GOVERNMENTAL RESPONSES TO NUCLEAR TERROR

A Thesis
In Partial Fulfillment
Of the Requirements for the Degree
Master of Public Administration

By
Roy Milton Bell
Presented to the
Faculty of
The Consortium of The California
State University and Colleges

1980
GOVERNMENTAL RESPONSES TO NUCLEAR TERROR

A Thesis
By
Roy Milton Bell
Presented to the
Faculty of
The Consortium of The California
State University and Colleges

Approved by:

Dr. Warren Campbell

Dr. Leo Bromwich

Dr. David Ringsmuth
ABSTRACT

GOVERNMENTAL RESPONSES TO NUCLEAR TERROR

by

Roy Milton Bell

Master of Public Administration

Public administration must be prepared to respond effectively to a nuclear blackmail threat. Nuclear terrorism is definitely a possibility. The information on how to design a nuclear device is unclassified; there is missing weapons-grade material; and we have already seen terrorists make nuclear blackmail threats. Government's responsibility to protect the health and welfare of its citizens makes it mandatory that officials be aware of and ready to respond to a nuclear blackmail threat immediately and in a professional manner.

This paper puts forth some essential structures which will enable governmental officials on the federal, state, and local level to respond to nuclear terror. Contingency plans must be produced; special task forces of all responding governmental agencies must be ready to cooperate
fully; and questions dealing with jurisdictional capability and responsibility must be answered before a nuclear blackmail crisis occurs. All three levels of government, federal, state, and local, are investigated to determine their current preparedness to respond to nuclear terrorism. On the federal level, the introduction of law enforcement and military personnel are discussed. State preparedness is studied in light of the California Nuclear Response Plan. Interviews were conducted in Ventura County to ascertain the effectiveness of state communication with the local level. Questionnaires were sent to sheriffs in every county in California in another attempt to ascertain the preparedness on the local level. Results of the questionnaire showed that Ventura County was not atypical in its shaky state of preparedness. Recommendations for improvement of governmental response to nuclear blackmail threats include: the establishment of seminars to inform public officials about nuclear terrorism; strict organization of communication lines to insure that contingency plans are made known to those public officials who will respond in a nuclear crisis; and thorough intelligence gathering concerning nuclear terrorists, their methods and potentialities.
# TABLE OF CONTENTS

Chapter

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Introduction</th>
<th>The Problem of Terrorism</th>
<th>Public Administration and Its Responsibility to Respond to Nuclear Terrorism</th>
<th>Federal and State Awareness and Response to the Problem</th>
<th>Local Awareness and Response to the Problem</th>
<th>Analysis and Recommendations</th>
<th>Bibliography</th>
<th>Appendix</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
<td>6</td>
<td>35</td>
<td>55</td>
<td>78</td>
<td>88</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>II</td>
<td>13</td>
<td>20</td>
<td>24</td>
<td>28</td>
<td>30</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>24</td>
<td>28</td>
<td>30</td>
<td>33</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>47</td>
<td>51</td>
<td>55</td>
<td>55</td>
<td>63</td>
<td>72</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>47</td>
<td>51</td>
<td>55</td>
<td>55</td>
<td>63</td>
<td>72</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>47</td>
<td>51</td>
<td>55</td>
<td>55</td>
<td>63</td>
<td>72</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>78</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

In the not too distant future, we are going to experience nuclear terror. Public administration will be required to respond to demands of terrorists possessing radioactive material. When nuclear blackmail threats are made by terrorist organizations, public administration will be challenged as it never has been before.

The above statement may seem a fantasy to many people. But the nuclear accident that occurred at Three Mile Island proved that nuclear technology is vulnerable. For years the American people were told by the Atomic Energy Commission and the nuclear power industry that there was no need to fear nuclear power accidents. Many reports were produced to reassure the public of how safe the nuclear industry was. The most famous of such reports was the Rasmussen Report of WASH-1400 study.1 The Rasmussen Report concluded the likelihood of a major nuclear accident

1"It's Time to End the Holy War over Nuclear Power," *Fortune*, March 12, 1979, p. 84.
to be once in a billion reactor-years. In April of 1979, the United States and the world were suddenly confronted with radioactive material released into the atmosphere by a nuclear power plant which was out of control. The area of Southern Pennsylvania near the Three Mile Island nuclear power station was caught completely by surprise. Not since the Army of Northern Virginia had entered this same area on its way to Gettysburg in 1863 had such fear existed. The governor of Pennsylvania, Richard Thornburgh, had to order the evacuation of pregnant women and preschool children from the nearby towns. There was even the possibility that four surrounding counties would have to be evacuated.\(^2\) The bureaucracy of the State of Pennsylvania and civil defense personnel worked around the clock to deal with a problem which was never to have occurred. Transcripts and personal reports reveal that the governmental response to the nuclear crisis in Southern Pennsylvania was "mired down in confusion and disarray."\(^3\) When a lone terrorist or terrorist organization presents a credible nuclear blackmail threat in the future, let us hope public administration will not be wanting in its response.

\(^2\)"Nuclear Accident," Newsweek, April 9, 1979, p. 24.

Because of prior domestic terrorism and the growing spread of international terrorism, both capable of going nuclear, responsible public administrators should become concerned and prepared to respond immediately to the challenge. One need only look at the Middle East to recognize the potential danger of Palestinian terrorist organizations lashing back at the United States-sponsored Egyptian-Israeli peace agreement by using nuclear devices in terrorist incidents in the United States.

The purpose of this research paper is to examine the extent of public administration's preparedness to respond immediately to a real nuclear blackmail threat made by terrorists. Before public administration can prepare a professional response to a nuclear blackmail threat, an understanding of the terrorist and his nuclear capabilities is a prerequisite. Only after becoming fully cognizant of the nuclear potential will public administration be able to gage its possible response to nuclear terrorism. Realizing this need, an introduction to terrorism in general and nuclear terrorism in particular is incorporated in this study. Also included is a list and discussion of valuable tools available to public administration in its effort to deal effectively with nuclear terror. Governmental officials on all levels will be confronted with many challenges when nuclear terrorism occurs. These challenges can be overcome by prior planning. This prior contingency
planning must take into consideration governmental coordination, task force management and cooperation of all the different responding public agencies. Questions dealing with jurisdictional responsibility and the gathering of information concerning terrorists must also be considered in a response to nuclear terrorism. Since no one level of public administration will be able to respond effectively to nuclear terror alone, all three levels, federal, state, and local, are analyzed to ascertain their state of readiness. Law enforcement agencies naturally will play a critical role when terrorists go nuclear. In an attempt to determine the level of preparedness on the part of law enforcement, interviews were conducted in Ventura County, and a questionnaire was sent to all sheriff's departments in the State of California. In evaluating the interview and questionnaire responses, law enforcement, in general, fell short of being aware of and prepared to deal with a problem involving nuclear terrorism.

It is hoped that this study will convey to public administration that an ad hoc response to nuclear terror will not be satisfactory. Through a greater understanding of nuclear terrorism and by preparing for its eventuality, public administration will not be found deficient in its readiness when the moment arises. Hopefully the
recommendations offered in this study will enable public administration to improve the current lack of preparedness before a real nuclear blackmail threat is made.
CHAPTER II

THE PROBLEM OF TERRORISM

On July 16, 1978, suspected West German terrorist Kristina Berster, 27, was charged with trying to sneak by a United States border station on the Canadian-Vermont border. Kristina Berster possessed a false Iranian passport and was wanted in West Germany as a member of the Socialist Patients' Collective in Heidelberg, an appendage of the Baader-Meinhof urban terrorist organization of West Germany. United States and West German intelligence officials have speculated that Kristina Berster might have entered the United States to assassinate Jewish U.S. Treasury Secretary Michael Blumenthal or to become involved in terrorist activity surrounding the 1980 Winter Olympics at Lake Placid, New York. 4 American public administrators across the country should become aware of this border crossing in Vermont and no longer consider the terrorist activities currently perpetrated by the Baader-Meinhof in West Germany,

the Red Army in Japan, the Popular Front for the Liberation of Palestine in the Middle East, the Red Brigades in Italy and other such terrorist organizations of no concern in America. America is ripe, and, in some cases because of our democratic institutions, quite vulnerable to similar terrorist activity. In fact, some concerned public officials as recently as May 8, 1978, convened in Washington, D.C. to discuss the possible ramifications of terrorist activity and terrorist infiltration in the United States.\(^5\)

This White House meeting, as Federal Bureau of Investigation Director William Webster stated, was in response to the possibility that Americans could become involved in incidents of terrorism abroad, "and it could happen here."\(^6\) Director Webster went on to state that the White House "is evaluating the nation's capability for a coordinated response to possible terrorism in the United States."\(^7\) Public administrators at all levels of government, local, state, and federal should not forget that the United States


\(^6\)Ibid.

has already experienced terrorist activity and should also understand the potential for more terrorist activity; activity of a domestic nature or with foreign terrorist organizational cooperation.

Before one can approach the problems of dealing with nuclear terrorism, one must fully understand what terrorism is. There are many definitions which attempt to describe the salient characteristics of terrorism. Webster's Dictionary defines terrorism as "the act of terrorizing; use of force or threats to demoralize, intimidate, and subjugate, esp. such use as a political weapon or policy." Brian M. Jenkins of the Rand Corporation, who is one of the world's foremost authorities on terrorism, states that terrorism can be described as the use of actual or threatened violence to gain attention and to create fear and alarm, which in turn will cause people to exaggerate the strength of the terrorists and the importance of their cause. Since groups that use terrorist tactics are typically small and weak, the violence they practice must be deliberately shocking.

Jenkins, in reference to terrorism, often uses the word "theater." According to Jenkins, "Terrorism is violence
for effect. Terrorists choreograph violence to achieve maximum publicity. Terrorism is theater.\textsuperscript{10}

The definition of terrorism put forth by the California Specialized Training Institute is particularly noteworthy. The Institute, located at San Luis Obispo, California, is a unique institution which, among its other responsibilities, brings together internationally known authorities on terrorism and concerned public sector personnel to address the problems associated with terrorism. The California Specialized Training Institute defines terrorism as

\begin{quote}
the organized use of violence with the aim of promoting political or social change and emphasizing the ruthlessness and desperate dedication of its advocates through the brutality or destructiveness of their actions.\textsuperscript{11}
\end{quote}

According to the director of the Institute, this definition relates terrorism to political ends but does not limit it to right or left-wing groups. The definition distinguishes terrorism from other forms of violence either legitimate or illegitimate (war, police violence, crime, and

\begin{flushright}
\textsuperscript{10}Brian M. Jenkins, "Will Terrorists Go Nuclear?" (testimony given before the Committee on Energy and Diminishing Materials of the California State Assembly, November 19, 1975), p. 4.
\end{flushright}

\begin{flushright}
\textsuperscript{11}Louis O. Giuffrida, "The Language of Terrorism" San Luis Obispo, California: California Specialized Training Institute, February, 1979), p. 2.
\end{flushright}
vandalism); and calls attention to what most non-terrorists regard as the distinctive trait of terror: the apparently indiscriminate and irrational nature of terrorist attacks. The California Specialized Training Institute's description of terrorism renders a succinct summary of the vital characteristics of terrorist activity.

We often think of terrorism as being of left-wing orientation, but terrorism can also be employed by conservative right-wing groups. America has itself experienced right-wing terrorism. The Ku Klux Klan and the Minutemen have been involved with the use of terrorism on the American political scene for quite some time. One of the better known right-wing terrorist organizations active in the United States today is the Posse Comitatus, a vigilante group who operate primarily in the Northwest. Thus, America has experienced terrorism from both the left and the right.

