE INSUFFICIENT

Police Officer Firearms Training. All police personnel interviewed during the site visits were asked whether police training approaches should be changed to warn officers of the possibility of encountering toy guns. Without exception, all persons interviewed said that officers must be taught to assume that all weapons they encounter are real. It was continually emphasized that training officers to try to distinguish between real and toy guns during an encounter would be an officer safety factor and an increased potential threat to the public. One chief noted, "There is inherent danger to law enforcement officers who must face a perpetrator in possession of a 'toy' gun marked with a blaze orange barrel insert. Even with the insert, there is no definite way to distinguish between the toy and real weapon." More directly, another respondent stated, "A gun is a gun is a gun. Brightly colored toy guns, replicas, starter's pistols, etc. are guns. ... As long as the item in question has the general shape and appearance of a gun, any type of gun, it should be considered and handled as a real gun."

A number of police departments deactivate seized guns and paint them red for use in training exercises. The guns—known as "red handles"—not only serve as a training aid,
they reinforce the lesson to officers that any gun, regardless of color, must be treated as a real threat and no distinction between guns should be made until the situation is under control. Similarly, officers are trained that anyone can pose a threat with a gun regardless of age or sex. Thus, officers are told that even when encountering a youth with a gun, it should be treated as a life-threatening circumstance. (Reinforcing this is the disturbing fact that police departments are arresting increasing numbers of 11-year-old to 14-year-old juveniles—male and female—on weapons charges, most frequently associated with drug offenses.)

Another element of police firearms training is what is known as “shoot/don’t shoot” scenarios. This approach involves interactive media wherein an officer watches a vignette or circumstance and is confronted with the need to make an instantaneous decision of whether or not to use deadly force. In one of the scenarios, the officer is confronted by a person who is holding a gun and says, “don’t shoot, it’s a toy”—a moment later, when the officer may have relaxed, the subject raises the gun and fires at the officer. Approaches such as these are meant to reinforce the need for officers to be conservative and assume all weapons are real.

**LOS ANGELES COUNTY, CA** - A sheriff’s department detective in an unmarked car saw a teenage boy lean from a car and point what an officer thought was a .45 caliber automatic pistol. The detective called for uniformed deputies who stopped the car and ordered the driver, her two sons (ages 16 and 10), and a daughter (age 11) out of the car at gunpoint. The officers searched the car and found a toy .45 caliber pistol and a watergun modeled after an Uzi automatic pistol. **SOURCE:** Review of report submitted by the agency.
VI. HOW SERIOUS IS THE PROBLEM?

The answer to the question, "How serious is the problem?" is elusive. It must be answered in perspective, taking into account various qualitative factors. In comparison to all crimes of violence and police-involved shootings throughout the United States, the proportion of cases involving imitation guns is small. The nagging element of the "toy gun problem" is that many of the incidents seem particularly tragic—a child is involved, a mentally disturbed person does not recognize the gravity of his/her actions, or a person simply uses poor judgment.

Regardless of the reason, motivation was the penultimate concern in this study—it only served as an explanator of behavior. More directly, rather than trying to explain why a given person became involved in an imitation gun encounter, this study attempted to document the frequency of such encounters and the environmental circumstances that either contributed to or aggravated the incident. Police executives, when asked about the seriousness of the problem in their jurisdictions, responded with mixed reactions. One chief observed, "We have more serious problems to worry about." On the other end of the continuum, another chief stated, "I believe the toy gun issue is serious enough to require legislation prohibiting the manufacturing and sale of toy guns that are duplicates of the real thing."

Important elements of the problem are already being addressed. Responsible manufacturers have taken the lead in changing the degree to which toys resemble real guns. Similarly, market forces are also affecting the presence of realistic looking toy guns—consumers are beginning to avoid purchasing those items. A caveat remains, however. Despite these changes, realistic imitation guns remain in retailers' inventories and in the possession of many who bought the toys before manufacturing changes went into effect. These guns still remain "at risk."

There is no clear answer to the question, "How serious is the problem?" The response is a value judgment based upon one's ideology and experiences. One chief, in wrestling with the issue, took a somewhat philosophical perspective...

The problem is one of education; we must teach children and adults that violence and the use or threatened use of force, in play or for real, is not an acceptable solution to problems or conflicts.
SEC. 4. PENALTIES FOR ENTERING INTO COMMERCE OF ImitATION FIREARMS.

