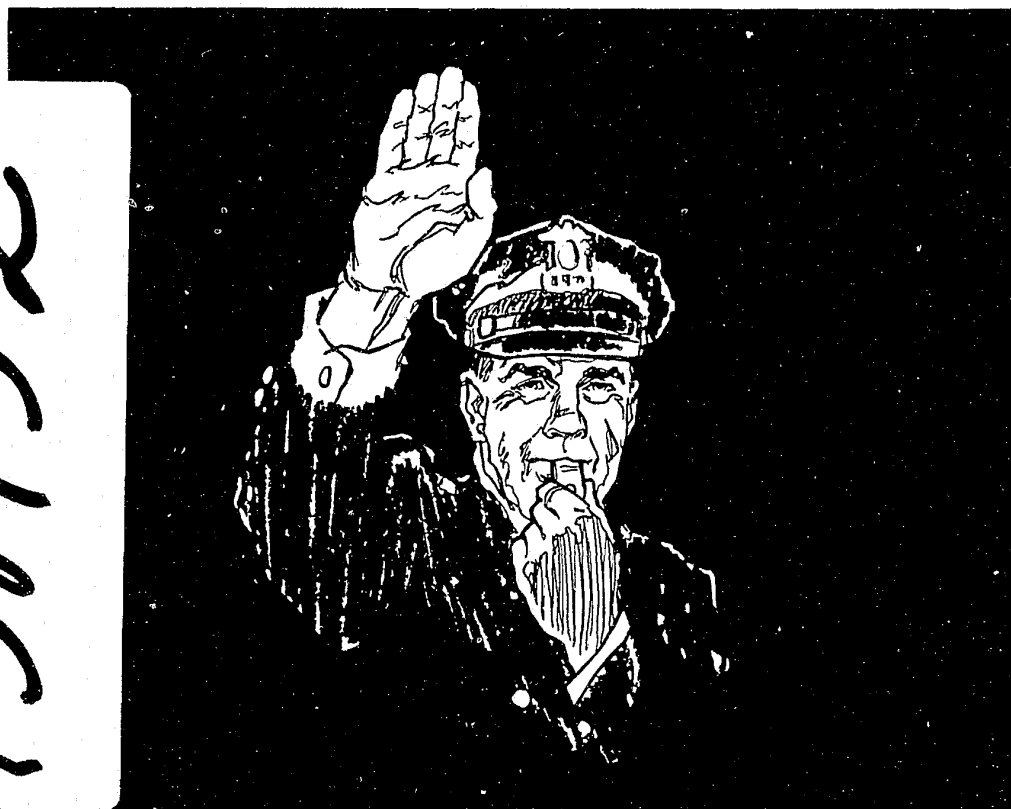




# LAW & ORDER TRAINING FOR CIVIL DEFENSE EMERGENCY

STUDENT MANUAL - Part A

138432



DEPARTMENT OF DEFENSE ■ DEFENSE CIVIL PREPAREDNESS AGENCY

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**LAW AND ORDER TRAINING  
FOR  
CIVIL DEFENSE EMERGENCY  
Student Manual (Part A)**

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**SM-10.1A LAW AND ORDER TRAINING  
FOR  
CIVIL DEFENSE EMERGENCY**

(Student Manual—Part A)

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## PREFACE

Generally, State, county, and municipal law enforcement agencies would have to carry out some new or additional functions during civil defense emergencies, and they would have to carry out familiar functions under highly unusual conditions. They should be prepared, for example, to ensure rapid, controlled movement of people from their places of work or residence to shelter. In addition, police and sheriffs' departments would remain responsible for protecting life and property, preserving order, preventing crime, and handling other emergencies which might arise within shelters, outside shelters prior to arrival of fallout, or outside shelters in the postshelter period. This would include safeguarding essential resources such as food, medical supplies, or fuel. Police agencies must thus be prepared for emergency police operations, oriented to the shelter-centered civil defense system.

Police requirements for civil defense emergencies may substantially exceed present regular police manpower. This situation would require auxiliary police to be trained to augment regular police forces. In support of this requirement, DCPA has developed this training course, "Law and Order Training for Civil Preparedness," which is available to State and local governments for use in training auxiliary personnel for law enforcement agencies.

Police training should be carried out by the police chief or sheriff, who are police professionals, not by the civil defense director. The role of the civil defense director is to assist the head of the law enforcement agency in preparing for civil defense emergencies by acquainting him with the magnitude of the movement-to-shelter problem and other police requirements, including the need for training of auxiliary police as indicated in local government civil defense program papers.

These materials are primarily designed for training auxiliary police. However, all police need orientation on CD problems. Regular policemen or sheriffs' deputies could profit from instruction on the matters covered in the lessons on "The Police and Civil Preparedness," "The Role of the Auxiliary Policemen," "Shelter Duties," and "Modern Weapons and Radioactive Fallout."

## INTRODUCTION

We live in an uneasy age. Strife abounds in many troubled corners of the world, and the weapons of modern warfare have become increasingly numerous and powerful. Nuclear warheads can be delivered accurately by potential aggressors on targets up to 10,000 miles away.

Despite continuing efforts to achieve and maintain peace, attack on the United States is always a possibility. Nuclear attack—the ultimate disaster—could affect much of the Nation within a short time.

In the face of this threat, a strong national disaster preparedness is deemed essential to the conduct of life saving operations in an attack emergency situation. The goal of protecting the population will consist of two key program elements:

- The continued development of plans for relocation of the population from high risk areas near key military installations and/or major metropolitan areas, including provision of fallout protection in areas where evacuees are to be temporarily relocated; and
- Protection of the population of high risk areas (essentially in place) in best available shelter against all the effects of nuclear attack in situations where warning time or other circumstances preclude relocation, and protection against nuclear fallout for the population in the remainder of the nation. Shelter facilities (in existing buildings) must be identified and plans prepared for their emergency use by the public.

The Armed Forces should be free to level their capability to deal with the military threat and not become irrevocably committed to the task of civil defense.

The police service, including regular officers and augmentation personnel, are an integral part of civil preparedness and therefore a vital part of the total defense effort.

The maintenance of law and order in a Civil Defense emergency *primarily* is the responsibility of Federal, State, and local governments—not of the military.

It is with this thought that this manual and related materials were prepared.

The foundation of any society is its laws and the ability of the society to enforce them properly. As long as its people can reside in a peaceful environment where their lives and property are protected by competent and impartial law enforcement officers, then that society enjoys that “domestic peace and tranquility” which was a prime object of the framers of our Constitution, and civilization has a chance to develop. However, when the legal structure is destroyed by either a manmade or natural disaster, then the very foundations of a society are imperiled. To avoid this possibility, the legal system and respect for law must be kept intact both during and after a disaster. Hopefully, this student manual and the students participating in this program will serve as vital aids in preserving the ideals and foundations of a free society.

This manual does have certain limitations which should be understood by the student. This manual does not purport to make professional policemen or civil defense specialists out of the students involved in this program. To accomplish this would take much more time than is allotted to this course. It does, however, give an overview of the police role in a CD emergency. Each lesson contained within this manual is designed to give the student a basic understanding of the material that will be covered by the instructor. The material contained in the lessons may be supplemented by referring to the publications cited in the bibliography contained within the manual as “optional” student references, and by taking the “part B” course for auxiliary police in CD emergencies.

The term "auxiliary police" is used in this manual to refer to personnel trained to augment and support the regular police during CD emergencies. However, it is not intended for use on a nationwide basis as an official title, since terminology varies; for example, many police agencies have designated such personnel as "reserve" or "special" police officers.

## THE NATIONAL CIVIL DEFENSE PROGRAM

The Soviet Union for many years has given a great deal of attention to civil defense, including not only the construction of shelters and the training of civilians, but also the preparation of plans for relocating the bulk of the population from its major cities in event of a crisis.

Thus, the Soviet leaders have the option to evacuate the cities or to shelter the population in place, depending upon their assessment of the situation at the time.

It is felt that the United States should have a similar option so as to be able to respond in kind in a time of a crisis by relocating the population from our cities and to reduce fatalities if an attack upon our cities seems imminent.

Repeated studies have shown that the relocation of the bulk of the population from our major metropolitan areas could save some 70 million lives in an all-out Soviet attack on the United States, over and above those saved by in place protection options.

The nationwide community fallout shelter system makes maximum use of existing structures in day-to-day use. This major effort results in low-cost protection. Over 200 million shelter spaces have been located in buildings of all types by means of shelter surveys.

Community shelter planning was required to assure realization of the maximum life-saving potential of the Nation's shelter resources. Community shelter planning includes an assessment of existing shelter resources, assignment of the population to shelters, plans for movement to shelter, and appropriate shelter organization with designation and training of shelter leaders and staff.

The intensity of fallout radiation decreases rapidly. Seven hours after detonation of a nuclear weapon, radiation intensity is reduced to about 10 percent of what it was at 1 hour after detonation. Depending upon the proximity of ground bursts, radiation levels in some areas could be so intense as to require 1 to 2 weeks shelter occupancy before it would be safe to leave and still limit exposure to safe levels. However, short trips

out of shelter to replenish, take radiation readings, etc., would be possible much earlier.

Currently receiving major planning emphasis are four areas of consideration by the Defense Civil Preparedness Agency, which is called the Nuclear Civil Protection (NCP) planning concept. The four planning areas are:

- (1) The designation of areas deemed to be at relatively high-risk from the direct effects of nuclear attack—i.e., those areas most likely to be subjected to the blast and thermal effects of nuclear weapons.
- (2) Conduct of an "all-effects" shelter survey designed to identify the best shelter protection available from radioactive fallout in all areas and from the direct effects of nuclear weapons in high-risk areas.
- (3) A reoriented community shelter planning program for high-risk areas which provides for consideration of direct nuclear effects as well as fallout.
- (4) Development of guidance for and feasibility testing of contingency planning for the relocation of populations from high-risk areas during a period of intense international crisis.

As you can see from the above, NCP planning will provide for two options: (1) Protection of the population essentially in place at or near their place of residence, and (2) Orderly relocation of people from areas of potentially high risk from the direct effects of nuclear weapons.

Relocation planning also involves the reception, care, and protection of the people in low-risk host areas if national authorities so direct. These functions will greatly overload the regular police forces and will require trained auxiliary police to help direct, protect, and regulate both the populace that is relocated, as well as those essential personnel who will remain at their present location.



Developing flexible response capabilities for use in nuclear attack requires that local jurisdictions throughout the United States be able to conduct emergency operations to support and assist their citizens.

This, in turn, generates as a highly desirable bonus, improved readiness to conduct coordinated local operations in peacetime emergencies or disasters.

## Warning

The concept in strategic planning is presently thought that there would be a gradual increase in international tension rather than a surprise missile attack. However, it must be noted that the flight time of a missile launched toward the United States is from 5 minutes up to 50 minutes dependent upon the point of origin and the delivery system utilized. In view of this, the need for effective warning is apparent.

This need has been met by creation of a nationwide warning network that can warn of attack to over 1,200 local warning points in less than two minutes from the primary National Warning Center at Cheyenne Mountain, Colorado.

This National Warning System (NAWAS) is a nationwide private-line telephone communication system which interconnects the DCPA Warning Centers, and Federal, State and local warning points. Many of these warning points are located in police installations. The State-to-local portion of the warning network makes use of State and local police networks.