Although, to this date, terrorist activity causes a relatively small number of deaths, the success of terrorism is due to the fantastically large impact such acts have

---


on society. Acts of terrorism, whether domestic, international, or transnational in scope, have not, when taken all together, caused as many deaths as the average number of homicides occurring in America per year. America averages twenty thousand homicides annually while "approximately one thousand people have been killed during terrorist incidents world-wide." excluding Northern Ireland in the past decade. But even though most terrorist incidents have not caused thousands of casualties, the effect of terrorist-caused violence on the public psyche is enormous. The whole world stops and takes notice when Olympic athletes are killed, when one country conducts a surgical strike into another country's territory to regain possession of its nationals, or when a major confrontation occurs between law enforcement and a terrorist organization. Who can forget the live coverage of the shoot out between the SLA and law enforcement officials of Los Angeles? The world stops and takes notice, and it seems as if all other activity is put aside for the time being. But the potential for high technology terrorism, nuclear terrorism to be specific, and mass casualties is real, and the possibility of such disaster must be dealt with prudently.

---

Terrorism is not a new affliction on society; it is as old as mankind itself. It is no new frightening disease and should not be thought of as such. That is not to imply, however, that the costs of terrorism are stagnant; they are growing annually. One need only look at the world's airlines to gain an appreciation for the growing costs. Now one must submit to electronic devices and tighter security in the airports because of terrorist threats. These costs are tangible in nature, but there are intangible costs also. In this particular case, one intangible cost that should not be minimized is our loss of former freedom from search at airports. Other costs include hours spent dealing with terrorist incidents, government officials from the local level to the national level become involved. Special command centers are found within the U.S. State Department, which during an international terrorist incident operate around the clock.\textsuperscript{15} But terrorism is like any other crime problem confronting mankind, and we must appreciate it as such; always remembering we will probably never totally eradicate it, but we may be able to control it.

Terrorist activity causes a fundamental problem in a democratic society; it threatens the "rule of law". The

\textsuperscript{15} "A Diplomat Who Protects Diplomats, Anthony Quainton Is Our Man Against Terror," \textit{People Weekly}, March 5, 1979, p. 40.
"rule of law" maintains that "the highest authority is the law, not one person or a group of persons."16 A terrorist activity does not require a large organization; one terrorist can produce a threat and thus cause a large number of people to take notice and to fear for their safety. Since a terrorist incident is usually used by a minority to cause the majority to react or change its policies, one can justifiably say that it is an attack on the "rule of law". An attack on the "rule of law", the cornerstone of most democratic societies, poses a real threat to the very basis of democratic government. Certainly in this Republic, majority rule and the "rule of law" are highly valued and because of this, terrorist activity must be met and controlled.

Who Are the Terrorists?

Many books and articles are available which describe terrorist incidents and provide the historical background of individual terrorists or groups. Dr. Frederick Hacker, M.D., an internationally known authority on terrorism who has actually been involved in negotiating with terrorists in Vienna, Austria, does not see one universal terrorist, but three different archetypes. "Terrorists

can be roughly divided into three groups according to their main motivations: the crazy, the criminal, and the crusading."¹⁷ The emotionally disturbed are driven by reasons of their own that often do not make sense to the average bystander. Then there are the criminal terrorists who want "nothing different from what most other people want, but they are willing to resort to socially disapproved methods in order to achieve their goals."¹⁸ Third, and lastly, come the crusading terrorists who are idealistically inspired and motivated. These crusading terrorists seek "not personal gain, but prestige and power for a collective goal; they believe that they act in the service of a higher cause."¹⁹ It must be stated that in categorizing a terrorist, he or she may not be completely characterized in solely one of the three groups but may possess all three characteristics: crazy, criminal, and crusader.

It is the crusading terrorist who "form the van-guard of terrorism."²⁰ "Motivated by unselfish ideals, crusaders are the real terrorists, the genuine article."²¹

¹⁸ Ibid.
¹⁹ Ibid.
²⁰ Ibid., p. 27.
²¹ Ibid., p. 33.
These are the terrorists who are copied or joined by the crazies and the criminals. "Skyjacking is one example of a crime invented by crusading terrorists and copied by those who could more accurately be described as crazy or criminal."\textsuperscript{22} The present form of skyjacking was first introduced by the ideologically motivated and crusading terrorists who flew to freedom over the Iron Curtain during the years immediately following the end of World War II. Crusading terrorist groups are usually set up on lines similar to a military organization. "Everybody gets a high-sounding, significant title to compensate for the group's actual insignificance."\textsuperscript{23} The directives or news bulletins issued from terrorist "general headquarters" are usually referred to as "general order" number such and such. "And of course, every kidnapping is an arrest; every killing, an execution."\textsuperscript{24}

In a further effort to understand the terrorist, one must investigate the terrorists' general tactics and stated goals. Evelle Younger, the former Attorney General of the State of California, tells us that the tactics of the terrorist might include kidnapping persons to exchange later for captured fellow terrorists, robbing banks to

\textsuperscript{22}Ibid., p. 28. \quad \textsuperscript{23}Ibid., p. 153. \\
\textsuperscript{24}Ibid., p. 154.
finance further terrorist operations, and bombings to disrupt law enforcement and change public opinion. According to Carlos Marighella, a well known terrorist, there are specific stated goals to be achieved through terrorist incidents. Marighella has even authored works to instruct and inform the new terrorist. His best known work is the *Mini-Manual on Urban Guerrilla Warfare*. Marighella states that the goals of the terrorist are:

1. To show the masses that police and military authorities are impotent to protect themselves from urban terrorism and thus powerless to protect society as a whole;

2. To provoke, by acts of outrageous terror, overreaction on the part of police and the government in order to radicalize sympathizers of revolutionary aims, who without the provocation of overreaction, would not engage in acts of violence; and

3. To combine the first two goals ultimately to overthrow the established government.

With the advent of modern transportation systems, the terrorist has gained a great deal of mobility which historically he has lacked. This mobility has complicated society's efforts to control terrorism. No longer must a given political unit be solely concerned with local homegrown terrorists, but it must be fully cognizant of the

---


terrorist threat posed from outside its own jurisdictional boundaries, similar to the Berster crossing on the Canadian-Vermont border. Today's terrorist is truly international in scope and capability.

Gene Price, Deputy Chief for Terrorism Programs at the California Specialized Training Institute, states that non-domestic terrorism is divided into two groups: international terrorism and transnational terrorism. International terrorism is terrorism "carried out by individuals or groups controlled by a sovereign state." 27 Many authorities place the terrorist activities carried out by the Popular Front for the Liberation of Palestine in this group. The Popular Front receives much support and maintains a base of operations within many Arab countries, Libya for example. 28 Transnational terrorism is terrorism "carried out by basically autonomous, non-state actors, whether or not they enjoy some degree of support from sympathetic states." 29 The Japanese Red Army terrorists, no longer a factor of consequence in Japan itself, would be an example of a transnational terrorist group. These

27 Giuffrida, op. cit., p. 2.
28 National Advisory Committee on Criminal Justice Standards and Goals, op. cit., p. 436.
29 Giuffrida, loc. cit.
Japanese terrorists have almost no support from Japan, and thus the problem of alienating the base of support in one's home country plays no part in determining future terrorist operations. In fact, these transnational terrorists sell their product to other groups. The Lod massacre is a prime example of such activity.

Whether it is referred to as transnational terrorism or international terrorism, the key factor which should be remembered is its disrespect for international boundaries. Within a matter of a few days or even a few hours, a country which is relatively free from any indigenous terrorist activity can be subjected to outside terrorism which can cause that given country to become involved in a terrorist activity. Such a case occurred in West Germany in 1972 when Palestinian terrorists flew into West Germany. These Palestinian terrorists gained world-wide coverage when they took members of the Israeli Olympic team hostage in Munich.\(^{30}\) An example of transnational terrorism was the Lod Airport killings in Israel. At Lod Airport, Japanese Red Army terrorists carried out a Popular Front for the Liberation of Palestine mission by flying from Paris to Israel to kill twenty-five persons and wound seventy-six

others. As a sidelight, it must be mentioned that many of the innocent people killed or wounded by these Japanese Red Army terrorists at Lod Airport were tourists from Puerto Rico visiting the Holy Land.\(^{31}\) These Puerto Rican Christians had no involvement with the conflict which is still raging between the Arab world and the Israelis, but they were killed just as quickly as if they had been. They were indiscriminately killed or wounded by a group of Japanese terrorists who flew into Israel to cause havoc for the Jews because of a Palestinian request.

Not only will terrorist groups cross international borders, they have also shown a willingness to cooperate with one another. The best example of a terrorist United Nations approach was seen in the kidnapping of the ministers of the Organization of Petroleum Exporting Countries in Vienna, Austria in December 1975. "Five professional international terrorists—a Venezuelan, two Palestinians, and two Germans" were involved in this terrorist activity in Austria.\(^ {32}\) There are Palestinian training facilities in the Middle East and in North Africa which conduct programs for "apprentice terrorists from Western Europe, Japan,

\(^{31}\) National Advisory Committee on Criminal Justice Standards and Goals, op. cit., p. 436.

Scandinavia, and the United States." Not only are different terrorists assisting each other in their activity, but a few governments offer assistance. Some of this governmental assistance is not under the table but is conducted out in the open for the entire world to see. Countries like Libya and South Yemen have openly offered safe havens for terrorists returning from a terrorist activity. And who can forget that Ugandan troops actually guarded the skyjacked passengers at Entebbe Airport while their terrorist captors slept.

Nuclear Terrorism

The nuclear age has given mankind, on the one hand, a great potential energy source that can assist him in controlling more of his destiny on earth; but along with the productive use of nuclear energy, mankind has also become capable of totally destroying civilization. The world's destructive potential is so overwhelming in nature that we must never allow Pandora's Box to be opened. Yet more Trident submarines and Backfire bombers are deployed. Somehow, a credit to mankind, nuclear weapons have not been unleashed in anger against opposing nations since 1945. Although the superpowers have come to the edge of the nuclear precipice

33 Hacker, op. cit., p. 37. 34 Ibid., p. 329.
and looked over, as in the Cuban Missile Crisis of 1962, the restraint employed was that of truly concerned statesmen. We all hope and pray that all countries who today and in the future have nuclear capability will show the same restraint which has enabled mankind to live in the nuclear age thus far. But the nuclear threshold can be crossed by terrorists who may be affiliated with quasi-state or non-state entities. These quasi and non-state entities may not show the same concern for mankind as has been shown by the legitimate nuclear powers of today. The non-state terrorists can be quasi-agencies in the employ of a legitimate state or a separate, unsupported non-state group possessing allegiance to no political ideology or government.

A few national and international authorities predict that so far we have only seen the tip of the iceberg in terrorist violence. Not that past terrorist incidents have not been costly and involved the killing of many innocent people, but that it will become even more deadly. This predicted increase in terrorist violence is referred to as superviolence. Superviolence would involve terrorists causing mass casualties in an effort to sway their antagonists to a different point of view and eventually give in to the demands put forth by the terrorists.

---

35 "If Terrorists Go After U.S. Nuclear Bombs-，“ U.S. News and World Report, March 12, 1979, p. 43.
To create superviolence, the terrorist might employ biological or chemical agents or radioactive material. All three of these deadly weapons would have the ability to cause panic within the general population if the terrorist incident is not handled properly by the public sector. We are actually closer to seeing terrorists causing mass casualties than many people suspect and than public administrators are willing to admit. More people should become aware of the fact that

in 1970, a group of radicals attempted to blackmail an officer at the U.S. Army's biological warfare center into assisting in the theft of biological weapons. This plot was discovered when the officer requested issue of several items unrelated to his work. Two college students plotted to introduce typhoid fever bacteria into the Chicago water supply in early 1972. The culture was developed in the college laboratory and was to have been placed originally in water supplies throughout the Midwest.36

All these attempts have, thus far, failed; but time is on the side of the terrorist.

With or without support from a legitimate government, terrorists could cause the world to cross over the forbidden nuclear threshold. They can cause the same damage that today's superpowers using tactical nuclear weapons can accomplish. The delivery systems and the actual nuclear device or devices may not be as sophisticated and

36 National Advisory Committee on Criminal Justice Standards and Goals, op. cit., p. 450.
technologically advanced as one of the seven thousand
tactical nuclear devices that the United States has deployed
in Europe to break up Soviet tank formations, but the poten-
tial destructive capability could be the same. A lone ter-
rorist or group which possesses a nuclear device, no matter
how crude its construction, could cause catastrophic damage
to a heavy population concentration. When one considers
that the paid attendance at the 1979 Rose Bowl was 105,629
people, the potential destruction that could occur with
the use of a crude nuclear device by a terrorist organ-
ization begins to take shape.