(a) It shall be unlawful for any person to manufacture, enter into commerce, ship, transport, or receive any toy, look-alike, or imitation firearm unless such firearm contains, or has affixed to it, a marking approved by the Secretary of Commerce, as provided in subsection (b).

(b)(1) Except as provided in paragraph (2) or (3), each toy, look-alike, or imitation firearm shall have as an integral part, permanently affixed, a blaze orange plug inserted in the barrel of such toy, look-alike, or imitation firearm. Such plug shall be recessed no more than 6 millimeters from the muzzle end of the barrel of such firearm.

(2) The Secretary of Commerce may provide for an alternate marking or device for any toy, look-alike, or imitation firearm not capable of being marked as provided in paragraph (1) and may waive the requirement of any such marking or device for any toy, look-alike, or imitation firearm that will only be used in the theatrical, movie or television industry.

(3) The Secretary is authorized to make adjustments and changes in the marking system provided for by this section, after consulting with interested persons.

(c) For purposes of this section, the term "look-alike firearm" means any imitation of any original firearm which was manufactured, designed, and produced since 1898, including and limited to toy guns, water guns, replica nonguns, and air-soft guns firing nonmetallic projectiles. Such term does not include any look-alike, nonfiring, collector replica of an antique firearm developed prior to 1898, or traditional B-B, paint-ball, or pellet-firing air guns that expel a projectile through the force of air pressure.

(d) The Director of the Bureau of Justice Statistics is authorized and directed to conduct a study of the criminal misuse of toy, look-alike and imitation firearms, including studying police reports of such incidences and shall report on such incidences relative to marked and unmarked firearms.

(c) The Director of National Institute of Justice is authorized and directed to conduct a technical evaluation of the marking systems provided for in subsection (b) to determine their effectiveness in police combat situations. The Director shall begin the study within 3 months after the date of enactment of this section and such study shall be completed within 9 months after such date of enactment.

(f) This section shall become effective on the date 6 months after the date of its enactment and shall apply to toy, look-alike, and imitation firearms manufactured or entered into commerce after such date of enactment.

(g) The provisions of this section shall supersede any provision of State or local laws or ordinances which provide for markings or identification inconsistent with provisions of this section provided that no State shall—

(i) prohibit the sale or manufacture of any look-alike, nonfiring, collector replica of an antique firearm developed prior to 1898, or

(ii) prohibit the sale (other than prohibiting the sale to minors) of traditional B-B, paint ball, or pellet-firing air guns that expel a projectile through the force of air pressure.

Appendix 2

FINAL RULE ON TOY FIREARM MARKINGS
U.S. Department of Commerce

19356 Federal Register / Vol. 54, No. 86 / Friday, May 5, 1989 / Rules and Regulations

Technology Administration
15 CFR Part 1150
[Doecet No. 90240-9104]

Marking of Toy, Look-Alike and Imitation Firearms

AGENCY: Technology Administration, Commerce.

ACTION: Final rule.

SUMMARY: The Technology Administration of the United States Department of Commerce is today issuing a final rule to implement section 4 of the Federal Energy Management Improvement Act of 1988 ("Act") (Pub. L. 100-315) which prohibits the manufacturing, entering into commerce, shipping, framing, or selling, of any toy, imitation or look-alike firearm ("device") unless such device contains, or has affixed to it, a marking approved by the Secretary of Commerce. The final rule maintains the method of marking established by section 4(b)(1) of the Act and establishes an alternative method of marking when a device is not capable of being marked by the method established by section 4(b)(1) and three alternative methods of marking which may be used in all instances. In addition, the rule waives marking requirements for any toy, look-alike, or imitation firearm that will be used only in the theatrical, movie, or television industries.

DATE: This rule is effective May 5, 1989.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 5, 1989.

FOR FURTHER INFORMATION CONTACT: Dr. Stanley I. Warshaw, Associate Director for Industry and Standards, National Institute of Standards and Technology, telephone number (301) 975-4000, FAX (301) 922-0647.