Warning to the local population is primarily by means of outdoor warning devices such as sirens. The warning system was created primarily to warn of impending attack. The warning signals are:

1. ATTACK WARNING — wavering tone or short blasts, 3 to 5 minutes.
2. ATTENTION or ALERT — steady tone or blast, 3 to 5 minutes.

## Emergency Operations

The current planning for nuclear emergency planning has the following basic assumptions:

1. A period of crisis will most likely precede a nuclear conflict.
2. All zones are subject to fallout threat; many zones are subject to blast and fire threat as well.
3. Local agencies of government form the backbone cadre for emergency operating services; all services require expanded operating capability.

4. Emergency operations will include mutual aid but will not be dependent upon it; military assistance, if available, will complement rather than substitute for local civilian action.

During an emergency, any emergency, there are at least fifteen emergency functions to perform. (When the normal ways of coping with these problems no longer work, they become "emergency" functions.) These functions are:

1. Warning people.
2. Moving people.
3. Sheltering people.
4. Rescuing people.
5. Maintaining health.
6. Firefighting.
7. Maintaining law and order and supporting emergency operations.
8. Protecting livestock and other food supplies.
9. Medical care to minimize casualties.
10. Feeding displaced persons or others whose normal sources of supply are cut off.
11. Emergency shutdown of essential equipment to protect or move it.
12. Housing for those displaced by movement or attack effects.
13. Restoring facilities and removing debris.
14. Decontaminating to minimize damage, radiation, or other.
15. Welfare services—aid and counsel for persons in need of counsel, service, or etc.

Operational plans and the resources necessary to execute such plans must be ready before attack or emergency.

Protecting government Emergency Operating Centers (EOC's) are required to allow key local officials to direct emergency operations. This ability to communicate direction and instruction is needed at all levels of government. A capability must exist to communicate to the public both life-saving instruction and priority information. This assured means of communication must be made available for use by the President, other Federal officials, and State and local authorities. Communications are also required for sending and receiving reports of conditions, requests for assistance, and for coordinating emergency operations.

An effective system for detecting and monitoring radioactive fallout is essential. The presence of radioactivity could prevent or hamper emergency postattack operations; lessen the survivors' ability to work; and deny the use of some areas and facilities for weeks or possibly for months.

To conduct emergency operations, there must be a capability at local levels to monitor radiation levels and to inform those who must make decisions regarding the period of shelter occupancy, restoration of vital facilities, firefighting, law enforcement, and other public service operations. Knowledge of fallout conditions will also be necessary for decisions on possible relocation of people from areas of high radiation intensity to safer areas, and to organize rescue, first aid, and medical and welfare operations.

Survival of the remaining population during and after the in-shelter period may depend in large part upon the availability of certain critical community services, such as firefighting, health and welfare, debris clearance, and law and order.

The police services have a key role in implementing certain protective measures, support plans, and training. For example, such protective measures as planning and preparing for movement to shelters, maintaining order within shelters, planning for post-shelter support functions, and training laymen to augment the regular police forces in times of stress are logical preparedness actions necessary for maintaining law and order during a civil defense emergency. They must also be able to perform their duties in host areas in case of crisis relocation of the population of their home community.

To provide the student with a clear picture as to where the law and order function fits into the total civil effort, the following chart setting forth the major segments of the civil defense program is included:

## MAJOR SEGMENTS OF THE CIVIL DEFENSE PROGRAM

Objectives	Activities
a. Protect life .....	<ul style="list-style-type: none"> <li>National Fallout Shelter System</li> <li>Civil Defense Warning System</li> <li>Radiological Monitoring and Warning System</li> <li>Emergency Broadcasting System (EBS)</li> <li>Emergency Public Information</li> </ul>
b. Save lives and protect property .....	<ul style="list-style-type: none"> <li>Law and Order</li> <li>Firefighting and Control</li> <li>Rescue</li> <li>Medical Care</li> <li>Debris Clearance</li> <li>Decontamination</li> </ul>
c. Sustain survivors and repair essential utilities .....	<ul style="list-style-type: none"> <li>Food</li> <li>Water</li> <li>Health and Sanitation, including burial of the dead</li> <li>Housing</li> <li>Emergency Welfare</li> <li>Emergency Repair of Facilities and Utilities</li> </ul>
d. Achieve emergency operational capability .....	<ul style="list-style-type: none"> <li>Emergency Operating Centers</li> <li>Emergency Operations Plans</li> <li>Damage Assessment and Intelligence System</li> <li>Training and Education</li> <li>Tests and Exercises</li> </ul>
e. Provide support .....	<ul style="list-style-type: none"> <li>Communications</li> <li>Transportation</li> <li>Facilities Protection</li> <li>Public Information</li> <li>Federal Assistance</li> <li>Military Support</li> <li>Manage, distribute and use available resources</li> <li>Research and Development</li> </ul>

## THE POLICE AND CIVIL PREPAREDNESS

Under emergency conditions the police function is, if possible, even more vital to the welfare of a community than under normal conditions. Under emergency conditions the performance of representatives of law and order may be a crucial element in determining whether the community can function in an organized and effective manner. The quality of this performance will turn to a considerable degree on the effectiveness of police emergency plans and the training of police officers in the implementation of those plans.

### The Police in Disaster Emergencies

Disaster emergency conditions will mean that some normal police functions will still have to be carried out. However, it may have to be done in ways or under conditions which will pose unprecedented problems, require unusual selectivity, and dictate unorthodox approaches.

It may help the student to build up an appreciation of these matters if he will visualize with his mind's eye a disaster emergency situation. The disaster may be manmade, such as nuclear attack, or natural disaster, such as an earthquake or hurricane. He should then consider an enumeration of the traditional police responsibilities: Protection of life and property; prevention and detection of crime; preservation of public peace and order; regulation and control of traffic; apprehension of offenders; and regulation of certain kinds of non-criminal conduct (such as giving driver tests or issuing licensing and permits). As we run our mind's eye over these responsibilities we can make some judgments concerning changes which would happen to them under various emergency conditions. It may reasonably be concluded that some normal police activities will be suspended or drastically curtailed, such as issuance of parking tickets, regulatory activities such as those mentioned above, and even (under some conditions) apprehension of some offenders, prevention and detection of some crimes, and some activities to afford protection to life and property. For example, during a period of severe radiological contamination police will

take shelter, and therefore they cannot carry out their usual activities on the main thoroughfares, or in the commercial and financial center of the city.

On the other hand, under other emergency conditions (such as during the postattack emergence of the population from shelters or crisis relocation), some of the normal police functions listed in the preceding paragraph will have to be carried out with even greater emphasis than usual in order to preserve public peace and order to the extent possible. These functions may have to be carried out under conditions of economic and social dislocation, radiological contamination, and perhaps physical destruction.

Under still other emergency conditions, such as movement of large numbers of people to community shelters or from high risk areas, or providing police services in such shelters, the traditional police functions will undergo some change, or will have to be carried out in ways different from the normal. For example, protection of life and property, prevention of crime and preservation of public peace and order in a shelter or relocation area will involve the police in devising methods for collecting weapons, drugs, etc., from large numbers of persons; and improvising means of detaining or guarding prisoners in the absence of jail facilities.

In addition to the change in character and expansion of some normal functions, police departments will have to take on new functions in order to cope with emergencies. A good example of such a new function would be providing "backup" or alternate warning systems using police communication networks. Another example would be explosive ordnance reconnaissance (investigation of bombs and ammunition or objects suspected of being such). Still another example would be radiological monitoring; this function would usually take the form of "service monitoring"—that is monitoring for the information and protection of the police service itself; in some cases it might also include operation of some of the fixed radiological monitoring stations providing information used by all levels of government for the protection of the whole population.

## Police Organization

For the police auxiliary to function effectively he will need to understand both the normal organizational structure of his police department and also its organization for emergencies (in those departments where the pattern is altered for emergency situations).

The basic purpose of organization is to reduce the complexity of the direction, control, and coordination of the various members and components of the organization. Most administrators follow certain fairly well defined principles in the administration of any agency. These principles make the direction, coordination, and control of an agency much easier. A few are as follows: The administrator must establish a well-defined chain of command and provide techniques and develop systems for the efficient delegation of authority. He must also develop unity of command so that each person in the organization has a boss, but only one boss. The span of control must be reasonable; that is, a supervisor can effectively supervise only a limited number of people. These are some of the major principles which a progressive administrator will utilize in the organization of his agency.

Generally, most police departments are structured quite similarly, if allowances are made for variations in detail. A typical pattern is as follows: An operations division which includes the line units such as patrol; traffic and investigation (some times these are independent divisions); a service division which represents the auxiliary services within the agency such as maintenance and supply; and an administrative division which represents the staff functions within an agency such as personnel, finance, and community relations. In any given police department one may find minor differences in structure and organization, but by and large they follow this general pattern. In large departments one finds a refinement of structural organization and much greater specialization than in small departments.

As suggested above, in some departments it will be feasible to use the normal organizational pattern for emergency operations in other departments it will be desirable to make modifications in organizational structure to best meet emergency situations.

Your instructor will distribute copies of the organization chart of your police agency and discuss it in some detail to give you some idea of the structure of the organization of your local agency. It is good to remember that a command and supervisory structure needs to be fitted to the particular needs of the department and community.

## Role of the Military in a Defense Emergency

Civil defense planning at all levels of government—Federal, State, and local—has been carried out on the premise of civilian rather than military authority and control. Mayors, city managers, State governors, and Federal civilian authorities (or their designated successors in case the original incumbents are casualties) will be in control rather than the military. Vague statements about wholesale military “take-over” or martial law find no reflection in the civil defense plans of either civilian governments or military commands. Only in the case of actual combat operations on our soil would such drastic measures be considered.

Many civil defense plans are written in terms of possible (not certain) military support, but this is a rather different thing from military “take-over” or martial law.

## The Police Emergency Operation Plan

As forces traditionally involved in emergencies of various kinds, many police forces have well-developed plans covering various kinds of emergencies; even smaller forces have experience and standing procedures which give them a posture of readiness to react to an emergency. A disaster emergency, however, will pose problems for which normal experience and operational emergencies provide little if any guidance. If a police force is to cope with a disaster it must have special training and a plan, or plans, adequate for the occasion.

This leads to the question: What do we mean by a “plan”? People who have had military experience will visualize immediately what is meant; they will visualize the document that a military commander has prepared to help him guide and control a tactical or strategic operation; a disaster emergency plan is the civilian counterpart of such a document.

Various definitions or descriptions of a “plan” might be given. One dictionary definition for the word as we use it here is: “a detailed program of action.” Other definitions that have been used to apply to civil preparedness and similar plans are: “the decisions you can make in advance concerning who does what, where, when, and how.” Implicit in these phrases is the idea of automatic response—that is, “the situation gives the order,” because the plan specifies what an individual or unit is to do in such a situation. Because such plans are conceived to help commanders and administrators control complex operations by “decisions made in advance,” such plans are frequently called “operation plans,” or “operational plans.” Because such plans are

frequently written to cover more than one possibility or contingency, sometimes they are referred to as "contingency plans." So when we refer to "plans" in this chapter it is with the hope that the reader will be able to visualize documents, sometimes simple and sometimes quite detailed, which in broad outline determine in advance what the responses of individuals and units are to be under assumed situations, although not in complete detail, of course; wise planning recognizes that in emergency situations a high premium is placed on the judgment of the unit leader and individual team member. What the plan does is to make it possible for this to be done well by settling questions which can be settled in advance, such as specifying where units are to assemble and where their headquarters shall be.