Nuclear terrorism may take one of many different
forms. It may involve the actual stealing of an already
made nuclear device, constructing a radioactive dispersal
device, constructing a crude nuclear weapon, or taking over
a nuclear power site and intentionally causing the release
of radioactive material into the atmosphere. It may also
involve quasi-state terrorists being given, by another
country, weapons-grade radioactive material from which they
could construct a nuclear device.

37 Mal Florence, "USC Wins Rose Bowl but the
Replay's a Tie," Los Angeles Times, January 2, 1979,
Technical and Logistical Aspects
of Constructing a Nuclear Device

Through an extensive literature search of all unclassified documents, the "secrets" for designing a workable and thus credible nuclear device can be found. "It is possible to make an atomic bomb using information that is available" to the general public.\(^{38}\) Mason Willrich and Theodore B. Taylor in their *Nuclear Theft: Risks and Safeguards* have produced probably one of the most authoritative works available describing how easy it would be for a would-be terrorist to assemble a nuclear device. Willrich and Taylor painstakingly explain "the detail in which fission explosive design principles are described in widely distributed publication."\(^{39}\) By simply going to the *Encyclopedia Americana*, Willrich and Taylor's thesis is verified. In the *Encyclopedia Americana*, John S. Foster, an expert on nuclear weapon technology, presents a thorough description of the principles for the design of nuclear explosives. (See Appendix)

Probably the most famous case of someone outside of government describing the workings of a nuclear device was


\(^{39}\) Ibid.
a Massachusetts Institute of Technology chemistry student who was able to produce a thirty-seven page study replete with instruction, diagrams and the required figures in only five weeks." Most authorities concerned with this report confirmed it would work. If the device, which would have contained only ten to twenty pounds of plutonium, had actually been constructed, Swedish scientists "gave it a 'fair chance' of yielding one hundred to one thousand tons of TNT."

There are countless reports and studies both inside and outside government which claim that the nuclear power industry is vulnerable to an attack or theft occurrence. A United States naval demolition specialist reported to Congress that, "I could pick three to five ex-underwater demolition Marine Reconnaissance, or Green Beret men at random and sabotage virtually any nuclear reactor in the country." This same naval demolition specialist goes on to

---

41 Ibid., p. 20
state that a small team of men would not have to be specially trained except for one person, who would engineer the damage once inside the compound. "The engineered safeguards would be minimally effective and the amount of radioactivity released could be of catastrophic proportions." Thus a highly trained terrorist group, possessing some training in nuclear engineering, could threaten to cause a core meltdown if their demands for policy change were not met by the government.

It must be noted in this connection that there have already been thefts of nuclear material in the United States. The Federal Bureau of Investigation had warned, on January 3, 1975, "of the possible theft of atomic material from nuclear plants by terrorists or extortionists for use in the manufacture of crude atomic bombs." The Bureau also stated that "there were two known instances in which government employees had smuggled out of guarded facilities enough special nuclear materials to develop nuclear weapons." The United States General Accounting Office also has discovered similar occurrences when it

---

43 Ibid., p. 55. 44 Ibid., p. 56
46 Ibid.
investigated the nuclear power industry. The GAO informed the House Small Business Committee's Subcommittee on Energy and the Environment in 1976 "that lax government inventory controls and security measures had been responsible for the loss of as much as six thousand pounds of weapons-grade plutonium and uranium."\(^{47}\) It is clear also that nuclear facilities have been attacked with malicious intent in the past (see Table 1) and might be attacked again in the future.

One of the better known incidents dealing with missing "plutonium in strategically critical amounts" occurred at the Kerr-McGee Nuclear Corporation facility near Crescent, Oklahoma in 1974.\(^{48}\) The United States Justice Department was called in to investigate when a female employee of Kerr-McGee became contaminated by plutonium.\(^{49}\) The twenty-eight year old laboratory analyst was killed in a car accident three months after she was contaminated. Her apartment was also found to be


TABLE 1

ATTACKS ON NUCLEAR INSTALLATIONS OR FACILITIES

<table>
<thead>
<tr>
<th>DATE</th>
<th>INSTALLATION</th>
<th>DAMAGE OR SECURITY BREACHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 4, 1969</td>
<td>Ill. Inst. of Tech. reactor</td>
<td>pipe bomb found</td>
</tr>
<tr>
<td>Sept. 1970</td>
<td>Point Beach Reactor at Two Creeks, Wis.</td>
<td>dynamite discovered</td>
</tr>
<tr>
<td>Dec. 7, 1971</td>
<td>Stanford University Linear Accelerator in California</td>
<td>2 bombs; heavy damage to electronic control equipment</td>
</tr>
<tr>
<td>Aug. 27, 1974</td>
<td>Pilgrim-1 reactor at Plymouth, Mass.</td>
<td>incendiary; damage light</td>
</tr>
<tr>
<td>May 27, 1975</td>
<td>Zion reactor in Illinois</td>
<td>2 shots fired at security guards</td>
</tr>
<tr>
<td>Jan. 27, 1976</td>
<td>Three Mile Island reactor in Penn.</td>
<td>intruder scaled security fence and entered protected area; he escaped</td>
</tr>
</tbody>
</table>

contaminated.  

"On December 16, 1974, twenty pellets of plutonium were found on a lawn outside the plant, and late that year from forty four to sixty six pounds of plutonium were reported missing." Because of these revelations, the Kerr-McGee nuclear facility was closed down in 1975 for an inventory count.

There are many experts within the nuclear power industry who feel that it would be virtually impossible for a small group of people to produce a credible nuclear device. The opinions of these experts are also reinforced by many public administrators. But according to Willrich and Taylor, "The time and resources required to design and make nuclear explosives depend strongly on the type of explosive wanted." The terrorist, in all likelihood would not be concerned with producing a lightweight nuclear weapon capable of pin point accuracy to be delivered by an intercontinental ballistic missile. A very crude but workable nuclear device in the hands of a terrorist group is all that is required. The only concern of

53 Willrich and Taylor, op. cit., p. 10
such a group is that their nuclear device is transported to a target and exploded with a "yield equivalent to at least 100 tons of chemical explosive."\textsuperscript{54} It is also clear that, with time, smaller nuclear devices could be constructed. On April 26, 1979, the Director of the FBI stated that a nuclear bomb "small enough to be strapped to a terrorist's back now can be built."\textsuperscript{55} The nuclear potential is definitely here and must be recognized.

**Why Will Terrorists Go Nuclear?**

With the further growth of civilian nuclear reactors, the chances of an attack or theft by a highly trained terrorist group will increase. One might ask the question: Why should a terrorist group want to attack or attempt to remove radioactive material when other potent agents are available? These other possible agents which could find themselves in a terrorist's arsenal are chemical and biological substances. Probably one of the main reasons a terrorist group would attack or attempt to remove radioactive material is simply that it is there and because of the immediate effects upon society. One can imagine the

\textsuperscript{54} Ibid.

newspaper headlines and television coverage following a successful attack on a nuclear reactor or the proven fact that radioactive material has been removed by a terrorist group. The attack or theft of radioactive material would "not even have to succeed to send diplomatic ripples along the corridors of power." 56 According to Brian Jenkins, The rapid growth of a civilian nuclear industry, the increasing traffic in plutonium, enriched uranium and radioactive waste material, the spread of nuclear technology both in the United States and abroad all increase the opportunities for terrorists to engage in some type of 'nuclear action.' The increased public concern with the potential terrorist threat to nuclear programs and the virtual guarantee of widespread publicity may increase the possibilities that terrorists will attempt such actions. 57

There are those who feel terrorists will not go nuclear. 58 They argue that to date no terrorist group has employed nuclear devices and, because of the consequences, probably will not. This argument is advanced because a nuclear device would be indiscriminate in nature and would cause mass casualties, and the terrorists' primary objective is to gain publicity for his cause, not to kill. These critics of nuclear terrorism point out that the terrorist's

56 Flood, op. cit., p. 31
57 Jenkins, "Will Terrorists Go Nuclear?" op. cit., p. 1.
use of a nuclear device would cost the terrorist whatever local support existed. Since terrorist groups depend on sympathizers and safe havens in order to carry on their mission, loss of support would be devastating.

But the arguments of the critics of nuclear terrorism can be challenged. First of all, terrorists have not, in the past, been adverse to causing mass casualties and indiscriminate killings. At Lod Airport, for example, the Japanese Red Army terrorists did not mind ending the lives of innocent people in order to gain attention. Recently cases have been reported of terrorists using rockets to bring down large aircraft flying overhead.\textsuperscript{59} Terrorists have not shown much care in their killings. Concerning the argument that nuclear devices will not be used because a consequence might be to cause loss of local support for the terrorist; what is to prevent the terrorist group from using nuclear devices away from their areas of local support? The group could remove itself from its base of operations and popular support and carry on nuclear terrorism resulting in mass casualties in someone else's area. As Martha Hutchinson states:

It seems naive to trust the good-will and humanitarian instincts of the terrorist to prevent mass casualties. The argument, although ostensibly based

on past experience, overlooks a definite trend toward
greater destructiveness accompanying the availability
of ever more sophisticated weapons and explosives.60

The possibility of terrorists going nuclear is a reality
and public administrators must be well aware of this pos-
sibility and be ready to react.

**Nuclear Blackmail**

On October 27, 1970, a nuclear blackmail threat
was received by the city government of Orlando, Florida.61
The Orlando chief of police was notified by a phone call
that a nuclear device would be exploded "unless a ransom
of one million dollars was paid and a promise of safe con-
duct out of the country for the terrorists was provided."62
This nuclear blackmail threat was accompanied by a detailed
diagram of a nuclear device. The Federal Bureau of Investi-
gation and the then Atomic Energy Commission were unable to
reassure the city government that this nuclear blackmail

---

60 Martha Crenshaw Hutchinson, "Defining Future
Threat: Terrorists and Nuclear Proliferation" (prepared
for "International Terrorism: National, Regional, and
Global Ramifications," City University of New York,

61 National Advisory Committee on Criminal Justice
Standards and Goals, op. cit., p. 553.

62 U.S., Air Force, Air War College, op. cit.,
p. 18-19.
threat was a hoax and not a credible threat. The Orlando city government was prepared to pay the one million dollars to ransom the city and would have paid the said ransom if the "terrorists" had not made a mistake. "Through a series of mishaps, misadventures and ordinary police procedures, a fourteen year old boy was apprehended as the sole perpetrator of the hoax."63 This fourteen year old, who had the city government of Orlando willing to ransom their city, was a honor science student at one of the local high schools. This student was able to produce such a credible diagram of a nuclear device from available unclassified documents that the city authorities, the Federal Bureau of Investigation, and the Atomic Energy Commission could not say it was not capable of creating havoc in the city. The Federal Bureau of Investigation has confirmed that other nuclear blackmail threats have occurred. In 1974, the FBI "had investigated seven letters threatening to explode nuclear bombs in Boston, Des Moines, San Francisco and Lincoln, Nebraska."64

63Ibid., p. 19.
64News Dictionary, 1975, op. cit., p. 27.
CHAPTER III

PUBLIC ADMINISTRATION AND ITS RESPONSIBILITY TO RESPOND TO NUCLEAR TERRORISM

Public administration is a term used to refer to those activities involved in implementing the policies and programs under governmental jurisdiction. But public administration does not only involve the implementing of policy, also included in a definition is the influencing of public policy and programs. Public administration focuses its energy on planning, organizing, coordinating, supervising, and controlling the operation of government. It is constantly challenged in times that are rapidly changing; new problems and dangers are confronting the administrator daily. Public administration must be dynamic and flexible in order to deal with these new problems and to protect the citizens for whom it works.

By its very nature, terrorism is an activity which directly challenges the "rule of law", the very basis of

---

our governmental system. Public administration must meet this challenge competently and efficiently. Law enforcement agencies, in particular, must be ready to react in an organized fashion to ensure the safety of citizens when terrorism goes nuclear.