SUPPLEMENTARY INFORMATION: Section 4(a) of the Federal Energy Management Improvement Act of 1988 provides that "it shall be unlawful for any person to manufacture, enter into commerce, ship, transport, or receive any toy, look-alike, or imitation firearm unless such firearm contains, or has affixed to it, a marking approved by the Secretary of Commerce..." (15 U.S.C. 5001(a)). Section 4(b)(1) of the Act establishes as an acceptable marking a permanently affixed blaze orange plug marking on the exterior surface of the barrel of the device bright red, bright orange, bright yellow, bright green, or bright blue, either singly or as the predominant color in combination with other colors in any pattern; or (3) permanently coloring the entire exterior surface of the device predominantly in white in combination with one or more of the colors bright red, bright orange, bright yellow, bright green, or bright blue in any pattern. These alternatives were selected because they represent standard industry practice for most toy, look-alike, or imitation firearms and, in the opinion of those consulted, are sufficient to identify the device as a toy, look-alike, or imitation firearm rather than as a real firearm. Finally, the notice proposed to waive marking requirements for any toy, look-alike or imitation firearm that will only be used in the theatrical, movie or television industries.

Section 4(c) of the Act specifically excludes from the Act's marking requirements any marking requirements established thereunder look-alike, non-firing, collector replicas of antique firearms designed, manufactured, and produced prior to 1988, and traditional B-B, paint-ball, or pellet-firing air guns that expel a projectile through the force of air pressure. (15 U.S.C. 5001(c)). However, it is clear from the legislative history of section 4 that it was the intent of Congress to also exclude from marking requirements traditional B-B, paint-ball, and pellet-firing air guns that expel a projectile through the force of compressed gas or mechanical spring action, or any combination thereof. Accordingly, the notice proposed to exclude from marking requirements look-alike, non-firing, collector replicas of antique firearms designed, manufactured, and produced prior to 1988, and traditional B-B, paint-ball, or pellet-firing air guns that expel a projectile through the force of compressed air, compressed gas or mechanical spring action, or any combination thereof.

In response to the March 14, 1989 Notice of Proposed Rulemaking, the Technology Administration received twenty-eight comments, five from manufacturers, vendors, or their representatives or attorneys; ten from police officials at various levels of government; four from State legislators and executive officials; seven from interested members of the public; and two from elements of the U.S. Government. Eight of the commenters fully supported the regulation, thirteen supported the regulation but recommended changes, four took the
position that a total ban on realistic toy guns was necessary and therefore opposed the regulation as too weak, and three took no position.

The two most frequent comments about the regulation were, first, that the marking requirements should be changed to eliminate the recessed orange plug as an acceptable marking, and second, that a complete ban on realistic toy guns was needed. Eight commenters raised the first issue and five raised the second. No changes are being made to the regulations at this time as a result of either comment. The Technology Administration is awaiting the results of a study by the Director of the National Institute of Justice, mandated by section 4(e) of the Act, before deciding whether to remove the recessed orange plug as an acceptable marking. That study is a technical evaluation of the marking system established by the Act and of the alternative marking systems being implemented by this regulation. The Act requires that study to be completed within nine months of enactment, or no later than August 5, 1989. With respect to the comments requesting a complete ban on realistic toy guns, the Secretary of Commerce has no authority under the Act to take such action.

Other comments received are described below, listed by commenter. Among the five manufacturers, vendors, and their representatives, all generally supported the methods of marking contained in the proposed regulation. However, three requested changes in § 1150.1. "Applicability" of the regulation to make clear the intent of Congress that the regulation did not apply to toy, look-alike, and imitation firearms. Three comments were received from the California and the National Institute of Justice, neither of which specifically commented on the regulation. The final rule repeals the blaze orange plug method of marking established by the Act and repeats the presumption set forth in the statute. In all other respects it grants waivers and allows less restrictive methods of marking. Accordingly, since the rule thus grants or recognizes an exemption and relieves restrictions, under section 553(d) of the Administrative Procedure Act (5 U.S.C. 553(d)) it may and is being made effective without a 30 day delay in effective date.

Additional Information

Executive Order 12291

The Under Secretary for Technology has determined that this rule is not a major rule within the meaning of section 1(b) of Executive Order 12291 because it will not result in:

1) An annual effect on the economy of $100 million or more;
2) A major increase in costs or prices for consumers, individual industries, Federal, state or local governments, or domestic or foreign; or,
3) Significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S. based enterprises to compete with foreign-based enterprises in domestic or export markets.

Therefore, preparation of a Regulatory Impact Analysis is not required under Executive Order 12291.

Executive Order 12612

This rule does not contain policies with Federalism implications sufficient to warrant preparation of a Federalism assessment under Executive Order 12612.