A typical operation plan for a local government usually takes the form of an "overall" plan and a number of annexes, one of which pertains to the police. The police auxiliary will not only need to familiarize himself thoroughly with the essential elements of the police annex, but also those features of the "overall" plan which will condition his performance of police duties or are important for him to know from the standpoint of protection of himself and his family. The auxiliary officer who limits himself to knowledge of only his own role in a disaster plan is without foresight. Disasters interrupt communication systems, disable or eliminate designated supervisors or leaders, and destroy written orders and plans which contain directions. The

auxiliary must know what is expected of him and his police agency *before* disaster strikes.

The following are typical features of the overall plan to which the auxiliary policeman should pay attention: (1) Assumptions (concerning such matters as types of disaster effects which he might encounter); (2) mission (that is, the goal sought to be accomplished); (3) basic concepts of operations; (4) organization for emergencies; (5) actions to be taken by the general public and civil defense services under various conditions defined by kinds of warning, shelter occupancy, weapons effects, crisis relocations, and natural disasters; (6) communication channels and doctrine.

Typical elements of the police annex which the police auxiliary will need to know about include the following: Statement of mission; composition of the police force for emergency operations; organizational arrangements (particularly headquarters, districts or precincts, etc.); basic concept of emergency operations; actions to be taken or considered under various conditions of warning, shelter occupancy, crisis relocation, weapons effects, and natural disasters; supply and transportation; communication channels and doctrine; and coordination with other emergency services.

Police emergency plans defining the police role during disasters should be flexible and will be changed to incorporate new guidance and advice developed through continuing study by the Defense Civil Preparedness Agency (DCPA).

## THE ROLE OF THE AUXILIARY POLICEMAN

When someone disturbs the peaceful existence of another person, or our daily activities are interrupted by larger disturbances, conflicts are bound to develop. Under circumstances such as these, police departments are called upon to control the behavior of people. The control is in the form of enforcement of order to create patterns of conduct which are necessary for a peaceful and healthy community. A disaster emergency will generate needs for police services which are unusual both in degree and kind.

### Need for Auxiliary Police

Disasters require augmentation of regular police forces. Assistance to the regular staff or local police agencies during such emergencies should come from trained auxiliary police units.

For example, during a defense emergency large numbers of people must be assisted to shelters or relocated away from high risk areas in a very short period of time. This calls for control of traffic, both automobile and pedestrian, which can only be accomplished by having adequate numbers of trained police personnel, both regular and auxiliary, ready to meet this problem. All police personnel play a key role by continuation under emergency conditions of their responsibilities for protection of life and property, preservation of order, prevention of crime as well as handling incidents peculiar to the disaster. If the disaster is a type of which there is warning, the main function of the police will be traffic control and preservation of order during the movement of the community to shelter or relocation areas. During the disaster, depending on its type, the police will engage in life saving activities, preserve order, enforce regulations, and prepare to carry out the plans made for returning people to their normal pursuits.

Assuming the disaster has caused great damage and disruption, the police will still be responsible for their traditional missions, but with added vigilance being required to prevent hysteria, looting, vandalism, sabotage, rioting, or subversive activities. Periods of confu-

sion and chaos create added opportunities for the criminally' disposed and lead the undisciplined and selfish to acts against the public good.

These considerations suggest that police manpower requirements during disasters will be very great. Trained police auxiliary units in support of regular police may well spell the difference between chaos and a semblance of community order.

### Organization and Command

Now that the role of the auxiliary police has been sketched, let us look at the organization of a regular force and its auxiliary units to learn more about their relationships. The manner of organization of the auxiliary unit is determined by its use as a reserve, support or special aid to the regular force. The auxiliary police are organized within and under the regular police department.

Sound police administration will provide for good discipline, high morale, confidence, and understanding of the knowledge required in the application of police duties on the part of auxiliaries, just as in the case of the regular force. These goals can be reached only by organization and training.

Figure 1 is an organization chart suggesting relationships between regular and auxiliary police service.

Variations in organization will be found among police departments throughout the United States. Differences in organizational structure depend upon such factors as population and the numerical strength of a police agency.

Therefore, it is suggested that the student examine organization charts found in the local police agency to provide further understanding of the relationships between regular and auxiliary units in his community.

In time of emergency, the head of the local police force is normally in command of all police personnel and equipment. When the auxiliary officer is called upon to perform the duties of a police officer, he usually comes under the command of a regular officer. The reasons for this are the need for unity of command, as discussed in

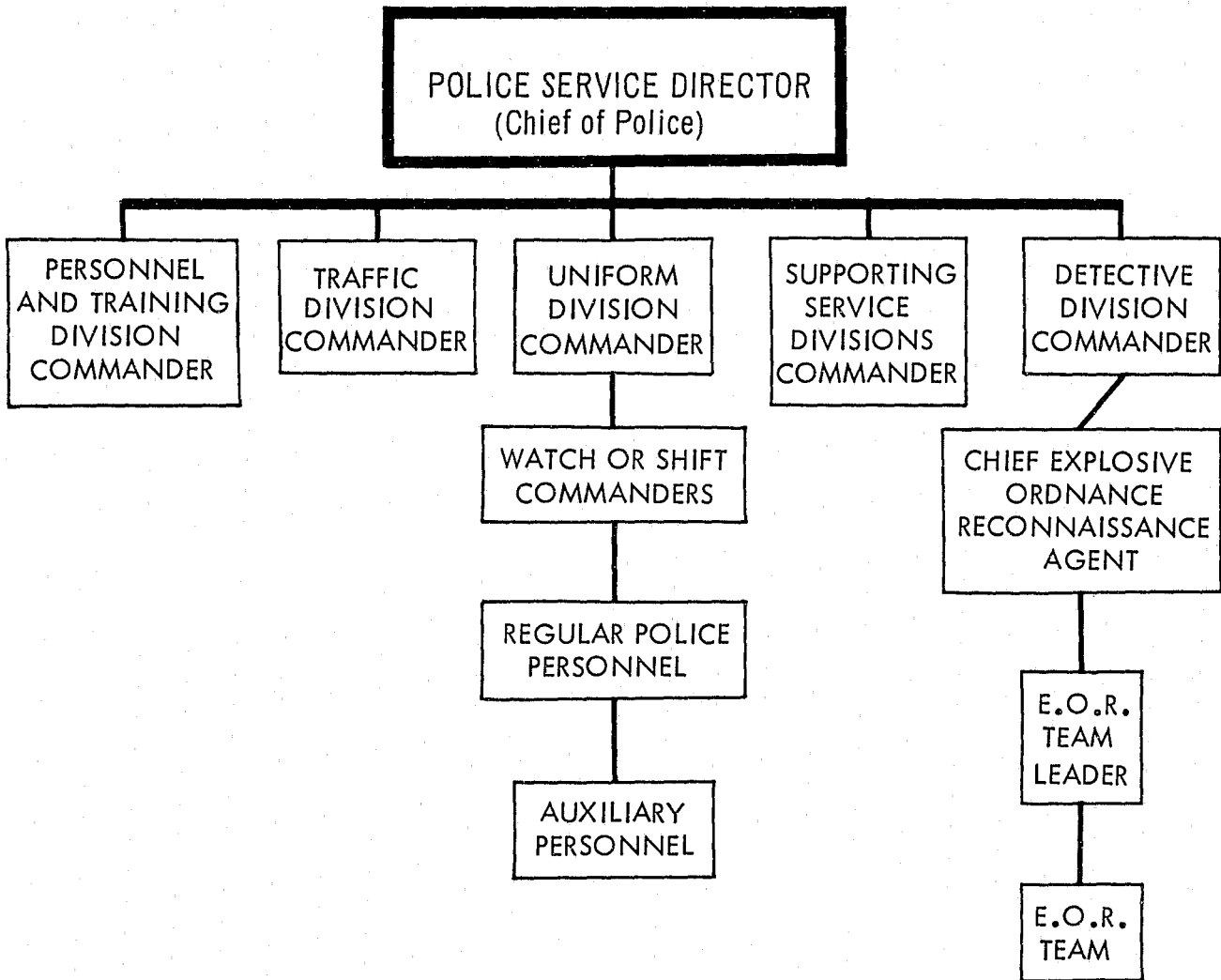


FIGURE 1.—Example—Police Department Organization Chart.

the preceding chapter, and the obvious desirability of providing the auxiliary police officer with an experienced supervisor.

### **Auxiliary Police Authority**

The above comments bring us to the question of the authority vested in auxiliary police officers. Various laws, ordinances and local police department regulations will define the scope of authority for auxiliary police. It should be understood from the outset by all auxiliary officers that they cannot exercise the powers of a peace officer until they are given those powers by appropriate authority, and then only within whatever limitations are imposed. Local departmental rules and regulations will delineate policies on various matters pertaining to auxiliaries, such as power of arrest, carrying of weapons, handling of prisoners, and other matters of concern to the auxiliary police officer.

### **Assignments**

Law enforcement administrators have the responsibility of assuring that operations of auxiliary police are consistent with the overall Civil Preparedness Program (or whatever other plan is being implemented) in the jurisdiction concerned. The police emergency plan of action usually will provide for the following kinds of assignments for police personnel:

1. Traffic control (vehicular and pedestrian).
2. Handling crowds, both orderly and disorderly.
3. Protection of property and prevention of looting (including protection of essential facilities).
4. Shelter or relocation area duties.
  - a. Maintain law and order (protection of life and property, and prevention of crime).
  - b. Provide for detention of prisoners.
  - c. Support and assist shelter or relocation area managers by:
    - (1) Preventing unauthorized entry or exit
    - (2) Protecting supplies, equipment, and personal property.
    - (3) Controlling rumors and providing information to reduce hysteria.
    - (4) Communicating to superiors requirements and concerns of the people.

- (5) Enforcing rules and regulations which pre-existed or have become necessary because of the particular conditions prevailing.
- (6) Make preparations to carry out the plans for returning the people to their normal pursuits.

d. Train members of the community to assist in carrying out law enforcement duties.

5. Service monitoring—i.e., radiological monitoring for purposes of the police service (if the plans of the local jurisdiction provide for such assignments to auxiliaries and if the necessary training is provided).

Traffic control is very important in emergency situations. It will be especially important during the movement to shelter or relocation areas when it must provide for the orderly movement of the civilian population from areas of danger, and during the time when people are moving to safer areas or returning to their homes. In times of disaster there will be demands on motor vehicle transportation for emergency work. The emergency flow of traffic over the road net may be different from a normal pattern with the usual controls.

Crowds will be moving and potential trouble can be expected unless the crowds are properly handled. Certain basic principles are used to govern the movements and actions of individuals and large groups to prevent a crowd from becoming a mob. If a mob should form, disorder will prevail. In such an eventuality riot-control techniques must be employed by the police. (This will be discussed further in another lesson.)

Even after people have moved to safety police responsibilities will not end. Problems are bound to arise under close and crowded conditions. Procedures will be established to prevent infractions of rules and to minimize problems of communal living.

Properties will become vacant and unattended during the confusion of movement to safer areas. The police protection plan should specify the conditions under which the policeman performs his duties up to the point at which he must withdraw and then resumes them after the disaster subsides, unless directed otherwise by his superiors. Protection of property and prevention of looting will be an important part of police operations.