If a lone terrorist or an organized group of terrorists were able to produce a credible nuclear threat, the consequences to society could be catastrophic. The public sector must be fully prepared to perform as one unit to meet this threat. A reliance upon \textit{ad hoc} responses would be unacceptable, ineffective, and surely costly. Public administration cannot afford to gamble with countless lives and invested capital which would be lost if a terrorist successfully employed radioactive material. To prevent loss of public support and to avoid undue panic, the public sector has no other choice; only through well thought out discussion before terrorists go nuclear will the public sector's response to a nuclear threat be effective. There will be no time to read through plans previously disseminated or to hastily develop plans at the local level. Only through prior study of the problem, appreciation of the reality of nuclear terrorism, and implementation of sound programs will the threat of nuclear terrorism be controlled.
Before supporting structures are added to a house, a solid foundation must be laid; it is no different when the public sector starts out to combat nuclear terrorism. Terrorism may be political in nature, but terrorism, political or not, is still basically a criminal activity. It must be understood from the beginning that terrorism, like other crimes, will probably never be eradicated. All we can hope to accomplish is a firm control of it. Failure to achieve control conceivably could bring an end to a system of majority rule and the "rule of law". Success may depend upon the efforts of public administrators to meet challenges of unprecedented complexity.

To ensure that the "rule of law" is always maintained when a terrorist activity involving radioactive material occurs, public officials must be prepared beforehand. Essential factors, but certainly not all-inclusive, of structures to aid in achieving the goals stated above would include: emergency and contingency planning, coordination, task force management, inter-agency and intra-agency cooperation, a well defined understanding of the given jurisdictional responsibilities, an appreciation of the value of intelligence, and professionalism on the part of public administrators. Public administration in general and law enforcement in particular must make wise use of these tools in order to deal competently with the threat of nuclear terrorism. These organizational and procedural
elements, when well implemented, will hopefully allow the administrators and their agencies to move smoothly and rapidly to control the situation resulting from a terrorist threat.

**Emergency and Contingency Planning**

The primary objective of a lone terrorist or a group of terrorists is to cause disruption of the daily pattern and create as much fear as possible. The creation of fear throughout the terrorists' targeted area is aimed at shaking the people's confidence in their government's ability to protect them and their tranquil life. To create as much fear as possible and possibly cause the targeted population to doubt their government requires a great deal of forethought on the part of the terrorist. A terrorist must produce a highly shocking and appropriately timed incident to accomplish this goal. To produce such a terror-filled incident requires prior planning on the part of the terrorist. Only through planning will the terrorist become aware of a given population's sensitivity and be able to produce the needed shock effect. Since we know that the terrorists spend a great deal of time preparing, planning, and training, law enforcement must be that much better prepared, planned, and trained.

A terrorist threat involving radioactive material will create an emergency, a situation demanding an
effective public sector response, a response that demands prior planning. "An emergency is a situation characterized by one or more of the following conditions: shortage of time, personnel, material resources." These shortages can be prevented, however, with prior planning. A shortage of time can be minimized with well-thought-out plans before the emergency arises. A shortage of personnel can be minimized with proper training and with employing personnel of the highest caliber. And the shortage of resources will be minimized with the advanced stockpiling of possibly needed resources "and by mutual aid agreements." With prior planning before an emergency arises, the administrators, the decision makers, will be able to concentrate on solving the crisis at hand and "not be required to spend an undue amount of time attempting to bring some organization out of chaos resulting from a lack of prior planning," which could waste precious time and result in catastrophe.

The public sector must be fully aware of the value of planning before the emergency crisis arises.

Central to effectively controlling high-technology terrorism is the implementation of a planning process, not only by local law enforcement but also by local decisionmakers, parallel jurisdictions, State and Federal agencies, and the community as a whole.

---

67 Ibid. 68 Ibid., p. 3
Planning offers a connecting function that to some degree embraces all other control mechanisms. Regardless of the specific control measure for high-technology terrorism, planning is essential. The uniqueness of high-technology violence necessitates prior consideration and planning for this phenomenon by all levels of government.69

It is extremely important that the public sector be prepared to respond immediately to a terrorist incident in order to reassure the citizenry that their servants are protecting them and worthy of their continued support. The public sector must have, at its ready disposal, contingency plans which describe how the different agencies within the governmental structure are to react in an emergency. These contingency plans must be "based on the need to expect and to prepare for the unexpected" since the terrorist activity is trying to tax government to its limit.70 Contingency plans must be thoroughly conceived and must take into account the different agencies in the public sector which might be called upon to render valuable assistance during a crisis. Once these governmental contingency plans have been produced by the proper agency, they must be disseminated to all appropriate agencies which might play a part in the public sector's response to the terrorist incident. "All who are affected administratively and operationally

---

69 National Advisory Committee on Criminal Justice Standards and Goals, op. cit., p. 465.
70 Ibid., p. 44.
by the plans should be familiar with their terms and with their own precise responsibilities under them.\textsuperscript{71}

When contingency plans are developed by the appropriate agency and are received from that agency, their content should be evaluated and directed to the given recipient's primary area of responsibility. It must also be fully understood that contingency plans can become outdated or, because of new developments, require changes to amend the original plan. A periodic review of the plan is mandatory. Updating the plan and reissuing it to the public agencies involved will also serve to reinforce the fact of the plan's existence. Reissuance will, once again, bring the plan to the attention of the various agencies and will serve to reemphasize its importance. The plan must be well disseminated and kept up to date.

Since terrorism, in all probability, will be with us for some time, the development of contingency plans to respond to a terrorist incident should be considered wise and prudent policy at all levels of government. Even if there seems to be no major terrorist problem currently existing in one's area of purview, the introduction of outside terrorists, whether domestic, international, or transnational, should be recognized as a possibility. It would

\textsuperscript{71}Ibid., p. 45.
be a wanting and feeble response if the given body politic assumed that since it was not subject to terrorist activity from within its own jurisdiction at the time that it was not aware of available contingency plans relating to the terrorist problem. Terrorism does not recognize arbitrarily-agreed-upon jurisdictional boundaries!

The small size of a police agency obviously is no assurance against its encountering serious incidents of terroristic and quasi-terroristic crime, neither is the small population or nonurban character of the area it polices. Although terroristic and quasi-terroristic crimes will continue to occur less frequently in smaller and less urbanized jurisdictions, there is nothing in the theory of terroristic crime or in the records of American terrorism and quasi-terrorism to date to suggest that any jurisdiction is immune. In fact, the risks posed for the smaller jurisdictions may, in some respects, be peculiarly serious. The subjective damage done by an unsuccessfully managed incident, measured in terms of increased public apprehension and decreased public confidence in government, will differ according to where it occurs. In urban areas, the public may already be partly acclimatized to extreme violence and its consequences; in less sophisticated jurisdictions, a single explosive incident may be a drastic collective trauma.

Planning for terrorism and quasi-terrorism should be regarded as no less necessary by small departments than it is by large ones.72

All aspects of the public sector need to be ready to respond.

If a nuclear threat is received by a local governmental body it is, in all probability, going to be the

---

72 Ibid., p. 140.
only bureaucracy to respond for the first couple of hours. "In spite of all the backup that might be given by Federal, State, and American Red Cross resources, the final, frightening responsibility for decision affecting citizens' lives fell upon the local officials." There are certainly aids available from the federal and state levels when a crisis arises, such as emergency plans and guidelines promulgated for such emergencies. Personnel and emergency equipment is also available. "But in those first few hours of any emergency, it is the activity of local officials that is so important. This fact cannot be underplayed when considering protective actions that might have to be taken in a radiological emergency." Thus, local government agencies, no matter how small the constituency or how rural the area, must be prepared to respond immediately to an emergency situation involving radioactive material.

Planning for evacuation in the event of a nuclear threat will be one of the most important responsibilities of the public administrator. The use of military personnel and vehicles should be considered in the drawing up of

---


contingency plans. This personnel and equipment will be an important resource to call upon in the event of an emergency. Military assistance can be in the form of nearby National Guard units, United States Regulars, or a combination of both. But there are advantages and disadvantages in introducing military personnel into the terrorist situation. The immediate advantage would be the availability of highly disciplined and properly equipped units of assistance. The disadvantage would be public awareness of the inability of the local authority to handle the situation could increase public anxiety.75

Jurisdictional Responsibility

On the national level, we have law enforcement agencies like the Federal Bureau of Investigation and the Bureau of Alcohol, Tobacco and Firearms from the Justice Department and the Treasury Department respectively. All states possess law enforcement organizations which might be called the state police or the highway patrol. Local law enforcement is usually represented by the county sheriff and the different police departments within the given county. All these different law enforcement agencies, whether national, state, or local have mandated areas of

75National Advisory Committee on Criminal Justice Standards and Goals, op. cit., p. 222.
responsibility and jurisdiction. With such a complex structure, there is naturally a great deal of overlapping and hopefully mutual respect and cooperation.

When a terrorist activity occurs, the local law enforcement agency will likely be the law enforcement body to respond first. But due to overlapping areas of responsibilities and jurisdiction, other law enforcement agencies will also be involved. The hijacking of an airplane is a good example of how various agencies share responsibility in certain situations. As long as the airplane is on the ground, it comes under the jurisdiction of the Federal Bureau of Investigation. "If its doors are shut, if it has the power to take off, it is the charge of the Federal Aviation Administration."76 Meanwhile, the local law enforcement departments are involved in maintaining order within the airport. Thus the various agencies involved in a situation will need a strong bond of cooperation and coordination.

The problem of overlapping jurisdiction can be further illustrated by examining the location of the nuclear power plant at San Onofre in northern San Diego County. Within a twenty mile radius of the San Onofre

nuclear power plant, one encounters the whole gamut of governmental structures, federal, state, and local. There are the counties of Orange, Riverside, and San Diego; the cities of San Clemente, San Juan Capistrano, Newport Beach, and, to the south, Oceanside. These city and county governments are simply a few of the jurisdictions competing and complementing each other in this area. Just across the freeway from the San Onofre nuclear power plant is the Camp Pendleton Marine Corps base. Camp Pendleton is the peacetime duty station of an entire Marine Division with their many thousands of civilian dependents. If a radioactive release should occur, similar to the one at Three Mile Island near Harrisburg, Pennsylvania, and people within a twenty mile radius were asked to evacuate total confusion could develop. There is only the north-south bound freeway which runs between the San Onofre nuclear power plant and the high mountains of the Marine Corps base. Even if no panic occurred, the road systems would be taxed as never before. Who would be notified to evacuate, and how would this evacuation be coordinated to assist everyone to safer ground? This is where good prior planning is so important. All of the possible problems should and must be worked out before a terrorist group causes a radioactive release. It will be a poor public administrative response which waits until something like Three Mile Island occurs before contingency plans are made and read.
The prospect of nuclear terrorism will involve more than just one level of government. Jurisdictional lines, in time of crisis, will be crossed with impunity. Since many governmental bodies on different levels will be called upon to protect public safety, a provision for a task force structure should be included in contingency planning, in order to coordinate among and between jurisdictions. A task force should be made up of representatives from the various public agencies involved. The task force would enable the public sector to move as one unit in coordinating its response. Command decisions which must be made in such an important time would carry the weight of all the task force members. Task force leadership will enable the public sector's response to be organized and the agencies will be more likely to work together as a tightknit team.

**Intelligence**

John P. Harlan states that the police have a dual mandate. Law enforcement agencies are supposed to do the best they can to keep crimes from happening (the preventive function) and they are supposed to investigate, apprehend and assist in the prosecution of the crimes which they could not prevent (the enforcement function).77

Both of these police services, the preventive function and the enforcement function, are to be regulated by federal, state, and local laws. That is to say, the police within a democracy must operate within the "rule of law". Harlan goes on to state that, since terrorist incidents could involve a great deal of violence, there is a sense of urgency added to the problem. "In the case of acts of terrorism, the police are confronted with the prospect of high loss of life, major property damage, and serious public anxiety, as well as the disruption of orderly social processes." In appreciation of this urgency, law enforcement must have good intelligence concerning terrorists if terrorism is to be brought under control. Good intelligence at the right time can go a long way in preventing a terrorist incident and, if this fails, in the subsequent bringing to justice of the culprits.