Executive Order 12372

This rule does not involve Federal financial assistance, direct Federal development, or the payment of any matching funds from a state or local government. Accordingly, the requirements of Executive Order 12372 are not applicable to this rule.

Executive Order 12580

This rule does not pose significant takings implications within the meaning of Executive Order 12580.

Executive Order 12630

This rule does not contain information collection requirements subject to the Paperwork Reduction Act.

National Environmental Policy Act

This rule will not significantly affect the quality of the human environment. Therefore, an environmental assessment or Environmental Impact Statement is not required to be prepared under the National Environmental Policy Act of 1969.

List of Subjects in 15 CFR Part 1150


Lee W. Mercon,
Deputy Under Secretary for Technology.

For reasons set forth in the preamble, Title 15, Subtitle B of the Code of Federal Regulations is amended by adding a Chapter XI, consisting of Part 1150, to read as follows:
CHAPTER XI—TECHNOLOGY ADMINISTRATION, DEPARTMENT OF COMMERCE

PART 1150—MARKING OF TOY, LOOK-ALIKE AND IMITATION FIREARMS

Sec.

1150.1 Applicability.
1150.2 Prohibitions.
1150.3 Approved markings.
1150.4 Waiver.
1150.5 Preemption


§ 1150.1 Applicability.

This part applies to toy, look-alike and imitation firearms ("devices") having the general appearance, shape, and/or configuration of a firearm and produced or manufactured and entered into commerce on or after May 5, 1988, including devices modelled on real firearms manufactured, designed, and produced since 1988. This part does not apply to any toy, look-alike, or imitation firearm that is a non-firing replica of an antique firearm modelled on a real firearm designed, manufactured, and produced prior to 1988, nor to traditional B-B, paint-ball, or pellet-firing air guns that expel a projectile through the force of compressed air, compressed gas or mechanical spring action, or any combination thereof, as described in American Society for Testing and Materials standard F 589-86, Standard Consumer Safety Specification for Non-Powder Guns, June 28, 1985. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of Federal Standard 595e may be obtained from the Office of Engineering and Technical Management, Chemical Technology Division, Paints Branch, General Services Administration, Washington DC 20406. Copies may be inspected at the office of the Associate Director for Industry and Standards, National Institute for Standards and Technology, Gaithersburg, Maryland, or at the Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, DC.

§ 1150.2 Prohibitions.

No person shall manufacture, enter into commerce, ship, transport, receive any toy, look-alike, or imitation firearm ("device") covered by this Part as set forth in § 1150.1 of this part unless such device contains, or has affixed to it, one of the markings set forth in § 1150.3 of this part, unless this prohibition has been waived by § 1150.4 of this part.

§ 1150.3 Approved markings.

The following markings are approved by the Secretary of Commerce:

(a) A blaze orange (Federal Standard 595e, February, 1987, color number 12109, issued by the General Services Administration) solid plug permanently affixed to the muzzle end of the barrel as an integral part of the entire device and recessed no more than 8 millimeters from the muzzle end of the barrel. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of Federal Standard 595e may be obtained from the Office of Engineering and Technical Management, Chemical Technology Division, Paints Branch, General Services Administration, Washington DC 20406. Copies may be inspected at the office of the Associate Director for Industry and Standards, National Institute for Standards and Technology, Gaithersburg, Maryland, or at the Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, DC.

(b) For any water gun, air-soft gun, light-emitting gun or other ejecting toy, look-alike or imitation firearm having an opening to discharge such thing as water, non-metallic projectiles, and light, a blaze orange (Federal Standard 595e, February, 1987, color number 12109, issued by the General Services Administration) marking permanently affixed to the exterior surface of the barrel, covering the circumference of the barrel from the muzzle and for a depth of at least 6 millimeters. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of Federal Standard 595e may be obtained from the Office of Engineering and Technical Management, Chemical Technology Division, Paints Branch, General Services Administration, Washington, DC 20406. Copies may be inspected at the office of the Associate Director for Industry and Standards, National Institute for Standards and Technology, Gaithersburg, Maryland, or at the Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, DC.

(c) Construction of the device entirely of transparent or translucent materials which permits unmistakable observation of the device's complete contents.

(d) Coloration of the entire exterior surface of the device in bright red, bright orange, bright yellow, bright green, or bright blue, either singly or as the predominant color in combination with other colors in any pattern.