## POLICE-COMMUNITY RELATIONS

A few years ago the terminology used in describing the communication effort or system operating between the police and the community was "Police Public Relations," but today the appropriate words are "Police-Community Relations" (PCR). The single word change indicates an extremely different viewpoint as to what the appropriate communications should be between the police and the public they serve. In fact, even the hyphen between the words "police" and "community" is heavy with meaning.

PCR is a crime fighting, law enforcement concept in which the police and their community members, the citizens of the areas in which the police agency operates, involve themselves in communicating their objectives and problems to each other. Each group benefits from the wholesome exchange of viewpoints, and the objective toward which both move is a cooperative effort in which the police provide enforcement for and to the community according to professional and public requirements and the public assists in this effort. It is a human relations effort by both parties.

PCR is based on the human relations concept. Human relations is the whole area of study and practice aimed at establishing cooperative rather than antagonistic relationships between persons or groups. Human relations is based on effective communication so that with full and accurate knowledge of the situations all parties face, and based on realistic and rational methods of operation, all parties involved will benefit through an exchange relationship rather than one which is exploitive or superior-subordinate.

PCR involves the police department as an organization and its relationships with various segments of the community, and each member of the department and his relationships are developed through his individual contacts as a peace officer. The image conveyed by the individual officer conveys an image of the department as a whole; the image of the police agency becomes part of that which is seen by persons who individually contact each officer.

There have been at least three important changes in the relationships between the police and the community in recent years. The first is that police contacts are no longer nearly exclusively with professional criminals. The advent of the motor car and its development into the agency by which most people transport themselves has caused the police to come into contact with persons from all walks of life. This increased contact has given the police increased realization that the need for support from the law abiding citizens of the community is imperative, which backing is soon lost when contacts by unprofessional officers are too frequent.

The second change is that to service oriented police operations which are demanded by the community and provided by the police. In some areas the police agency has become the governmental unit through which many and varied requests for services from government and private groups are channelized for reference to the appropriate organization which will provide the desired assistance.

The change is that of the role of the professional police as arbitrators of competing demands by special interest groups or individuals in the society. The job of the police remains repressive in many instances, but this must be performed in a society which is basically permissive and expressive—freedom of dissent is an extremely important right in a democratic society such as ours. It must be protected, and the police are often the only agency which is immediately available to offer such a service.

PCR aims toward community involvement with the police in their efforts to provide effective law enforcement. Although it would be more pleasant if more persons within the society were to like the police, and this can be accomplished to a certain extent by an effective PCR program, the more important objective of a PCR program is to convince the various individuals and groups in the society to work with the police. It may be necessary to obtain compliance by force and repression in some instances, but it is much to be preferred to win

the willing compliance of persons and groups and their assistance in repression of unlawful behavior.

Democracy can function only when the rule of law is deemed by the majority to be the appropriate procedure to follow in obtaining protection and domestic tranquility. Democracy cannot function where anarchy and violence prevail to the point at which the system of designated, governmental, community controls become ineffective.

Officers must not neglect the fact that PCR programs involve the willingness and necessity to change on the part of the police in answer to beliefs held in the community. PCR is not a one-way street as was the public relations system. PCR programs and their objectives include at least the following:

Information exchange forums, meetings, and programs by which the police and various community groups and their representatives (some of whom will display very antagonistic feelings toward the police and the lawfully constituted government) communicate their objectives and beliefs.

Communications systems through which the police and minority groups involve themselves with mutual solutions to problems facing each other.

Programs designed to: inform the public of crime problems facing the police; provide information to the community which will enable them to protect themselves from being victims of criminals; and promote the inflow of information to the police which will enable them to more effectively repress criminal activity.

Enlightening sessions designed to educate individual officers so that they will become aware of the fact (and believe in the efficacy of the basic construction of our social system) that he as an officer is working for the community and should not act as a free agent in interpreting laws or forcing citizens to

conform to rules of conduct which have not been formalized by officially recognized governmental action.

### Personal Conduct

The individual actions taken or motivations and beliefs shown by an officer during his contacts with the public reflect upon the competence of the whole police department. Word of unprofessional conduct by individual officers spreads quickly like the waves of the sea and affect the responses of nearly unbelievable numbers of others in short order. These suggestions should be carefully considered and followed by all officers:

The professional officer is courteous, sincere, and friendly even when those whom he is contacting are abrasive, demanding or insincere.

The professional officer is able to be at ease with all types of persons and communicate and interact with them with consideration, tact and poise.

The professional officer shows respect to not only his superiors but also to his coworkers and subordinates.

The professional officer's person, uniform and equipment are always clean, presentable and/or in good condition and repair.

The professional officer is always willing to provide any reasonable service to those in need.

The professional officer's conduct is exemplary whether he is on duty or not.

Our law enforcement system is based on the premise that every peace officer is also a citizen—a member of the community who is serving the community needs rather than operating to attain his own personal objectives exclusively. The role is a sacred one and must be upheld by each and every member of the police profession.

## POLICIES, PROCEDURES, AND REGULATIONS

Good, effective management techniques applied to any organization require that each person within the organization knows what is expected of him and what to expect of others as they carry out their functions and bring the group effort to life. Professional management is important to police departments, too. All officers and employees should be well informed as to what they are to do, how they are to do it, and the goals to be attained by both their own unit and the department as a whole.

Every person in the organization should know exactly the person who is his superior as well as those who are his subordinates. One of the most famous writers in professional police literature, O.W. Wilson, states:

Channels should be established through which information flows up and down and through which authority is delegated. These lines of control permit the delegation of authority, the placing of responsibility, the supervision of work, and the coordination of effort. Lines of control should be clearly defined and well understood by all members so that each may know to whom he is responsible and who, in turn, is responsible to him.<sup>1</sup>

Another nationally recognized expert, Gordon H. Sheehe, has written:

Sound and adequate enforcement policies are essential to gaining enforcement objectives and will guide police officers in putting into effect the kind of enforcement program envisioned by the administration. Clear statements of policy will help to resolve doubts in determining administrative intent.<sup>2</sup>

Policy development is essential to the success of any organization, and policies should be in writing so that they can be used as the basis on which the departmental operations are constructed.

Policy indicates the general course of direction of an organization, within which the activities of the personnel and units must operate. This establishment of *general*

administrative guidelines relates to and complements the main objectives of the organization. For example, the policy concerning the issuance of citations in traffic accident cases might take the following form: "Violations of driving regulations cause traffic accidents, and accidents may be reduced to effective traffic law enforcement. Violators should be issued citations when evidence exists to justify such action." The intent of this policy statement is to inform officers that the policy of the department is to enforce laws. Obviously, this policy is not concerned with the procedures to be followed in preparing each citation, nor does it establish any precise rules. Procedures and rules and regulations must not only follow policy, but must originate from policy.

Established policy, although allowing individual supervisors to think for themselves, limits possible mistakes within manageable bounds. Independent thinking should be encouraged because it develops administrative abilities. Potential executives can be developed only by permitting discretion and initiative on the part of the supervisors. Carefully delineated policy statements allow this latitude.

The term *Policy* is not synonymous with *Procedure*, nor do either of these terms have the same meaning as *Rules* and *Regulations*. The following definitions are offered to clarify and insure uniformity of terminology:

### Policy

Policy consists of principles and values which guide the performance of a department in a particular situation. It is a statement of guiding principles which should be followed in activities which are directed toward the attainment of department objectives. Policy is formulated by analyzing objectives and determining through research those principles which will best guide the department in achieving its objectives. Policy is based upon police ethics and experience, the desires of the community and the mandate of the law.

Policy is articulated to inform the public and department employees of the principles which will be adhered to in the performance of the law enforcement function.

<sup>1</sup>Wilson, O.W., and Roy C. McLaren, *Police Administration*, 3rd Ed., McGraw-Hill Book Company, New York, 1972, p. 60.

<sup>2</sup>Sheehe, Gordon H., on *Police Traffic Supervision*, *Municipal Police Administration*, International City Management Association, Washington, D.C. 6th Ed., 1969, p. 113.

Additionally, policy establishes operational standards to assist department employees in the necessary exercise of discretion in discharging their responsibility.

An officer in the performance of his duty is confronted with an infinite variety of complex situations which require police action. Since policy is objective rather than situation oriented, it is broad enough in scope to encompass most situations. Policy, therefore, must be stated in general terms.

#### Procedure

A procedure is a method of performing an operation or a manner of proceeding on a course of action. It differs from policy in that it directs action in a particular situation to perform a specific task within the guidelines of policy. Both policies and procedures are objective oriented; however, policy establishes limits of action while procedure directs response within those limits.

#### Rule or Regulation

A rule or regulation is a specific prohibition or requirement which is stated to prevent deviations from policy or procedure. Rules and regulations allow little deviation other than for stated exceptions.

Many departments have been studied by police management consultants, and the results of these surveys are, with few exceptions, predictable. The larger the agency the better their policies and procedures (and the greater the change that they are all in writing and periodically reviewed and changed to fit present circumstances.

Policy and procedure formulation require planning and research. The larger agencies can afford such activities but the smaller ones cannot. The larger the organization is the greater the likelihood that there is a formalized planning and research unit with permanent staff personnel. Of the nearly 40,000 police departments in the United States, 98.9% have less than 100 personnel, and 82.2% have less than five.

There should be written directives applicable to auxiliary officers. At the very minimum these should cover such matters as eligibility for membership, application procedures, use of equipment and the wearing of the uniform, agency organization, disciplinary procedures, powers of arrest, use of force (including carrying of weapons both on and off duty), pursuit driving restrictions, and procedures for separation from the force.

Sworn officers are administered oaths before entering upon their duties. The intention is to impress upon officers that their conduct must be exemplary. Oaths of

office for the police and codes of ethics are usually brief, but their every word is of the greatest import.\*

The departmental oath for auxiliary police may be included in the application for membership in the auxiliary police. The following oath is typical:

I hereby acknowledge my complete understanding that the stand-by law enforcement assignment for which I am volunteering carries with it the requirement that I will, without question, obey and execute to the best of my ability the legal orders of those designated to supervise and command my activities; that I am to complete all assigned training courses; and that my violation or disregard of the Rules and Regulations of my organization will be cause for disciplinary action or dismissal. Furthermore, I understand that any false statements intentionally made in my application disqualifies me for membership in the \_\_\_\_\_ Police Auxiliary.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_ 19\_\_\_\_

The community expects better and more moral behavior from the police than they do of both other governmental employees and members of the private sector. These expectations apply both on and off duty, and all officers are subjected to close scrutiny in all their statements and actions. The community demands that those who enforce group standards rigidly abide by them.

Following are basic principles guiding conduct applicable to the police:

#### Courtesy

Policemen are expected to be courteous at all times—no matter how great the provocation, even if such would cause others to lose their tempers. This is not to say that they are to be servile. Although it is true that they are servants of the public need, they are not servants of individual members of the community as officers act within their sphere of authority. It is not difficult to be courteous when one learns to be an *objective* enforcer of the law, and this means that personal prejudices and animosities are to be repressed. Officers should be particularly attentive to persons who seek information or assistance and in each case try to put themselves in the "others' shoes"—no officer should act toward persons in any manner other than what he

\*See appendix for code of ethics.

would reasonably expect from them under similar circumstances. It must be constantly borne in mind by policemen that many persons whom they will meet professionally will be under great stress and may act in ways that they will later regret. But the officer who acts unprofessionally will be remembered negatively. The person who provoked the officer will then blame the officer for all that transpired, and the law breaker will then have a "patsy" on which to blame his own faults.