In the post-Vietnam and Post-Watergate era, the mere mention of police surveillance and intelligence gathering arouses fear in many Americans. According to Los Angeles Police Chief Daryl Gates, "Intelligence has become a dirty word." This fear is, in some respects, a realistic response to past abuses perpetrated by American international and domestic intelligence gathering agencies.

---

78 Ibid.
Because of overzealous and unconstitutional activity con-
ducted in the past by the Federal Bureau of Investigation
and other law enforcement agencies, many Bureau and local
police intelligence files have been ordered opened to the
public or are simply no longer kept active. Today many
law enforcement agencies, which had formerly maintained
intelligence data on terrorists, shy away from such activ-
ity because they do not want to bring down public criticism
on their agency.

Yet if public administration is ever going to con-
trol terrorist activity, one of the most important tools
available is going to be the use of good information. The
value and importance of good intelligence cannot be
stressed enough.

Terrorists do not plan their operations openly.
Clandestine activities, i.e., going underground, are
essential to any true terrorist movement. Unless
law enforcement is to be restricted merely to respond-
ing to violent acts after they have occurred—a posi-
tion that not even the most ardent civil libertarian
would aspouse—the need for some sort of intelligence
capability is obvious.

Good intelligence is "the linchpin of an effective overall
law enforcement program" to control terrorist activity.

---

81 National Advisory Committee on Criminal Justice
Standards and Goals, op. cit., p. 91.
82 Ibid., p. 145.
The importance of intelligence gathering and the necessary apparatus to conduct intelligence gathering should no longer be underrated. Every law enforcement agency, no matter at what level of government it finds itself, should respect and fully appreciate the value of good intelligence. Intelligence concerning the activities of suspected terrorists or terrorist groups must be gathered, evaluated, and disseminated to other law enforcement agencies. No purpose whatever is served, for example, if intelligence collected on a suspected terrorist noticed leaving the State of New York is not made known to law enforcement personnel in the State of California. The following are, according to R.W. Mengel, examples of indicators of potential nuclear terrorism that should be developed and disseminated to other law enforcement agencies:

1. Theft of radioactivity monitoring equipment;
2. Theft or loss in shipment of radioactive material;
3. Theft of explosives and or bomb components;
4. Purchase or theft of special handling equipment (e.g., protective clothing, isolation chambers, glove boxes);
5. Abduction of persons with high-technology backgrounds;
6. Rental of isolated facilities;
7. Purchase of laboratory equipment suitable for nuclear experimentation;
8. Indiscriminate targeting by terrorists;
9. Increased acquisition of funds by terrorist groups;
10. Increased terrorist liaison and coordination;
11. Increased expenditures by terrorist-connected groups; and
12. Unexplained sickness or unusual diseases reported for treatment.83

83 Ibid., p. 469.
Intelligence, gathered within the limits of constitutional constraint, will enable law enforcement agencies to advance significantly in the preventive function. All law enforcement agencies must ensure that intelligence is used to its fullest but that its use is always within the law. To accomplish this aim, oversight committees on intelligence made up of people from outside each agency should be established and empowered to act on a permanent basis.

Professionalism

Another valuable tool which must be used by the public sector in its effort to control terrorism is professionalism. Granted the idea of professionalism is abstract and hard to quantify, its importance will always be measured by those from within the organization and by those without. The public will derive a sense of well-being and the terrorist will have to weigh the consequences of his action more carefully if professionalism is evident within the public sector. Hopefully a highly professional response to past terrorist activity will prevent the future terrorist. Three items which will enable the public sector and law enforcement in particular to conduct themselves in a professional manner are: a policy of restraint, a disciplined response, and strict compliance with the law.\textsuperscript{84}

\textsuperscript{84}Ibid., p. 34.
Remembering that the terrorist wants the government to overreact to the terrorist incident, thus lending credence to the terrorist doctrine that the government is really repressive and dictatorial in nature, a policy of restraint is required of the government. A professional response from the government would be doing no more than what is required to protect public safety and bring the terrorist to trial. The government's response to a given terrorist incident should be properly and formally presented to the public following an incident. This reporting must be done to reassure the public that the terrorist rhetoric of a repressive and heavy-handed government is false. The case of the Symbionese Liberation Army confrontation with the Federal Bureau of Investigation and the Los Angeles Police Department is a good example in point. Many Symbionese Liberation Army sympathizers and nonsupporters granted martyrdom to the five terrorists inside the burning house because there were over 350 law enforcement personnel deployed against them. But, in reality, most of the law enforcement personnel who responded to the incident were involved in crowd control and second line security. Only a very small number of law enforcement personnel were actually engaged in returning fire. This important point should have been made evident to the public. Overreaction is usually caused by "surprise and unpreparedness"
on the part of the government and can only be countered by prior preparation and planning. 85

A policy of restraint on the part of the governmental agencies responding to a terrorist incident is closely related to that of a disciplined response. Martha Hutchinson tells us that "terrorism is often a strictly disciplined form of violence." 86 The response to terrorism by the public sector should be no less disciplined. The public sector, in its effort to control terrorist activity, should not appear overzealous. An overzealous response would be counterproductive. Law enforcement personnel must be constantly reminded that a highly disciplined response to a terrorist is probably their most constructive weapon. "Discipline is required to restore order, to outwit the terrorist, and to disarm him." 87

Finally, a professional response to terrorist activity should always be conducted within proper legal safeguards. As stated earlier, the "rule of law" is a cornerstone in a democratic form of government, and its mandates must be strictly observed by all governmental officials. It is ironic that terrorists operating outside the law should have a claim to full legal protection. We need to understand however that by providing a proper code of

85 Ibid., p. 33. 86 Ibid. 87 Ibid.
conduct for officials in all cases we protect ourselves and our system against the excesses inherent in unchecked policies and arbitrary rule.

Professionalism is an extremely important tool in the response to terrorism. Public administrators, in general, and law enforcement, in particular, must shoulder the responsibility for presenting an organized and lawful response to this problem. "An unduly repressive official response generates fear of a different kind, erodes fundamental freedoms, and lends credence to the terrorists' propaganda." A professional response generates positive public support for government and gives the citizenry a feeling of faith in their public servants. Public administration need not approach the problem of nuclear terrorism blindfolded. Once there is an appreciation of the problems associated with responding to a radioactive emergency, public administration must structure its countermeasures accordingly. While the tools enumerated thus far do not ensure that a catastrophe will not occur, these tools are valuable in public administration's response before and after a nuclear threat has been received.

---

88Ibid., p. 29.
Terrorism is not a new problem to confront the United States. The potential of terrorists going nuclear should be approached in a calm yet deliberate fashion. As stated earlier, if terrorists go nuclear, all levels of the public sector will become involved in response. This involvement could be from preventing or reacting to the problem, to mass evacuation of the targeted area.

**Federal Awareness and Response**

On the federal level, the effort to combat terrorism started to move into high gear in 1972. Prior to 1972, the major concern was the hijacking of airliners and the safe release of the passengers and return of the aircraft. But as a result of the terrorist massacre of Israeli Olympic athletes in Munich, West Germany, the United States government began to take a closer look at its own
anti-terrorist capability. This rethinking of terrorism caused President Richard M. Nixon to form the Cabinet Committee to Combat Terrorism. This cabinet committee is chaired by the Secretary of State. Realizing that the Department of State by itself was not sufficient to tackle such a gigantic effort, the Secretary of Defense, the Secretary of the Treasury, the Attorney General, the Secretary of Transportation, the Directors of the Central Intelligence Agency and the Federal Bureau of Investigation, the United States Ambassador to the United Nations, and the Assistant to the President for National Security Affairs were included as members of this cabinet committee.

At the same time the Cabinet Committee to Combat Terrorism was established, a Working Group to Combat Terrorism was brought into being to operate under the cabinet committee. This Working Group to Combat Terrorism consists of representatives of twenty-six departments, agencies, and bureaus. The Working Group meets on a regular basis to stay current with terroristic activity. One of

89 J. Bowyer Bell, Transnational Terror (Stanford: Hoover Institution on War, Revolution and Peace, 1975), p. 82.

the primary functions of the Working Group is "to exchange information, discuss jurisdictional issues, and coordinate antiterrorism activities of the various agencies."\textsuperscript{91} These Working Group members are usually middle level managers and planners in their respective departments, agencies, or bureaus. But "the working group is primarily a bureaucratic coordinating body, not a command organization."\textsuperscript{92}

When a terrorist incident occurs within United States borders, the United States Attorney General has the responsibility for ensuring that the federal government responds immediately. The Attorney General has delegated this responsibility for combatting terrorism to one of his deputies. "The Deputy Attorney General makes major policy decisions during a terrorism crisis."\textsuperscript{93}

According to Attorney General Benjamin R. Civiletti, the federal program that exists to respond to terrorism consists of the following four basic principles:

1. Reaction--Antiterrorism operations in response to specific major acts of terrorism;
2. Deterrence--Prosecution and protection and security efforts of the public and private sectors to discourage terrorist acts;


\textsuperscript{92}U.S., Congress, Senate, Committee on Foreign Relations, Subcommittee on Foreign Assistance, op. cit., p. 69.

\textsuperscript{93}Civiletti, loc. cit.
3. Prevention—International initiatives to discourage any country from condoning or permitting terrorism and to encourage sanctions to make terrorism unattractive as a form of political action;

4. Prediction—Intelligence efforts, which in the United States are undertaken only under strict guidelines, to support the other three aspects of the program.\[94\]

The combination and utilization of these principles, it is hoped, will enable the government to respond efficiently and effectively to terrorists threats.

On the national level, the primary agency which is responsible to respond to terrorism is the Federal Bureau of Investigation.\[95\] It is important to note that in most cases the individual states are the governmental bodies principally responsible for the protection and safety of their citizens. But because of the nature of terrorism and the potential of nuclear terrorism, "the law clearly identify a role for the Federal Government."\[96\] On June 4, 1979, the Federal Bureau of Investigation took steps to enable it to react immediately to nuclear blackmail. The Bureau announced it was drawing up contingency plans to evacuate cities. These contingency plans will have incorporated in them sections which will "impose

---

\[94\] Ibid.


\[96\] National Advisory Committee on Criminal Justice Standards and Goals, op. cit., p. 468.
modified martial law in case of nuclear threats by terrorists."97 Federal Bureau of Investigation Special Agents will immediately respond to a nuclear blackmail threat upon being notified by the receiving agency.98 Upon receiving notice of a nuclear blackmail threat, local Federal Bureau of Investigation Agents will report the situation to a twenty-four hour operations center maintained at FBI Headquarters in Washington, D.C. "Judge Webster and the FBI are also responsible for ongoing operations to contain and resolve the incident."99 The Federal Bureau of Investigation, if it finds it cannot resolve the problem, can request the assistance of other departments or bureaus on the federal level. This assistance may come from the Department of Energy or the Department of Defense. Valuable assistance can also be rendered by the Bureau of Alcohol, Tobacco and Firearms from the Treasury Department or the United States Marshall's Service.

In an effort to combat terrorism, many foreign governments have created special anti-terrorist units.


98 Statement by Robert B. Burkholder, Special Agent, Federal Bureau of Investigation, personal interview, Oxnard, California, April 20, 1979.