(e) Coloration of the entire exterior surface of the device predominantly in white in combination with one or more of the colors bright red, bright orange, bright yellow, bright green, or bright blue in any pattern.

§ 1150.4 Waiver.

The prohibitions set forth in § 1150.2 of this part are waived for any toy, look-alike or imitation firearm that will be used only in the theatrical, movie or television industries.

§ 1150.5 Preemption.

In accordance with section 4(g) of the Federal Energy Management Improvement Act of 1988 (15 U.S.C. 5001(g)), the provisions of section 4(a) of that Act and the provisions of this part supersede any provision of State or local laws or ordinances which provides for markings or identification inconsistent with the provisions of section 4 of that Act or the provisions of this part.

[FDR Doc. 59-10759 Filed 5-4-89; 8:45 am]

BILLING CODE 3510-15-M

FEDERAL TRADE COMMISSION

16 CFR Part 13

[Docket 9204]

PPG Industries, Inc.; Prohibited Trade Practices, and Affirmative Corrective Actions

AGENCY: Federal Trade Commission.

ACTION: Consent order.

SUMMARY: In settlement of alleged violations of Federal law prohibiting unfair acts and practices and unfair methods of competition, this consent order requires, among other things, that a Pittsburgh, Pa. manufacturer and seller to obtain prior Commission approval before acquiring any interest in a company that makes aircraft transparencies, if that company has more than $750,000 in sales in the U.S., and to provide the FTC prior notice before making other acquisitions.


FOR FURTHER INFORMATION CONTACT: Steven A. Newborn, FTC/S-3200, Washington, DC 20580. (202) 326-2582.

SUPPLEMENTARY INFORMATION: On Friday, January 13, 1989, there was published in the Federal Register, 54 FR

1 Copies of the Complaint and the Decision and Order are available from the Commission's Public Reference Branch, 600 Pennsylvania Avenue, NW, Washington, DC 20580.
Appendix 3
NEWS SOURCES REVIEWED FOR TOY GUN INCIDENTS

As noted in the “research methods” section, incidents and locales involving toy guns were initially identified through a computer search of news stories found in the Lexis®/Nexis® data base.

• Associated Press
• Boston Globe
• Chicago Tribune
• Detroit Free Press
• Federal Information Systems Corporation
• Gannett News Service
• Kansas City Star/Time
• Los Angeles Times
• Newsday, Inc.
• Reuters News Service
• States News Service
• Time Magazine
• United Press International
• USA Today
• U.S. News and World Report
• Washington Post
Appendix 4
SURVEY RESPONSES BY CENSUS REGION

RESPONSES BY CENSUS REGION

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast Region</td>
<td>73</td>
<td>16.0</td>
</tr>
<tr>
<td>North Central Region</td>
<td>159</td>
<td>34.7</td>
</tr>
<tr>
<td>South Region</td>
<td>99</td>
<td>21.7</td>
</tr>
<tr>
<td>West Region</td>
<td>126</td>
<td>27.6</td>
</tr>
</tbody>
</table>

STATES BY REGION:


North Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin

South: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

Appendix 5
LAW ENFORCEMENT AGENCIES VISITED IN SITE VISITS

- Alexandria, VA Police Department
- Broward County, FL Office of the Sheriff
- Clearwater, FL Police Department
- Corpus Christi, TX Police Department
- Dallas, TX Police Department
- Florida Department of Law Enforcement
- Harris County, TX Office of the Sheriff
- Houston, TX Police Department
- Independence, MO Police Department
- King County, WA Sheriff's Department
- Las Vegas, NV Metropolitan Police Department
- Los Angeles, CA Police Department
- Miami, FL Police Department
- New York, NY Police Department
- Newark, NJ Police Department
- Overland Park, KS Police Department
- San Bernardino County, CA Sheriff's Department
- San Francisco, CA Police Department
- Santa Ana, CA Police Department
- Seattle, WA Police Department
- St. Petersburg, FL Police Department
- U.S. Bureau of Alcohol, Tobacco, and Firearms - Detroit Office
- U.S. Bureau of Alcohol, Tobacco, and Firearms - Houston Office
- U.S. Bureau of Alcohol, Tobacco, and Firearms - Las Vegas Office
- U.S. Bureau of Alcohol, Tobacco, and Firearms - Washington Headquarters
- U.S. Drug Enforcement Administration - Las Vegas Office
- U.S. Drug Enforcement Administration - Washington Headquarters