#### **Punctuality**

Policemen should be punctual in their engagements and expeditious in the performance of their duties. Again, the community expects more from them than from others.

#### **Professional Objectivity**

The professional officer is just, impartial and reasonable in his enforcement of the laws he is sworn to uphold. Objective law enforcement never includes overstepping the limits of legal authority and power, and the officer's action or inaction will never be for personal gain or in vengeance.

#### **Protection of Public Funds**

Officers are custodians of the public property entrusted to their care and shall not misuse their equipment or otherwise be wasteful of public funds.

#### **Cooperation**

Law Enforcement is a cooperative effort among the community and other governmental agencies. Full cooperation by policemen should be offered to both private and public groups so that the safety and welfare of the community will be assured.

#### **Communication**

The professional officer actively disseminates practical and useful information to others regarding matters of the public safety and welfare. He does not passively wait for others to come to him.

#### **Exemplary Conduct**

The professional officer's conduct, both public and private, is such that the public regards him as an example of fidelity, stability and morality.

#### **Governmental Allegiance**

Officers should be faithful in the allegiance to our government, loyal to the ethics of their profession, and accept as a sacred obligation their responsibility as citizens to support the Constitutions of the Nation and their State and to defend our principles of liberty.

Departmental rules, violation of which subjects the member to disciplinary action, often include the following:

#### **Respect, Language**

Active lack of respect, manifested by abusive language or non-verbal communication directed toward other personnel or members of the public, is prohibited.

#### **Disobedience**

The violation of or deliberate delay in the prompt completion of activities directed to be performed by the lawful orders of any superior officer is prohibited.

#### **Confidentiality**

Divulgence of any information concerning the plans, actions, internal activities or case materials of the police department without authority is prohibited.

#### **Intoxication**

The use at any time of any intoxicating drug or material proscribed by law is prohibited, and reporting for duty while under the influence of the consumption of any intoxicant while on duty is prohibited, although the ingestion of intoxicants necessarily required by the nature of the assigned (usually undercover) duties being performed by the officer may be permitted.

#### **Misconduct**

Any breach of the peace, neglect of duty, or misconduct either within or without the jurisdiction which tends to subvert the good order, efficiency, or discipline of the department or the auxiliary force or which reflects discredit upon the department is prohibited.

#### **Misuse of Position**

Affiliation with any group which professes to represent the police department or other agency of the criminal justice system while purporting to act as a representative of the police agency, and utilizing or making reference to one's affiliation with the department to sway others for political purposes is prohibited without lawful permission of superiors of the department for professional purpose.

#### **Wearing of Uniform and Use of Equipment**

The auxiliary police will wear only prescribed or issued uniform items, utilize only prescribed or issued equipment or weapons, and maintain these items; and

any officer failing to meet these requirements shall be subject to disciplinary action.

**Off-Duty Weapons**

Off-duty auxiliary officers shall neither carry nor utilize any weapon in contravention to the laws applicable to citizens not falling within the statutory exemptions concerning the possession or use of weapons. (Or,

for those agencies which permit by regulation the carrying of off-duty weapons). Off-duty auxiliary officers may carry any weapon permitted by law upon prior approval by and registration with the department.

Any action by an auxiliary police officer that is illegal or contrary to departmental rules and regulations subjects that officer to disciplinary action, including separation from the force.

## BASIC CONCEPTS OF LAW AND ARREST

Man has been puzzling over the appropriateness of community controls throughout his recorded history—and undoubtedly before that. What he has been trying to decide are the answers to: “Who is/are going to run the show.” “Under what restrictions must authority operate?” and “What acts by community members shall be required or prohibited?” Basic to an understanding of the complexity of answers to these questions is an awareness of the variety of systems and laws under which various societies have lived and are living. At some time some community has lived under laws directly opposite to those under which we now control ourselves, and their requirements were “right” for that time and place. In fact, we can bring to mind examples of changes which have occurred in our own United States of America during its existence—even within our own lifetime. The requirements placed upon the members of any community by its government consist of laws which filter out by prevailing over others in the market place of ideas and which are manifested by their issuance through formal governmental organizations.

Every police officer should be aware of the fact that there is no law which has not been enacted in response to and for the purpose of correcting a problem which has become significant by the degree to which some members of the community have acted in opposition to the common belief. In short, where there is no meaningful opposition to the feelings of the majority there is no law in support of those beliefs. For example, cannibalism is not prohibited in the United States because opposition to it is so pervasive that it is reasonable to say that only the mentally ill have engaged in that gruesome activity.

Individuals and communities require guidelines defining acceptable conduct and reciprocal duties and responsibilities in order to attain feelings of tranquility, a sense of well being, and a belief that conformance to group requirements will result in the society's respect for and supply of individual needs in response. “Basic to any society, primitive or modern, is the necessity for compliance with authority, the necessity for disciplined

behavior, and the necessity for community tranquility.”<sup>1</sup> Each individual must relinquish his right to act entirely for his own self-interest in return for the agreement of others not to deprive him unduly of his right to personal freedom or to impinge upon his reciprocal rights under the law. Every requirement of law acts to some degree to reduce individual freedom of action, but reasonable restrictions on absolute freedom are essential to community living and to protect individuals against others. As the danger to any community belief increases so will the group response grow in severity to reduce that threat, especially when the common belief is basic and widely accepted without reservation.

Police officers are faced with daily frustration caused by their inability to understand clearly that the freedom-loving citizens of our Nation have learned from past experiences (some of which initiated our Nation's birth) that absolute authority demands rigid compliance with even the smallest and relatively unimportant requirement and results in stultifying repression of personal freedom. The ultimately efficient government can only be one in which power is so centralized that it is dictatorial and undemocratic. Therefore, laws have developed which restrict the police to that level of efficiency which is acceptable to the citizens and which permits the greatest possible individual freedom. Again, there is no law where there is no problem. Therefore, there should be little serious doubt that one of the highest duties of a police officer is to know and follow the law because it has been developed in answer to previously existing actions which were conducted in opposition to the beliefs of the people. Officials who are responsible for law enforcement must personify lawfulness as they interact with offenders. A peace officer is endowed with awesome power over life and property, and he must not only restrict his actions to those within

<sup>1</sup> Albert C. Germann, Frank D. Day, and Robert R.J. Gallati, *Introduction to Law Enforcement* (Springfield, Ill.: C.C. Thomas), 1962.

the law but also restrain himself personally to be considered a thoughtful, objective, police professional.

It is important that every police officer understands the basics of the checks and balances system under which we govern ourselves. Our forefathers so constructed our governmental system that none of the three branches of our government, the legislative, the executive, and the judicial, could become so strong that it would be able to dominate the people completely. The basic objective of this system is to prevent one or a few people from absolute control and overwhelming power. In its operation, the checks and balances system prevents domination by providing stumbling blocks in the paths of requirements which do not meet with the approval of the great majority of the citizens. Without considerable support, legislatures will not pass laws, the executive branch will not actively enforce them, and the courts will overturn them. However, those requirements which are backed by the great majority of the people are enacted by legislatures, enforced with great universality and vigor by the executive branch, and upheld by the courts.

The individual professional police officer understands the checks and balances system and acts within the law because of this knowledge. At the operational level, even though a patrol officer is aware of a problem he does not attempt to "enforce the law" when the legislature has not passed a statute dealing with it. He neither strains to fit the facts of an incident into another statute nor makes an arrest for an unrelated offense in order to harrass the "law breaker." At the executive level, the professional police administrator or agency head allocates the resources of his department according to priorities so that enforcement of important offenses is emphasized. The accompanying spinoff is naturally the deemphasis of enforcement against those offenses which are determined to be of lesser importance. The term which applies to this assignment of priorities is *selective enforcement*.

## Professional Demeanor

The appropriateness of the reasons for and the manner by which members of a community are deprived of their liberty is one of the most difficult problems to be solved by members of a society and its lawmakers. An arrest or detention is a matter of preventing the free movement of a person. In most cases what is more important to the person subject to this deprivation of liberty is the manner in which an arrest or detention is effected. There is a great difference between simply following the directions of another without the free will

to do any other thing one might wish to do and that loss *plus* being searched, handcuffed, placed in obvious incarceration, and even being stripped of all clothing and dignity for the purpose of maximizing security. In fact, most people will understand the necessity of appropriate loss of liberty, but what makes them seriously upset is the public spectacle and loss of face which it can entail when improperly conducted, especially when the arresting officer shows personal antagonism toward the prisoner.

The professional officer balances the importance of each factor involved in an arrest situation. Although safety to himself, his fellow officers and the general public is very important, he is well aware that it is not always the most important factor. In fact, he knows that some persons will submit to an arrest quietly unless demeaning security precautions are utilized or personal antagonism is manifested by the arresting officer.<sup>2</sup> Unfortunately, the unprofessional officer often considers security and safety to be uppermost and controlling in nearly every case and is personally offended by lawbreakers. When these conditions prevail, arrested and detained persons are often subjected to such overwhelming threats to their psychological well being (or face) that they find it necessary to fight back against those who are creating the threat. In some cases their loss of face or distress is so great that they physically attack any person who obstructs their liberty and are willing to kill to escape rather than to suffer the public humiliation of detention or arrest. Therefore, the professional officer effects his detentions and arrests with circumspection and avoids excessive psychological distress to those being restricted. By making the arrest as easy as possible on the offender, the arresting officer also makes it as easy as possible on himself and his coworkers. The professional exerts his will over those whom he is arresting by the use of reasoning rather than his club. The officer who is involved in fights significantly more often than his coworkers, however, soon becomes well known and is avoided as a partner.

Persons usually react in three general ways to a police officer who is enforcing the law or is about to make an arrest. They may submit to his directions or the arrest

<sup>2</sup>The use of psychological games, "loaded" words, gestures, and "body language" indicate one's true feelings. The sum or totality of these messages constitutes non-verbal communication, which is often the major influencing factor upon the feelings which exist between individuals who are experiencing personal interaction. See: *Games People Play: The Psychology of Human Relationships*, by Eric Berne (New York: Grove Press), 1964; *Body Language*, by Julius Fast (New York: M. Evans), 1970; *Kinetics and Context: Essays on Body Motion Communication*, by Ray L. Bridwhistell (Philadelphia: University of Pennsylvania Press), 1970; *Body Talk* by Kathlyn Gay (New York: Schribner), 1974; *Body Language and the Social Order: Communication as Behavioral Control*, by Albert E. Schefflen (Englewood Cliffs, New Jersey: Prentice-Hall), 1973; *Messages of the Body*, by John P. Spiegel and Pazel Machotka (New York: Free Press), 1974.



without resistance. Such persons follow the directions of the officer because they believe that the officer is correct in what he is doing or they simply bow to the inevitable. The professional, skilled police officer will so conduct himself that the great majority of persons will react to his directions in this way.