99 Civiletti, loc. cit.
These units are being trained by their respective governments to react to and counter terrorist groups within national borders or outside. The usefulness of the anti-terrorist groups has been demonstrated by the West German unit which flew into Mogadishu, Somalia to rescue eighty-six hostages. This West German group, known as the Border Protection Group 9, was created after the Bonn government realized its shortcomings in failing to rescue Israeli hostages at the Munich Olympics.100

Probably the best trained anti-terrorist unit in the world is Israel's General Intelligence and Reconnaissance Unit 269. Unit 269 is the Israeli commando unit which flew into Entebbe, Uganda on July 4, 1976.101 The raid on Entebbe and Israel's answer to the rerouting of over one hundred Jews was clear; to "teach the terrorist once and for all that there are no safe havens in the world."102 It must be pointed out that the Israeli "surgical strike" could not have taken place without international cooperation and coordination. The Israeli rescue party was permitted by the Kenya Government, Uganda's neighbor, to use Kenyan air facilities to regroup and refuel.103 The United

102 Ibid. 103 Ibid., p. 321.
States even supplied the Israelis aerial-reconnaissance photographs of the Entebbe airport. These photographs enabled Israeli intelligence people to determine the proper response and actual number of men and equipment required to conduct the recovery raid at Entebbe. After the successful rescue mission by Israel, many countries which heretofore had allowed terrorist groups sanctuary, were forced to review that policy. The lesson learned from the Entebbe raid is that terrorists can be counteracted by well organized governments. The rescue mission by the Israelis into Africa "is probably an excellent deterrent to terrorism" and "illuminates what is the greatest need in combating terrorism--greater international cooperation."

In realization that military units, specially trained and equipped, can provide valuable assistance in responding to a terrorist incident, the United States government has started to train a few such units. Fleet Marine Forces, Air Force Special Operations squadrons, Navy Seals teams, and Army Rangers are currently receiving special anti-terrorist training and equipment.

105 Ibid., p. 134.
106 U.S., Congress, Senate, Committee on Foreign Relations, Subcommittee on Foreign Assistance, op. cit., p. 72.
According to Federal Bureau of Investigation Director William Webster, these United States military units are being trained to respond to any similar occurrence, such as Munich or Entebbe, involving United States nationals.\textsuperscript{107} The units are also being trained to retake nuclear power plants if they fall into terrorists' hands within United States borders.\textsuperscript{108} The development of specially trained and equipped military units to counteract domestic terrorism is not unconstitutional, the Posse Comitatus Act (18 U.S. Code 1385) not withstanding.\textsuperscript{109} While local law enforcement and National Guard troops are legally responsible to respond first, these may not possess the training and equipment necessary to accomplish their mission. Under special executive order, the use of federal troops, in a non-routine situation, may be used according to the United States Code (10 U.S. Code 332;333).

Much progress has been made on the federal level to respond to terrorist activity. There has certainly been a noticeable strengthening of security at airports by the

\textsuperscript{107}"FBI Chief," op. cit., Sec. C, p. 5.
Federal Aviation Administration to forestall terrorist commandeering aircraft, but this occurred only after a rash of planes being rerouted. Hopefully the federal government will be adequately prepared to meet this danger before a nuclear threat becomes a reality.

State Awareness and Response

On the state level, California has probably made the greatest effort in the country to meet the problems associated with terrorism and its response. California is no stranger to incidents of terrorism. Terrorist groups from the Golden State have gained national and international notoriety from mass media coverage. The Symbionese Liberation Army was catapulted to front page headlines following the kidnapping of newspaper heiress Patricia Hearst in 1974. The SLA was a small group of terrorists who probably never consisted of more than ten or twelve members, although many people were claimed to be sympathizers. The founders of the Symbionese Liberation Army were well educated, upper middle class people. Bill Harris, for instance, possessed a Master's degree.\textsuperscript{110} They established small groups that went into the San Francisco Bay area prisons as "teachers,"

and while this teaching was going on in the prisons, a few convicts were converted to the cause. Upon the release of the convicts from prison, the Symbionese Liberation Army really began to move. Their "aim was absolute revolution, although the ultimate purpose of the revolution was never stated."\textsuperscript{111} It must be recognized that the Symbionese Liberation Army possessed a great deal of discipline, which is probably one reason why it took law enforcement so long to finally bring them under control.\textsuperscript{112}

Although the SLA is of no major consequence today, state and local law enforcement agencies cannot afford to put the problem of terrorism in California behind them. The Popular Front for the Liberation of Palestine maintains an "operational base" in California. Estimates of Popular Front for the Liberation of Palestine active supporters in the state range from several hundred to possibly several thousand.\textsuperscript{113} This fact causes law enforcement personnel in California concern, especially with the 1984 Olympics to be held in Los Angeles.

\begin{footnotes}
\item[112] U.S., Congress, House, Committee on Internal Security, Terrorism, a Staff Study, op. cit., p. 145.
\item[113] Yonay, op. cit., p. 29.
\end{footnotes}
Intelligence officials have heard rumors that Soviet-made, hand-held, ground-to-air missiles are being smuggled into the United States, thus enabling a terrorist team in Playa del Rey or in a small boat offshore to shoot down jets taking off from the L.A. International Airport.114

Law enforcement must become fully aware of the problems which can occur in the immediate future in California.

In an effort to provide the public sector with a structured format by which to study and to understand the problems associated with terrorism, the State of California offers classes at the California Specialized Training Institute. The California Specialized Training Institute, located in San Luis Obispo, is administratively under the State of California Military Department. Over 14,000 students have attended courses offered at the Institute since its opening in 1971. The student body has consisted of concerned public administrators throughout the United States. Foreign officials have also traveled to San Luis Obispo to participate in the week long terrorism courses offered throughout the year.

The resident faculty of the Institute are drawn from former military and law enforcement personnel. Appreciating that valuable expertise exists outside of an instructing facility, guest speakers are brought in to

---

114 Ibid., p. 24.
help further explain and convey the seriousness of terrorism. These outside authorities range from active law enforcement personnel to academicians and Ph.D's in psychology.

This writer had the opportunity to attend the terrorism course at the invitation of the Institute's director. The week long course instructed public administrators from the local, state, and national level. One administrator in attendance was from Norway, thus illustrating the international scope of the Institute. The entire program was conducted in an organized and highly professional manner. The California Specialized Training Institute classes on terrorism are one example of the State of California's effort to confront the growing problem of terroristic activity.

The State of California Office of Emergency Services is responsible to ensure that a state-wide emergency response organization is maintained to react to a crisis. The Office of Emergency Services produces for the governor "plans and programs necessary to enable the state and its political subdivisions to deal with emergencies and to enter into and carry out mutual aid agreements." The Office

of Emergency Services, located in Sacramento, is assisted by four regional offices disbursed throughout the state.

Because the individual states possess "police power" and are responsible for the protection of their citizens, the State of California had the responsibility to tackle the problem of nuclear terrorism. The problem of past terrorism in California and the potential of terrorists going nuclear demanded that public administrators on the state level prepare to respond to such problems. In response to terrorists going nuclear, a contingency plan was developed on the state level. The Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California was produced to fill this need. The author of the Nuclear Blackmail Response Plan was the State of California Office of Emergency Services in Sacramento, California. The plan, to the credit and forethought of the State Office of Emergency Services, is excellent and has been used as a model for other states to follow. It is detailed, yet flexibility has been incorporated to allow for different threats and demands that may be made by a nuclear blackmailer. The purpose of the Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California is to ensure that public administration does not respond to a radioactive threat in an ad hoc manner. The State of California plan goes a long way in its effort to
coordinate the responses of all the different departments and agencies on the national, state, and local level which must react to the crisis as a team. The development of the plan and the dissemination of its requirements to local levels recognizes the fact that it is the local sector which usually receives the threatening notice, and it is also the local departments and agencies which must respond first to the crisis situation. Time will naturally be required to marshal all the needed assistance from the state and national governments, and during this time the local level's professional response to nuclear terrorism is critical if the terrorists are to be apprehended and panic prevented in the targeted area.

The Nuclear Blackmail or Nuclear Threat Emergency Response Plan was sent by the State of California Office of Emergency Services to "Directors of City and County Emergency Organizations; Sheriffs and Chiefs of Police; and Regional and Operational Area Fire Coordinators." The recipients were informed that this new plan was to supersede the previous plan of December 1976, dealing with nuclear blackmail, but "as we pointed out before, the real

key to the effective use of this plan is to immediately notify the Federal Bureau of Investigation office in your area when a threat is received." 117 The cover letter which accompanied the plan even provides the telephone numbers of the nearest Federal Bureau of Investigation Offices.

Charles Manfred, Director of the Office of Emergency Services of the State of California, in the same cover letter, states, "We hope you will not have a need for this plan, but if you receive a threat involving nuclear weapons or radioactive materials it outlines an effective plan of action for you to follow." 118

The Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California was developed by the State of California Office of Emergency Services to ensure that, if a nuclear blackmail threat is received within the state, public administration will be prepared to respond in a professional manner. According to the plan, "acts of extortion, blackmail, and threats of violence involving radioactive materials pose a myriad of complex problems and require coordinated responses from many federal, state and local agencies." 119 The absolute necessity

117 Ibid.  
118 Ibid.  
119 Ibid., preface.
of a coordinated response needs to be stressed time and again if the people of the State of California are to be protected by their public servants.

In the actual development of the plan, the Office of Emergency Services formed committees composed of the following: Alameda County Sheriff's Department and Office of Emergency Services; Department of the Army; Department of the Navy; Department of Energy; Environmental Protection Agency; the Federal Bureau of Investigation; Los Angeles City Civil Defense, Fire Department, and Police Department; Los Angeles County Fire Department, Health Services, and Sheriff's Department; Long Beach City Emergency Services and Police Department; Rand Corporation; Radiological Defense Officers Association; the California Highway Patrol; Department of Health, Radiologic Health Section; and the University of California Lawrence Livermore Laboratory.

The representatives that formed the committees to develop the plan came from federal, state, and local governmental agencies. These members worked together to assist the Office of Emergency Services in the creation of the Response Plan.

The Blackmail Plan carefully outlines the different tasks and responsibilities which the responding governmental agencies are required to perform. At the top of the list is the description of activities which will be
performed by the Federal Bureau of Investigation. The plan states that:

Although local government is responsible for the protection of the public health and safety, the FBI is the lead investigative agency when threats are made involving---'the misuse of a nuclear weapon, special nuclear materials or dangerous radioactive material---.'

Upon receipt of information that a nuclear blackmail threat has been made, the local Special Agents of the Federal Bureau of Investigation will notify FBI Headquarters in Washington, D.C. and all other "appropriate local, state, and federal agencies" which could assist in the problem. The Nuclear Blackmail Response Plan contains a "Nuclear Blackmail Alerting" flow chart (see Table 2). Furthermore, according to the Blackmail Plan, the Federal Bureau of Investigation will "coordinate" all investigative activity among civilian law enforcement bodies or military investigative apparatus, if called into the situation. One of the most important jurisdictional problems which could arise in such a crisis-filled period is, who shall lead the governmental task force set up to coordinate the public sector's response to a nuclear blackmail threat. In most cases there will not be time to sit around and argue who shall chair the task force. The waste of valuable time

120 Ibid., p. 13.
TABLE 2
NUCLEAR BLACKMAIL ALERTING

Source: California, Office of Emergency Services, California Nuclear Blackmail or Nuclear Threat: Emergency Response Plan (Rev. ed.; Sacramento: Office of Emergency Services, 1978), Attachment no. 3.
would be a disservice to the public which all the responding agencies on different levels are to protect and serve. The plan clearly sets down that the Federal Bureau of Investigation shall "provide a representative to chair the task force," thus alleviating any confusion as to the task force leadership.\footnote{Ibid., p. 13} For an overview of the organization of the task force, see Table 3.

Realizing that the Federal Bureau of Investigation does not possess the technical knowledge surrounding a nuclear device, the U.S. Department of Energy is assigned a special role. The Department of Energy will, upon being notified that a nuclear blackmail threat has been received, accept from the FBI the responsibility for control and coordination of the nuclear aspects of assessment and search operations in all cases where the threat involves special nuclear material and, when requested, cases involving other radioactive materials.\footnote{Ibid.}

Department of Energy personnel from the offices in San Francisco or the State of Nevada offices thus would be incorporated into the emergency task force. Also from the federal level, Department of Defense personnel would be involved if the nuclear blackmail threat involved a military nuclear device.

On the state level, the Office of Emergency Services, when requested by the Federal Bureau of

\footnote{Ibid., p. 13} \footnote{Ibid.}
TABLE 3

TASK FORCE

The task force should be made up of representatives from the following agencies and expanded as appropriate:

1. FBI
2. DOE
   - San Francisco Operations Office (SAN)
   - Nevada Operations Office (NVO)
3. OES
   - Headquarters
   - Region
4. Sheriff
5. Health Department (State and/or Local)
6. Police Department
7. Local government representative
8. DOD 6th Army/EOD

The task force is responsible for:

1. Assessing the threat, and coordinating the search for, and disposal of, the device:
2. Determining courses of action to be taken by responsible governmental officials to mitigate the problem;
3. Coordinating communications;
4. Coordinating law enforcement assistance;
5. Establishing an Emergency Operations Center (EOC) and assist in establishing a Search Coordinating Center (SCC) for DOE and Field Command Post (FCP) if required;
6. Directing the application of protective actions;
7. Providing instructions to the public; and
8. Coordinating news releases.

Investigation, will inform appropriate state and local governmental agencies that a nuclear blackmail threat has been received and will serve as the coordinating agency for all of the state's responding agencies. The Office of Emergency Services can offer valuable monitoring and technical expertise during a nuclear blackmail threat. Of course the state and local health departments must be involved early in the response organization, if a nuclear blackmail threat is received. The Radiologic Health Section of the State Department of Health, when requested by the Federal Bureau of Investigation, will "provide protective action support to local government, and technical advice on radiological hazards, through the task force." 123

At the local level, important members of the task force are the local heads of government and the sheriff's department. The elected and appointed leaders of the local government, such as city managers and members of the board of supervisors, are "legally" responsible for ensuring that their constituents are free from harm. These local representatives naturally would be involved if demands were made upon their constituents. The responsibilities placed upon the sheriff's departments are very important. Historically, within the State of California, the sheriff has always

played a vital role in maintaining law and order. Within their respective counties, the sheriff is the senior law enforcement officer. Many cities contract with the county sheriff for police services. The Blackmail Response Plan states that "regardless of the variances in responsibilities the sheriff should always be a member of the task force." Among one of the most important responsibilities that rest upon the sheriff is to "assume operational control until the task force is convened." This requirement of the sheriff to respond cannot be overstated. The period immediately following the receipt of the nuclear blackmail threat is crucial, if not the most crucial, in the entire response of the public sector. Professionalism requires that the senior law enforcement representative in the county be able to meet the challenge, especially the nuclear blackmail threat. There will inevitably be a period of time involved in bringing the different members of the task force together, and this time period will need effective leadership. When a nuclear blackmail threat has been received by a city police department, the chief of police will ensure that the same services which were described above as being performed by the county sheriff are carried out. But according to the Nuclear Blackmail Plan,

124 Ibid., p. 16. 125 Ibid.
the county sheriff will always be a member of the task
force set up to respond to a nuclear blackmail emergency,
even if the threat is received in an incorporated city with
its own law enforcement structure.

While the public sector is responding to the prob-
lems of nuclear terrorism and its associated potential on
the federal and state level, it must not be forgotten that
it is the local level which will be the first to respond to
an incident and which will play a key role. Valuable
assistance can be requested and given by the federal and
state authorities following a terrorist incident involving
radioactive material, but this assistance will, in most
cases, not be available during the first few crucial hours.
Thus, it is the local sector which must perform immediately
when the crisis arises and most importantly reassure the
public that they are being adequately protected.
CHAPTER V

LOCAL AWARENESS AND RESPONSE TO THE PROBLEM

Because it is usually the local government that receives a nuclear blackmail threat and because it is the local government that must respond to the nuclear blackmail threat in the first few crucial hours, the state of preparedness on this level is extremely important. It serves little purpose for the federal and state governments to have special reaction teams and contingency plans if the local level officials are unaware of the potential of nuclear terrorism or are unprepared to respond to a terrorist threat. Public administrators on the local level would certainly be committing a disservice to the people they are to protect if they are not prepared to respond to a nuclear threat. An uncoordinated and ad hoc approach to a nuclear terrorist incident would result in local officials being held up for ridicule by the federal and state levels. In appreciation of this, an investigation of the state of or lack of preparedness to respond to a nuclear terrorist incident on the local level was conducted. Knowing that local law enforcement would be on the front line if a
terrorist made what was determined to be a credible threat, the problem of nuclear terrorism was discussed with the appropriate concerned public administrators in the County of Ventura, California. It must be remembered that, as in the case of the nuclear blackmail threat issued in Orlando, Florida, it is the local law enforcement chief executive who is usually first notified of the threat involving radioactive material, and he or she must be prepared to react.

The County of Ventura, comprising an area of 1851 square miles, is situated on the California coast just north of the most populated county in the state, Los Angeles. Ventura County is a General Law County. The proximity of Ventura County to the heavily populated Los Angeles County has been a major factor in Ventura County's growth. The suburban spillover of people and light industry are readily seen in the southern part of the county. By 1979, the County of Ventura was estimated to contain 465,605 residents within its borders. Most of these residents are found in the nine incorporated cities within the county. These nine incorporated cities are: San Buena-ventura, Oxnard, Port Hueneme, Camarillo, Ojai, Santa Paula, Fillmore, Thousand Oaks, and Simi Valley. 126

Ventura County has representatives of all three levels of government that would respond to a nuclear blackmail threat. The federal government is represented by five resident Special Agents of the FBI who are headquartered in the City of Oxnard. On the state level, the Office of Emergency Services is represented by the Emergency Services Information Specialist for the county. And of course the local level includes the sheriff's department and incorporated cities' police and fire protection agencies. (The City of Thousand Oaks contracts with the Ventura County Sheriff's Department for police protection.) In an endeavor to understand the state of preparedness of public administration in Ventura County to respond to a terrorist nuclear threat, a series of personal interviews was conducted. These interviews were with the resident Federal Bureau of Investigation Special Agents, the Emergency Services Information Specialist for the County of Ventura, the fire chief of one of the larger cities in the county, the Sheriff's Department, and all police departments within the county. Most of the police department interviews were conducted with the police chiefs but, in a few cases, due to police chief unavailability, the watch commanders of these departments were interviewed. These watch commanders were lieutenants or senior personnel in their respective police departments.
To determine the extent of coordination between the State of California and local representatives, the above named individuals in Ventura County were asked if they were aware of the **Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California** or of any planning, for that matter, on the state level to describe a coordinated response to nuclear blackmail within the state. The Resident Special Agents of the Federal Bureau of Investigation stated that they were familiar with the California plan and from time to time disseminated intelligence concerning nuclear blackmail to local law enforcement agencies. The Sheriff's Department and all police departments in Ventura County were unaware of the **Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California**. The police chief of Port Hueneme expressed the belief that nuclear blackmail would not occur in his city. This police chief responded with "Why here?" when confronted with a hypothetical problem of nuclear blackmail. One fire chief interviewed was familiar with the existence of the plan and the assistant fire chief was able to produce a copy of the actual plan. One the state level, the Emergency Services Information Specialist was only able to produce the Nuclear Blackmail Plan after two hours of search. In complete honesty, the Emergency Services Information Specialist for Ventura County admitted he was not
familiar with the **Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California**.

The second question asked of the interviewed Ventura County public administrators, with the exception of the local FBI Special Agents, was if an individual "did present what was determined by you to be a credible nuclear blackmail threat, who would you notify once it left your department?" This question was asked to gain an appreciation of different perceptions of responsibility and to discover if valuable time might be lost in responding to a nuclear blackmail threat. The California Nuclear Response Plan demands that the recipient of the threat "**immediately**" call the FBI. On the first page of the plan in capital letters, underlined, it states: "**CALL THE FBI!**" Five of the police departments stated that they would first notify the Ventura County Sheriff's Department. Several police chiefs stated that they would notify the Bureau of Alcohol, Tobacco and Firearms of the United States Treasury Department. The Sheriff's Department stated they would call over to the Emergency Services Information Specialist for Ventura County "because he knows about plans and nuclear stuff." The Emergency Services Information Specialist stated he would "probably call the Department of Energy."

The third question put to the interviewed public administrators in Ventura County was dealing with the
formation of a task force to deal with the crisis situation surrounding a nuclear blackmail threat. The individuals were asked who, in their opinion, must chair the task force at such time. (According to the Nuclear Response Plan, the FBI is to chair the task force.) Most of the interviewed stated that the logical person to chair the task force would be the Ventura County Sheriff since "he is the senior law enforcement official in the county." One interviewed police chief felt it should be the county executive.

Hypothesizing that Ventura County's seeming unpreparedness might be an isolated case, a questionnaire was sent to all fifty-eight county sheriffs in the state. The questionnaire was sent to gain some understanding of coordination and cooperation between state and local public administrators—whether the work conducted by the Office of Emergency Services on the state level to present an effective response to nuclear blackmail reached down to the sheriffs. In the initial fifty-eight questionnaires sent out to the sheriff's departments in the state, twenty-one were returned. A follow up questionnaire was sent to those sheriff's departments who did not respond to the initial questionnaire. An additional eighteen county sheriffs or their departments responded to this second questionnaire for an aggregate of thirty-nine out of fifty-eight sheriff's departments responding.
The purpose of sending the questionnaire to the fifty-eight sheriff's departments in the State of California was, similar to the local Ventura County interviews, to find out how many were prepared to respond to a nuclear blackmail threat in an organized and professional manner and not in an ad hoc fashion. Included in the questionnaire were two questions dealing with the California Specialized Training Institute. The purpose of these two questions dealing with the Institute was to ascertain if local law enforcement, in particular the sheriff's departments in the state, were utilizing this state level training program on the problems associated with governmental responses to terrorism.

The first question in the questionnaire asked if the sheriffs were "familiar with the Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California," and if so, how many had actually read it? Of the thirty-nine returned questionnaires sent out to the sheriffs of the State of California, twenty-four were familiar with the State Nuclear Blackmail Response Plan, fourteen were not, and one questionnaire was returned unanswered. Nineteen of the sheriffs indicated they had not read the plan.

Question two asked the sheriffs if "anyone" had followed up and explained the reasons for the dissemination
of the Nuclear Blackmail Response Plan to them. Ten of the responding sheriffs answered in the affirmative, that they had been contacted by someone to explain the plan. Twenty-eight replied that they had never been contacted, and one returned the questionnaire unanswered.

Question three asked the sheriffs "if you are familiar with the plan, do you feel it is of value?" Fourteen answered yes to this question. Interestingly enough, five answered no, twelve left it unanswered, and five placed a question mark for their reply. Three answered "not applicable."

The next question asked if any departmental personnel had attended the California Specialized Training Institute and in particular had attended any terrorism classes there. According to the returned questionnaires, twenty-three sheriff's departments had sent some of their personnel to the California Specialized Training Institute. Of those sheriff's departments responding that some of their personnel had attended the Institute, fifteen departments had people attend the terrorism course specifically.

Question number five asked the sheriffs if they had "any comments or recommendations to make concerning terrorist activity and/or the 'Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California?'" Although many respondents left this blank, those who did respond stated the following:
-I feel the State et al should develop a nuclear Blackmail exercise for use by local authorities in testing response capability.
-We will sure see the nuke terrorist in my view.
-We are a rural county and feel that we will not come in contact with this type of situation.
-I have received some valuable information from the FBI on this subject and would contact them in the event of such a threat. Most information or reports produced by the State isn't worth the effort spent reading it and can generally be found in the LA Times months before the State releases it.
-I intend to find out about the nuclear blackmail emergency plan. I and sheriff elect took office Jan. 8th and are not aware of many State plans.
-We just received a copy of the Emergency Response Plan and have not discussed it.
-Expect increased incidents resulting from coalitions of Mid East groups and Maoist groups resulting from U.S. Foreign Policy regarding Mid East and China.
-Not acquainted with the Emergency Response Plan for the State of California. Received course announcement from the California Specialized Training Institute regarding the terrorist course.
-I have attended 3 CSTI classes, none of which dealt with Nuclear Blackmail. I took office one month ago, but am quite certain none of my personnel have been to CSTI.

For a summary of the results of the questionnaire, see Table 4.