Other persons may feel gravely threatened by the officer's actions and believe it necessary to attack, either verbally or physically, or flee. Whatever their action may be, it is an attempt to reduce the real or imagined threat to their physical or mental well being. Although the attack will usually be directed at the source of the threat, the officer, it may be against another person—an "innocent" third party. This is still an attempt to reduce their feelings of frustration, however, but the target will be an object or person who cannot "fight back." We have all witnessed examples of distressed persons who kick their cats, shout at their children, or drive their automobiles recklessly when frustrated. In fact, many times officers find themselves to be the "cat" whom it is necessary for the person to "kick" to compensate for a frustrating experience which occurred prior to the officer's arrival on the scene. The professional officer, because of his self confidence, is never threatened by verbal "cat kicking." He is able to control these excited persons through the use of his calm, professional, competent manner so that they soon begin to accept his directions. This same technique is usually effective with those offenders who are inclined towards physical attack. The experienced professional officer knows with reasonable accuracy those who cannot be dissuaded and with reasonable force acts to protect himself and others from physical attack.

The professional officer asks himself questions such as these: "This person is attacking me verbally, therefore, he (NOT I) is greatly threatened by something—am I the threat, or is it something else?" "Is this attack going to be all talk, or will it turn into a physical attack?" "What can I do to reduce his feeling of distress?" The unprofessional reacts out of his own fear of the verbal attack, retaliates in kind, and the situation rapidly escalates into physical combat or the bringing of inappropriate charges out of spite. Invariably the result of retaliatory action by an officer who attacks to save his own face, no matter how poorly the offender may have acted to initiate the incident, is the salvation of the offender's conscience. This is because the offender will be able to say to himself that the officer attacked him, therefore, no matter what the offender has done, the officer has become the "bad guy" who is subject to all the blame—the "offensive cat," if you will.

The third reaction is that of ignoring or remaining unaffected by the threat. Persons who manifest this type

of reaction are those who are secure, unconcerned, and believe that they truly are not endangered by the threat. They are convinced that those who are acting aggressively towards them cannot in fact harm them in any basic way. In every day language, this type of individual is called a person with "self confidence." It is this type of confidence that the professional police officer exhibits. It is a quiet confidence, as opposed to the blatant, pushy, aggressive, officious manner of those who are unsure of themselves and who try to make up for it with bluster, which is immediately recognizable as a lack of confidence.

Self confidence is the kind of attitude which makes it possible to exert one's will upon others while encountering the least resistance from them. The officer who exhibits this confidence brings the belief into the minds of those he is controlling that: "This officer will not ask anything of me which is not only lawful but also reasonable and necessary, and if I refuse to act in response to his requests, I will be not only unlawful but also unreasonable and appear foolish to others." On the other hand, if it is the person who is to be arrested who exhibits the self confidence, that person is the one who has the greatest chance of defeating the officer and taking over control of the situation. The officer who allows himself to be manipulated is in for a very uncomfortable experience. The danger to the officer is rarely that of physical attack, rather he will feel greatly threatened psychologically. He may begin to believe that he is appearing foolish and damaged in his self image (loss of face; receiving severe blows to his ego, etc.). Unless he retains his self control, he may well commit a rash or illegal act which can easily result in disciplinary action or a civil suit naming him and his department as defendants. But the experienced professional officer never loses during these encounters because:

He never presses or demands more than is absolutely necessary

Even though the law may empower him to do more

He always acts within the law

And utilized it to accomplish its basic purpose, not just technical requirements which were designed to accomplish some other objective.

His actions assure that his opponent becomes aware that:

What the officer requires is within the law

The full extent of the available powers are never utilized without full reason

The officer never acts out of personal vengeance

## Professional Discretion

ONLY ROOKIES TRY TO ENFORCE ALL THE LAWS ALL THE TIME, AND ONLY ROOKIES CONFINE THEIR ENFORCEMENT ACTIVITY ALMOST EXCLUSIVELY TO AN ARREST. The experienced professional officer has learned that enforcement of some laws is best accomplished by simply being present and visible. Other laws can be enforced by a warning or an educationally oriented conversation with actual or potential offenders. There are certain laws which do require that offenders be processed through the criminal justice system by either a summons or physical arrest. In most jurisdictions, with rare exceptions, no officer is in fact required to arrest for an offense except when ordered to do so by a magistrate, either by the judge in person or under his written order in the form of a warrant.<sup>3</sup>

## Criminal Law

A crime or an offense is an act or omission forbidden by law, prosecuted by the governmental officials of the jurisdiction, and punishable upon conviction. The statutes which define what acts or omissions are crimes or offenses must clearly state the kind of conduct which is prohibited or required and designate the punishment which is to be applied to those adjudged guilty.

Each statute which defines a crime is constructed of elements or criteria which the prosecution must prove before a defendant may be found guilty of the charge. The words used in statutes each have very special and particular meaning under law, and an officer must be careful to be aware of these legal terms because definitions in law sometimes differ from the meanings they convey when used in informal or daily conversation. For example, larceny or theft involves the *taking* of the *personal property of another*. Each of the underlined words is an element of the offense, and they are not the only elements. The "thief" has not taken if he has not gained possession, it is not personal property if it is an attachment to a house, and it is not another's if the thief is a part owner or the property has been abandoned. Furthermore, even if he does commit all those acts, he has not committed theft unless he intended to steal. For example, the acts were committed under his reasonable belief that the property was his. Also, no matter how fervent was his intention to steal, there cannot be a conviction where the item "stolen" was not subject to

<sup>3</sup>Administrative orders which require a particular type of enforcement action for specific offenses or offenders must be followed, however.

ownership which is protected by law, for example an illegal lottery ticket.

## Detentions

Police officers are empowered to make detentions and arrests under appropriate restrictions. A detention is a temporary restriction of one's liberty during which the detaining person is permitted to make a short investigation for the purpose of determining whether or not the person detained is subject to arrest for an offense.<sup>4</sup> The authority and restrictions upon it which apply to this power of an officer are delineated by either court decisions or statutes, dependant upon the law which prevails within a particular jurisdiction. This type of detention is generally referred to as "stop and frisk."<sup>5</sup> These three little words, however, have become the subject of thousands of pages of court decisions and statutes. This manual must cover the subject with just a few words, and readers should bear in mind that jurisdictions differ in what is permissible. Each officer should become well versed in the law on this subject as it is applied in his jurisdiction.

The stop and detention of a person is generally authorized when an officer has reasonable grounds for *suspecting* that the individual whom he intends to detain:

Has committed a crime

Is committing a crime

Is about to commit a crime

Note that the facts on which the officer bases his stop and detention are less than those necessary for him to effect an arrest, and it is essential to his authority that the person to be detained must be suspected of criminal activity. An arrest requires that the officer has reasonable grounds for *believing* that the person has committed or is committing a crime, but a detention requires the officer to have reasonable grounds for *suspecting* involvement in criminal activity. Because the officer is possessed of information short of that required to make an arrest, he may not use deadly force to stop or detain the person.<sup>6</sup>

An important factor in the laws dealing with detentions is that of the duration which will be permitted. In jurisdictions where the courts have delineated the law on this subject, case law permits officers to detain persons a

<sup>4</sup>Detention is also used to describe the incarceration of an individual in a jail or other facility after being charged with an offense.

<sup>5</sup>The officer's authority to stop and his right to frisk are separate and distinct. In fact, in the majority of cases the officer will not have the right to frisk the person detained.

<sup>6</sup>Of course, if the person resists by the use of deadly force the officer may respond with deadly force in self defense.

reasonable time. The duration permitted is determined by the relative importance of permitting the officer time necessary to ascertain whether or not the person has committed a crime and the loss of freedom suffered by the person detained. Each case is decided on its own facts. Where statutes control, legislatures either permit a reasonable time, similar to court holdings, or specifically limit the duration, varying from ten minutes to two hours. Under both case law and statutes, however, an officer in every jurisdiction is required to release the person immediately after he has determined that the person has not committed a crime. Where the duration is limited to a specified time period, when the time limit has expired the officer must either arrest the person for a crime or immediately release him, even though with more time to investigate the officer might have been able to develop sufficient information to effect an arrest.

Another critical difference among the various jurisdictions is the right of the officer to transport the person detained during the course of the investigation. In some jurisdictions the officer is not permitted to remove the person from the place at which the detention was initiated. In areas where it is permitted, the transportation must be conducted only when it is reasonably necessary for the purpose of investigating the possible criminal involvement of the person detained, and unless the investigation results in the person's arrest he should be returned to the place from which he was removed.

The officer may ask any pertinent question of the person detained, for example his name, an explanation of what he is doing or where he is going, the ownership of any property in his possession, etc., but the officer must constantly remain aware that the person detained is under *no* obligation to answer *any* question. The detained individual may remain absolutely silent during the whole period of detention, is under no obligation to produce any identification or other property for the officer's inspection, and the officer has no right to take *anything* from the person except a weapon.<sup>7</sup>

## Frisks

The frisk is a very limited search which may be conducted by an officer who has detained a person. It may be performed only when the officer:

<sup>7</sup> Refusal to identify oneself or being passively uncooperative makes the investigation more difficult and in some jurisdictions will extend the permitted duration of the detention, but the person commits no offense.

Exceptions would be circumstances under which the person detained is performing some activity or possesses something which is subject to licensing. For example, driving an auto-

Knows that the person has a weapon in his immediate possession

Reasonably suspects that the person has a weapon in his immediate possession.

Note that the frisk is for weapons only, and that the officer must be able to state the facts which caused the development of his belief that the person possessed a weapon. The frisk:

Must be only for the purpose of locating the weapon

Must be initially restricted to touching or grasping only the *outer* clothing of the individual

May be continued inside the outer clothing, pockets, etc., only after the officer has felt something which reasonably causes him to believe that a weapon is contained within.

If the officer finds a weapon he may remove it from the person's possession. If the possession of the weapon on the part of the person constitutes a crime the officer may arrest for that offense and retain the weapon as evidence. If the person is not arrested the officer shall return the weapon at the end of the detention.<sup>8</sup>

## Arrests

An arrest is the deprivation of one's liberty by another for the purpose of initiating the arrested person's processing through the justice system, usually the criminal justice system. An arrest must be made in compliance with the restrictions which surround such an action. Otherwise it is considered a false arrest and will cause the loss of the admissibility of any resulting evidence and possible loss of a conviction. The arresting officer may also possibly be subject to a suit for civil damages and be charged with a crime. An "arrest" which is made without the intention of processing the party into or through the justice system would be kidnapping within the statutes of most jurisdictions. Arrests can be made either under the authority of an arrest warrant or

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mobile, in which case the officer has the right to demand the person's driver's license and vehicle registration. Refusal to produce these items upon demand is a crime which subjects the person to arrest, but prior to effecting the arrest the officer has no right to search for or take these items.

<sup>8</sup> If the person has a right to possess the weapon generally but committed the offense by the facts existing at the time, for example carrying a handgun concealed without a permit, the officer may return the weapon if the person ceases to commit the offense. Under the aforementioned facts, if the person continues on his way while carrying the handgun openly. However, if the weapon is contraband, i.e., he is prohibited from possessing the weapon under any circumstances, the officer should retain the weapon for the purpose of turning it in to the police department for eventual destruction. Examples of contraband weapons are switchblades, brass knuckles, sling shot, sword canes, machineguns, explosive and gas grenades, etc.

without a warrant, and the arresting person can be either a police officer or a person.<sup>9</sup>

An arrest involves the following elements:

1. The arresting party "intends" to take the arrested person into custody. Although in most cases the arresting party's actual intention is to take the person into custody, and the best way to express this is by stating words such as, "You are under arrest for . . .," courts determine the intention from all the evidence presented. Therefore, when a court finds that a person was taken into custody, even though the arresting party did not have that in mind, the intention to arrest has been determined as a fact. "Actions speak louder than words," so an arresting party cannot defend himself from false arrest liability by simply claiming that he had no intention to arrest.
2. The arresting party acts under the belief that he has legal authority. If the arresting party is correct in his belief the arrest is valid, but if he actually does not have the authority it is an illegal arrest. Examples of lack of authority would be arrests made under a void or nonexistent warrant, even though the officer had been informed that there was a warrant, and arresting for a misdemeanor not committed in his presence, if this is not permitted in his jurisdiction.
3. The arresting party gains custody and control of the arrested person. An arrest is not complete until the arrested person comes within the custody and control of the arresting party, and this state exists when either the person submits or his resistance is overcome. It is not necessary that the person be touched or that any force be applied if he understands that he is in the power of the arresting person and submits to control; that his liberty is restrained is sufficient. On the other hand, if the officer's words "You are under arrest for . . ." are immediately followed by the suspect's running away there has been no arrest. In fact, unless the flight includes some physical contact or the application of force between the suspect and the arresting party, the flight does not constitute resisting arrest.<sup>10</sup>

An arrest warrant is an order of a court directing police officers to arrest and bring before the court the

<sup>9</sup>An arrest made by a person is usually called a "citizen's arrest," but it is not required that the person be a citizen of the United States of America. There is no age requirement to be met by the person; juveniles and even children may effect an arrest. Police officers have no immunity from arrest, although they need not give up their weapons except to another officer.

<sup>10</sup>Flight in a motor vehicle is a crime in most jurisdictions, however, because of the extreme hazards involved in such actions.

person named in the warrant.<sup>11</sup> If it is practicable an officer should obtain a warrant before making an arrest. The basic purpose served by the warrant process is to protect persons from unjustified arrests and prosecutions. The warrant is one of the manifestations of the checks and balances system in that a member of the judicial branch passes upon the legitimacy of actions intended by the executive branch. Given the same circumstances or facts known to an officer, if he arrests after obtaining a warrant the courts will in all probability sustain the arrest, but if he arrests without one his action will be much more closely scrutinized for probable cause.

Following are common requirements for a valid arrest warrant:

1. Probable cause.

The magistrate issuing the warrant must make an impartial judgment on the basis of the evidence presented that probable cause exists that a crime has been committed by the person to be arrested. Probable cause is more than mere suspicion on the part of the officer requesting the warrant, but he is not required to present proof beyond a reasonable doubt of the person's guilt. Information supplied by informants may be used, even if their identity is not disclosed, but officers must be able to state facts which indicate the probable reliability of such information which they have not acquired through their own observation.

2. Affidavit supported by oath or affirmation.

Some person must swear to his belief in the truth of the statements contained in the affidavit.

3. Person particularly described.

The description must be such that the officer serving the warrant is supplied with information sufficient for him to believe with reasonable certainty that the person whom he is about to arrest is the person described. Ordinarily the warrant includes the name of the person, but sometimes this is not known. In such cases a physical description, occupation or place of employment, residence address or other information may be utilized to particularly describe the person.

4. Nature of the offense.

Although the language need not describe the offense with the same detail as in an indictment or information, it must be sufficient to inform the person of the subject of the accusation.

<sup>11</sup>Most warrants are directed only to police officers. A private person can arrest under the authority of a warrant only if he is specifically named in it.

5. Officers designated.

The warrant may direct an individual officer or a class of officers to arrest the person. For example, the warrant may be addressed to all police officers in the state.

6. Issued in the name of the jurisdiction.

Warrants must be issued either in the name of the state under which the issuing magistrate's authority exists or in the name of the United States when issued by a federal official.

7. Signed by the issuing official.

Only an official authorized by law may sign a warrant, and he must be a neutral and impartial person, a magistrate or judicial officer.

Requirements to be followed in serving a warrant:

1. Person serving warrant must be named in it.

Either the officer or person serving the warrant must be specifically named in the warrant or he must be within the class of persons designated.

2. Must be served within the jurisdiction.

A warrant issued in one state may not be served in another unless the second state has authorized this service by statute. An officer in the second state may arrest if he has knowledge of the warrant's issuance, however, his knowledge constituting the reasonable grounds for his belief that a felony has been committed by the person.

3. Officer make known his purpose.

Unless the information will imperil the arrest or the person flees or resists before the officer can convey his intention, the officer must inform the person of his intention to arrest and the cause for it.

4. Show the warrant or inform person it exists.

Under common law the officer must possess the warrant and show it to the person if he demands it, but most modern codes have relaxed this requirement under the needs of today's society. However, the officer's belief in the existence of the warrant must be reasonable, and it shall be shown to the person as soon as practicable if he so requests.

Arrests can be made without a warrant by both officers and private persons. The authority of a police officer is more extensive, but not as much so as most people believe.

1. Both an officer and a private person can arrest for a felony committed in their presence and for a

felony which has actually been committed but not in their presence.<sup>12</sup>

2. An officer can arrest for a felony which he reasonably believes has been committed by the individual to be arrested, even though the crime has not been committed, but a private person may not. Stated in another way, the officer is protected if he makes a reasonable mistake, but the private person is not.

3. In all jurisdictions an officer can arrest for a misdemeanor which is committed in his presence, but in some jurisdictions a private person may not.

4. In some jurisdictions an officer may arrest for a misdemeanor not committed in his presence when he has reasonable cause to believe that it has been committed by the suspect, but a private person may not do so in any jurisdiction.

The Constitution, statutes, and court decisions refer to the necessity of the "reasonable cause" and "probable cause" which must exist before the authority to arrest arises. This degree of proof, evidence, or information to be possessed by the officer who intends an arrest must be more than good faith suspicion (enough to effect a detention for investigation), but it need not be proof beyond a reasonable doubt of the person's guilt. The reasonable cause is determined as of the time the arrest is effected. Evidence acquired after the arrest may not be utilized to validate a proceeding arrest. In fact, if the arrest is not based on probable cause that evidence will be excluded no matter how condemning and conclusive it might have been in proving the defendant's guilt.

The standards by which an officer's reasonable cause to arrest is ascertained is determined individually for each case. That is, the information in his possession and its relationship to the development of probable cause in his mind (as opposed to a reasonable man test) in the light of his personal experience and the circumstances of the case before the court will all be considered by the court in arriving at its holding that there was or was not probable cause to arrest. Actions which do not attract the attention of untrained or inexperienced persons or

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<sup>12</sup>An offense may be a felony in one jurisdiction and a misdemeanor in another. Generally a crime punishable by either death or imprisonment in a state prison is a felony, and most states do not provide for imprisonment in their state prisons for terms of less than one year. The laws in each jurisdiction should be consulted, and if the statute declares that the offense is a felony or punishment is death or imprisonment in the state prison the offense is a felony.

officers may convince the experienced and trained officer that a particular offense is being committed. This experience may include not only the activity but also the person performing it. An officer who knows of the past criminal record of a suspect may consider that history along with other facts in developing reasonable cause, but the officer may not arrest on only the basis of one's previous criminal record.

The following are sources which can develop reasonable cause to arrest for the officer:

1. Complaints from victims and information from witnesses.

Statements and information received which indicate that a crime has been committed and which provide evidence by which the offender can be ascertained by developing reasonable cause to arrest. An officer must bear in mind that if the crime complained of is less than a felony no arrest will be valid unless a warrant is first issued, unless their jurisdiction is one in which officers are permitted to arrest for misdemeanors on reasonable cause. But if the jurisdiction is one in which private persons can arrest for misdemeanors, the victim or a witness can make the arrest and turn the prisoner over to the officer.

2. Information from an informant.

The reliability of the informant is an important factor. An officer should maintain records on the cases in which the particular informant's information has proven to be accurate, and whenever possible the officer should make further investigation to determine that the information is correct prior to making his arrest without a warrant.

3. Observation of the officer.

When the officer witnesses the actual commission of the crime there is reasonable grounds to arrest without serious question. But when his observations lead him to a reasonable suspicion only, then he must first detain until his investigation leads to reasonable cause to arrest. When all the circumstances lead the officer to the reasonable belief that a felony has been committed he may arrest under his reasonable belief in any jurisdiction, but for a misdemeanor only if his jurisdiction permits that type of arrest. An officer can always obtain a warrant and effect the arrest later for the misdemeanor.

4. Physical evidence.

Fingerprints, identification dropped at the scene of the crime, footprints leading from the scene of the crime to the place of apprehension, and other physical evidence closely tying the suspect to the

crime would be sufficient to give rise to reasonable cause to arrest.

5. Information received from the officer's department or from another agency.

Information received over the police radio, at briefings, or from wanted circulars or lists may form the basis for reasonable cause, however, persons initiating these messages must have reasonable cause for doing so.

## CITATION/SUMMONS PROCESS

The processing of offenders into the justice system is ordinarily begun when he is contacted by the police. At this point the person may be "physically" arrested and taken to jail or other place of detention to await his appearance before the court. Very few defendants want to spend time in jail, and the purpose of such incarceration is only to assure the appearance of the defendant before the magistrate.<sup>13</sup> Originally, under our criminal law, incarceration to await court appearance was the only process utilized no matter what the degree of the offense. Beginning with the widespread use of the automobile and the numerous offenses committed by motorists, spurred by the growth of more liberal feelings toward offenders by both the general community and persons involved in the administration of justice, and because of the great savings in time and money which the method causes, written notification to an offender of the charge to be made and the time and place to appear before a magistrate has now become prevalent. Commonly called "a ticket," the citation or summons process is now not only used universally for traffic code offenses but has expanded to include many other types as well, such as theft, assault, battery, a variety of regulatory statutes, and other misdemeanor offenses. Whenever possible or permitted an officer should use this process.

The "ticket" procedure can proceed in three ways, an arrest followed by release, a detention followed by release, or the delivery of a notice of charges to be filed to the person charged. Although definitions differ somewhat, the citation process is that which involves an arrest by an officer followed by the offender's signing on the citation that he promises to appear in court at the

<sup>13</sup> Although the only purpose under law is to assure appearance in court, jailing is often utilized to serve other purposes. For example, detention of persons likely to harm themselves or others, detention to prevent obvious offenders from committing further crimes, and detention to provide additional time in which to conduct an investigation. In practice this is usually accomplished by setting bail too high for the defendant to meet.

time indicated, at which time he is given a copy of the citation and released from arrest. The defendant's signature and promise is his "bail". Should he fail to appear he commits an offense which is separate from that of the original charge. The offender may refuse to sign the citation, but if he chooses to exert this right the officer is required to incarcerate him.

In jurisdictions in which the summons process is utilized, the offender is detained (not arrested) for a period necessary for the officer to determine the defendant's identity and write the summons, a copy is given to the person (he is not required to take it), and he is then released from detention. The suspect is not required to sign the summons, he commits no offense if he does not appear, and upon his non-appearance the court simply issues a warrant of arrest for the charge made.<sup>14</sup>

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<sup>14</sup>Of course, the defendant who deliberately fails to appear cannot reasonably expect the judge to be pleased, but he can

The notice process involves leaving a written notice to be discovered by the person to be charged or otherwise delivering such notice, for example by mail. The vast majority of cases in which this process is used involves parking offenses, but it can also be utilized for many other offenses. Whether the person receives the notice or not, the charge is filed before the court, and if the defendant does not appear as directed in the notice an arrest warrant will be issued by the court.