These responses to interviews and questionnaires were most enlightening. Through the local interviews conducted in the County of Ventura an understanding was gained of local preparedness, and possible response to a nuclear blackmail threat. The response to the questionnaires sent throughout the state indicate that the response of the Ventura County officials was not atypical of the state as a whole.
TABLE 4
RESULTS OF THE QUESTIONNAIRE

The questionnaire was sent to all 58 sheriff's departments in the State of California of which 39 replied.

1. Are you familiar with the "Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California"?
   - Yes 24
   - No 14
   - Unanswered 1

Have you read this plan?
   - Yes 18
   - No 19
   - Unanswered 2

2. Have you ever been contacted by anyone who explained to you the "Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California"?
   - Yes 10
   - No 28
   - Unanswered 1

3. If you are familiar with the plan, do you feel it is of value?
   - Yes 14
   - No 5
   - Unanswered 12
   - Question mark (?) 3
   - Undecided 2
   - Not applicable 3

4. Have any of your department personnel attended the California Specialized Training Institute?
   - Yes 23
   - No 15
   - Unanswered 1
CHAPTER VI

ANALYSIS AND RECOMMENDATIONS

Governmental officials have made a constructive effort to prepare for the eventuality when a nuclear blackmail threat is no longer a hoax. One must applaud the effort put forth on the national level to counter nuclear terrorism. This effort at the federal level must also be viewed in context, in that more expertise and monies are available to confront a nuclear problem at the national level than at the state and local levels. The creation of special military response units,'ready to move into a terrorist's backyard or to retake a nuclear power site once terrorists have captured it, is certainly a move of a concerned public administration. Attorney General Benjamin Civiletti and the Federal Bureau of Investigation have also confronted this subject with the enthusiasm it requires. Special Agents of the Federal Bureau of Investigation in the field are not only aware of the problems associated with nuclear blackmail but are also helping to inform other public agencies which might become involved in nuclear terrorism. The value of this intelligence disseminated to
other appropriate public agencies, not only on the federal but also state and local levels, cannot be overstated. This does not imply that the federal government is doing all that can be done to protect society from nuclear terrorism, but a good foundation has been laid.

The State of California has commendably added supporting structures to the federal effort to confront the issue. The establishment of a state-financed training facility, the California Specialized Training Institute, to inform public administrators about terrorism is a laudable move on the part of the state, if a democracy is to win the battle against terrorism. Only through studying the terrorists' past actions and psychology can public administrators start to deal effectively with the problems of terrorism and nuclear terrorism in the future. The actual development of a state-wide Nuclear Blackmail Contingency Plan for public administrators in California is excellent. The important questions concerning coordination and jurisdictional responsibility for example are herein answered before a nuclear blackmail crisis arises. The Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California is a most effective tool which will enable California's public administrators to present a professional approach to nuclear blackmail.
The information gathered from personal interviews and questionnaires indicates that there is the potential for confusion to occur on the local level during a nuclear threat. There seems to be a real failure to understand the problems associated with nuclear terror at this very important level of government. From personal interviews conducted in Ventura County, the impression was given that if a nuclear blackmail threat should ever occur, the state and federal governments would be the crucial factors in responding to and in resolving the crisis. Local governmental agencies would, it was implied, play a small role in the episode. It is true that help will arrive from the federal and state agencies, but many early pioneers had to rely exclusively on their own resources to protect themselves because of the time factor involved in waiting for the United States Cavalry. When one considers the possibility of having to evacuate a target area immediately and set in motion organizational structures to carry all the responding governmental agencies through the emergency, one begins to understand the need for local awareness of the problems. The urgency and need to rely on its own resources should not be taken lightly by the local government.

A good example of a possible waste of valuable time once a nuclear blackmail threat has been received in Ventura County is associated with the alerting process. Remember that five of the police departments interviewed in
Ventura County stated that they would, upon receiving a nuclear blackmail threat, notify the sheriff first. The sheriff stated he would request guidance from the Ventura County Emergency Services Information Specialist, and the Emergency Services Information Specialist was under the impression that he would inform the U.S. Department of Energy. All this shows that, at least in Ventura County, the local level is remiss in understanding jurisdictional lines of responsibility as set forth by the State of California.

Although on the state level, as indicated in the questionnaires returned by county sheriffs, there is some awareness of the directions provided by the state report on nuclear blackmail, there is also glaring unawareness. Over one-third of the responding sheriff's departments in the state were unfamiliar with the existence of the State Response Plan. This lack of preparedness is totally unwarranted in light of the potential for nuclear terror and California's past. The people of the State of California deserve better protection than they are receiving at present.

The conclusions reached are not intended to place blame on any one person or particular governmental agency. What is required is to bring the problems associated with responding to nuclear terrorism to the surface in the hope of correcting the current situation before a credible
nuclear blackmail threat causes confusion in the public agencies and possibly mass casualties in the general public. Recommendations to improve the current shortcomings are as follows:

* Seminars should be conducted which discuss the potential of nuclear blackmail and the importance of coordinated response. These seminars could be organized and financed by the Federal Bureau of Investigation or the Nuclear Regulatory Commission. Concerned public administrators around the county should be invited to attend.

* More effort should be made at the federal and state levels to ensure that local governmental agencies which would respond to a nuclear blackmail threat are knowledgeable of these responsibilities.

* In conjunction with the above recommendation, the State of California Office of Emergency Services should follow up the Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California with discussion of its value. These personal conversations could start with the sheriffs of California who have no knowledge of the Response Plan.

* The California Specialized Training Institute placed a copy of the Nuclear Blackmail or Nuclear Threat Emergency Response Plan for the State of California in the student mailboxes but never discussed the plan during the week long course on terrorism. The Institute provides an excellent forum for discussing the types of needed responses to nuclear terrorism, and they should discuss the State Plan.

* The value of all relevant intelligence must be given its full weight by those public administrators required to prevent nuclear terrorism and, very importantly, by the general public.

This paper has tried to deal with public administrators' responsibilities in responding to nuclear terror in a democracy. A proper response to nuclear terror is
going to require an understanding of the potential of nuclear terror and then preparation on the part of public officials. Public officials must not be complacent. They will be required to outperform professional terrorists when a nuclear blackmail threat is received. Their big challenge is to defeat terrorism within the established legal framework of constitutional guarantees. Nuclear terrorism, because of its potential for mass catastrophe, will stretch democratic administration to its limits. "You may have overreaction by the police because they are acting out of ignorance rather than being informed." 127

During the personal interviews of appropriate public administrators within Ventura County, a significant comment was made. The Ventura City Police Department watch commander interviewed stated that, if a nuclear blackmail threat is received and there has been no appreciation of the problem, "unpreparedness can cause overreaction." 128 This lack of preparedness leading to overreaction has been alluded to previously, but more should be said. If a lone terrorist or a group of terrorists presented what was


128 Statement by P. Rooney, lieutenant, Ventura City Police Department, personal interview, Ventura, California, April 24, 1979.
believed to be a credible nuclear threat, there might be a great tendency to overreact if the responding agencies are unprepared. This overreaction would be counterproductive both in apprehending the nuclear terrorists and in protecting the general public. Moving precipitately against a nuclear blackmail threat could, in fact, cause the terrorists to carry out their nuclear blackmail threat. Better official preparation might result in a more deliberate action, which is likely to prove more effective and more fully within the constraints of the existing law. A response to nuclear terrorism must be conducted by professionals.
BIBLIOGRAPHY

Books


Webster's New World Dictionary of the American Language. 2nd edition ed. Cleveland: William Collins and World, 1974

Government Publications


**Periodical Articles**


"Nuclear Accident." Newsweek, April 9, 1979, p. 24-33.


"Poisoned by Plutonium." Time, March 19, 1979, p. 35.


Other Sources


Burkholder, Robert B. Personal interview. Oxnard, California, April 20, 1979.
Freeman, J.M. Personal interview. Ventura, California, December 3, 1978.


Jenkins, Brian M. "Will Terrorists Go Nuclear?" Testimony given before the Committee on Energy and Diminishing Materials of the California State Assembly, November 19, 1975.

APPENDIX

The Encyclopedia Americana illustrates the principles for the design of nuclear explosives.

...It must be appreciated that the only difficult part of making a fission bomb of some sort is the preparation of a supply of fissionable material of adequate purity; the design of the bomb itself is relatively easy...

Fission Explosives--The vital part of fission explosives is the fissionable material itself. The two elements commonly used are uranium and plutonium. Each of these elements can exist as isotopes of several different atomic weights according to the number of neutrons included in corresponding nuclei, as in U-232, U-233, U-234, U-235... U-238, Pu-239, and Pu-240. Not all of the isotopes of these elements are suitable for use in a nuclear explosive. In particular, it is important to use a material with nuclei that are capable of undergoing fission by neutrons of all energies, and that release, on the average, more than one neutron upon fissioning. The materials which possess these properties and can be made available most easily in quantity are U-235 and Pu-239.

The immediate consequence of a nuclear fission is:

U-235 or Pu-239 + neutron + 2 fission products + 2 or more neutrons (average) + 2 gamma rays (average)

The total prompt energy release per fission is about 180 million electron volts. This means that the complete fissioning of 1 kilogram (2.2 lb) of U-235 or Pu-239 releases an energy equivalent to about 17,000 tons of chemical explosive.
Critical Mass--However, 1 kilogram of U-235 or Pu-239 metal, which is about the size of a golf ball, will not explode by itself. The reason for this is that, if one of the nuclei is made to fission the neutrons produced would usually leave the metal sphere without causing a second fission. If, however, the sphere contained about 16 kilograms (35.2 lb) of Pu-239 (delta phase) or fifty kilograms (110 lb) of U-235, the mass would be critical. That is to say, for each fission which occurs, one of the neutrons produced would on the average cause a further fission to occur. If more material were added, the number of neutrons in the assembly would multiply.

The mass of fissionable material needed to achieve a critical mass is also determined by the type and amount of material placed around it. This external material, called a tamper, serves to reflect back into the fissionable material some of the neutrons which would otherwise leave. For example, the presence of a tamper made of U-238 one inch thick around a sphere of plutonium reduces the mass required to produce criticality from 16 kilograms to 10 kilograms (22 lb).

To produce a nuclear explosion, one must bring together an assembly which is substantially above critical, or super-critical. For example, suppose that by some means a mass of material equal to two critical masses is assembled, and a neutron is injected which starts a chain reaction. Within two millionths of a second or less, the energy developed within the fissionable material will cause it to explode and release a nuclear yield equivalent to several hundred tons of high explosive. The actual yield depends on the particular characteristics of the masses and types of materials involved.

Initiation of the Explosion--Because a supercritical assembly naturally tends to explode, a major aspect of the design is related to the way in which the material is brought together. One can imagine, for example, a hollow cylinder inside of which two cylindrical slugs of fissionable material are pushed together by chemical propellant. While such an approach can be used to provide a nuclear explosion, considerable mass of fissionable material is required. Nuclear explosives involving considerably less fissionable material use a technique by which the nuclear material is compressed, or imploded.
A simple picture of this so-called implosion technique can be gained by imagining a sphere of fissionable material and tamper which is slightly below critical. Under these conditions, a neutron born in the central region of the fissionable material has almost an even chance of producing a fission before it leaves the metal. If the assembly is now compressed to twice the original density, the radius is then reduced to about $\frac{8}{10}$ of its initial value. A neutron leaving the central region under the compressed conditions must pass through atoms which are more closely spaced by a factor of two, although the total distance is reduced only 20 percent. Consequently, the chance of causing a fission is actually increased by approximately $2 \times 0.8$, or 1.6 times. The assembly is now obviously very supercritical, although only one critical mass was used.

The trick, of course, is to compress to several times normal density the mass of fissionable material and tamper. This requires pressures above 10 million pounds per square inch. Such pressures can be developed through the use of high explosive. The nuclear core could be placed in the center of a large sphere of high explosive. Compression of the fissionable material is attained by lighting the outer surface of the high explosive simultaneously at something like 100 points spaced roughly evenly over the surface. This procedure produces a roughly spherical, in-going detonation wave which, on striking the metal core, provides the necessary compression to lead to a nuclear explosion.