Each officer must be aware of the law concerning these processes in his area because in many jurisdictions numerous offenses have been required by statutes and departmental regulations to be so handled. Therefore, an officer who incarcerates a person who is entitled under law or departmental regulation to be offered a citation or summons will be subject to prosecution, civil suit, and/or disciplinary action.

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reasonably expect little consideration from the court if its finding on the charge is "guilty".

## POLICE TRAFFIC SERVICES

### Goal

The police traffic services goal is to effect the safe and efficient movement of persons and goods on publicly traveled highways. "Safety" and "efficiency" are often competing functions because attempts to maximize safety must usually be made at the expense of efficiency; conversely, to maximize efficiency may minimize safety.

### General Responsibility Areas

To accomplish the traffic services goal the police encourage cooperation among all groups and agencies interested and responsible for traffic safety, but they must also act directly in their four general responsibility areas.

#### Pedestrian

The pedestrian is a major problem to the police in their efforts to achieve the safe and efficient movement of vehicles, persons and goods. Pedestrians are highly represented (in many cities half of those killed are pedestrians) in the fatality experience of urban areas, and during the daylight or business hours are principal contributors to traffic conflict and congestion. More than one study in recent years have shown that the pedestrian is more often at fault in causing the accident in which he has become involved than is the driver who has hit him.

Police/pedestrian responsibilities include participation in training and information programs aimed at pedestrians from pre-school ages to senior citizens.

#### Driver

Of the four responsibility areas, the driver is of prime concern to the police in terms of traffic safety, the one requiring the most attention because of his most complex problems. The driver's unique combination of skills, attitudes and motivations, coupled with his

operation of a heavy mobile machine which can inflict tremendous damage and injury, are many times inadequate to the demands required for safe vehicle operation. Be it because of heavy intoxication or mere daydreaming, drivers may make errors which can be, and often are, tremendously costly to himself and others.

The police responsibilities relative to drivers include driver training and education, public information programs of a general nature, driver licensing, promotion and enforcement of legislation, and the promulgation of reasonable and uniform operational policies, vehicle equipment regulations.

#### Vehicle

Unsafe vehicle condition is a constant, inherent potential for accidents, therefore, vehicle inspection programs should be and are considered as an essential part of any highway safety program. The police should incorporate inspection programs into their routine stops and patrol operations to reduce the number of defective vehicles on the road.

#### Facility

The police should promote an active program designed to improve the facility upon or over which traffic units move through the highway transportation system. Highway design defects and other dangerous conditions of both temporary and permanent nature should be actively identified and reported to the appropriate agency for correction. Police should maintain very close association with traffic and highway engineers.\*

The police contribute importantly to the engineering function by providing engineers with the information collected from accidents and with operational records of traffic congestion. In turn, the police should look to the engineer for appropriate advice and information to assist them in their basic traffic-related activities.

\*Traffic engineers are responsible for designing systems to move traffic efficiently with safety, coordinated signals, one way streets, off street parking, traffic control and direction signs and signals, etc. Highway engineers are responsible for designing and building the highways; for construction.



## Traffic Safety Missions

A coordinated effort to accomplish a comprehensive traffic safety program requires activity in five areas, the traffic safety missions.

### Traffic Supervision Mission

Police traffic supervision is primarily concerned with four basic line functions: collision investigation, law enforcement, traffic direction and control, and general motorist services. These activities are intended to reduce collisions through prevention programs, provide for the safety and convenience of highway users, and assist the motoring public through provision of needed services on the highway system.

### Information Mission

The foremost activity performed to accomplish this mission is that of keeping adequate traffic records. This includes the tasks of file maintenance, retrieval and response, analysis and processing, dissemination of information required, and quality control. A primary task is the development and operation of adequate methods for communication information to the line officers. The entire success of the enforcement program depends on how well the supervisors and officers of the operating divisions are informed.

The information mission must be capable of identifying problem drivers, pointing out high accident locations, assisting officials in drafting laws and policies by revealing problem areas, identifying areas in which research is needed, and providing information essential to the training and retraining of drivers.

### Public Information and Safety Education Mission

The measures of success registered by a highway safety program will be determined by the amount of public support it receives. It is necessary, therefore, that community support be developed through an effective public information and safety education mission. The mission activities will include: informing the public about traffic accidents, explaining to the community the various traffic safety measures taken by the department, providing individual drivers, pedestrians and cyclists with information they need to protect themselves and others against accidents, and convincing all citizens of the need for each of them to meet this personal responsibility to drive, walk and cycle safely.

### Communication Mission

The task of the communications mission is to maintain an effective flow of pertinent information and demands to all agency personnel so that the achieve-

ments of all other missions will be expedited. The entire force must be considered as a part of the communication mission. Each officer is an observer and participant and is expected to communicate, through appropriate media, every observation that will be of use to the attainment of agency objectives.

### Management Mission

The management mission is that of assuring that the organization functions efficiently toward the accomplishment of agency objectives. Included are the management tasks of planning, organizing, staffing, directing, coordinating, reporting and budgeting.

## Definitions

### Traffic

Traffic is anything which moves on a public highway for the purpose of transporting persons and materials; it is a human-directed movement. Each driver and his vehicle, cyclist and his cycle, pedestrian, herdsman and his flock, equestrian and his horse, etc., is a traffic unit which, together with other traffic units, constitute the whole of traffic on a highway. Traffic does not include units such as road graders and pavement spreaders as they are used in road repair or construction because they are not on the highway for the purpose of transportation, nor are wild or loose animals traffic units because they are not under human control.

### Traffic Control Signal

A traffic control signal is a mechanical device which signals traffic units to stop or proceed alternatively and periodically. The common red, amber and green signal is a traffic control signal.

### Traffic Control Sign

A traffic control sign is a sign which conveys mandatory or warning messages to persons which require or recommend actions appropriate to the message conveyed by the sign. Stop signs, no parking signs, curve warning signs, etc., are traffic control signs.

### Traffic Control Device

A traffic control device is any device or material which directs, controls or aids traffic flow on a highway. Examples of traffic control devices are lines designating traffic lanes, roadway centers, and passing or no-passing zones, reflectorized paddles at roadside, curbing to channelize traffic flow, ridges in pavement surface which cause tire hum to convey warning, etc.

## Point Control

Point control is the control and direction of traffic by an officer through the use of standard gestures and audible signals for the purpose of stopping, starting or changing the direction of traffic units to facilitate traffic flow.

## Police Traffic Law Enforcement

Police traffic law enforcement is the totality of actions taken by police officers in their efforts to prevent, apprehend, and process through the criminal justice system, those persons who are traffic law offenders. Enforcement can take the form of verbal warnings, written warnings, citations or summonses, physical arrests followed by incarceration, or administrative sanctions aimed at revoking or restricting driver or vehicle licensing.

## Police Traffic Law Enforcement Efforts

"Presence Plus Contact" are the key words describing effective police efforts toward traffic accident reduction. It would be difficult to find a motorist who does not recheck his driving operation when he becomes aware of the presence of an officer in his immediate vicinity. This is the reason traffic experts advocate the use of marked and highly visible police vehicles for traffic law enforcement. What is more difficult to assess is the duration of the "halo effect"—careful and lawful driving in the suspected presence of officers. Hardest to evaluate is the effectiveness of enforcement contacts by officers in reducing accidents and violations on the part of those violators who are actually apprehended. Various enforcement programs over the years have proved successful in accident and violation reduction, but the proportional operation of presence and contact on motorists' behavior has escaped precise measurement.

Traffic law enforcement actions taken by officers vary according to the seriousness of the violation and what is permitted by statute and departmental police. *Physical arrest*—taking violators into custody—is reserved for the more serious offenses, when it appears unlikely that the offender will not voluntarily appear before a judicial officer, or when the hazardous driving may continue upon immediate release. Dependent upon the jurisdiction, serious violations are cause for incarceration by statutory requirement, departmental policy, or the arresting officer's discretion.

A *summons* or *citation* is a document issued by officers to violators for less serious offenses. It is a notification to the defendant both of the offense with

which he will be charged and of where, when, and before which judicial agency the matter will be heard. The vast majority of traffic violations are handled by this method because it is the most efficient procedure for the offenders and the agencies within the criminal justice system.

The *written warning*, while not permitted or advocated in all jurisdictions, is the third enforcement action utilized by enforcement officers. This procedure is followed when the violation is not serious and/or when the motorist's faulty operation appears to be one which will not be repeated. While written warnings can be issued for either rules of the road or faulty equipment violations, their use as a corrective measure with a built-in follow-up procedure for defective equipment is more common.

*Verbal warning* is the fourth common enforcement action. Used in situations similar to that under which written warnings are issued, the verbal warning is different in that no official documentation is made of the incident, the driver's record is not affected, and there is no action to ascertain whether or not the problem is corrected. The threat of negative sanctions is minimized, the purpose being more to educate and correct the unlawful or unsafe conduct which had been observed. In fact, it has been suggested that this type of contact should be termed something akin to "driver improvement discussion" or "officer's educational effort" to more effectively point up its purpose.

*Administrative sanction* is the fifth enforcement action available to the police. This type of procedure involves the notification of an administrative agency with quasi-judicial authority that a driver or vehicle owner has failed to meet legal requirements which subjects him to sanctions against his driver, vehicle or other license or permit. The most common action in this category is that of driver license suspension under implied consent laws.

Regarding enforcement, the police must attempt to achieve in the public's mind that traffic laws and departmental policies are reasonable and necessary, that the police are omnipresent, that violations will be observed, that enforcement action will be taken, and that necessary corrective actions by the courts and administrative agencies will be swift and sufficient to assure appropriate future compliance. The objective to be achieved is that of *voluntary* compliance on the part of the community of highway users so that direct enforcement contacts will no longer be necessary except in unusual cases.

An effective police program for traffic safety and control aims for both accident reduction and public acceptance. The enforcement methods available to the

police should be judiciously and artfully applied so that the end result is the greatest reduction in violations at the least possible economic and social cost—an efficient operation directed at specific goals.

## Heavy Volume Traffic Movement and Emergency Conditions

The efficient movement of heavy volume traffic requires advance planning. The main difference between moving traffic to or from a sports event and during a disaster emergency is that in the latter case the knowledge of the persons involved that their lives (rather than their time) may be at stake subjects them to possible panic, which leads to hysterical loss of control. The outcome depends upon the effectiveness of the planning and training of personnel prior to the need for controlling such mass movements.

Disasters require that persons and traffic be diverted or removed from the danger areas. This is the responsibility of the police. Ways must be kept open to accommodate all types of traffic, including emergency vehicles and personnel which have priority. Anything which blocks or impedes traffic flow during a true emergency must be reported to superiors immediately and corrected or removed. The usual method of using a tow truck may not be available, therefore, whatever is required should be requested of supervisors or commanders, including permission to upset vehicles and roll them off the roadway.

The traffic control responsibilities of the auxiliary police during emergencies will depend upon the provisions of the emergency plans, and these will have been developed in the light of the locally prevailing conditions. However, controls will be designed to accomplish one of two objectives, either persons will be diverted from areas of danger or they will be assisted in movement away from hazardous areas toward a shelter or other place of safety. In a situation wherein the plan is to move people to a nearby shelter, officers will be ordered to eliminate vehicular traffic so that the full use of the highway is retained for pedestrian use. Where circumstances dictate the mass evacuation of an area, both vehicular and foot traffic will be permitted, although officers will attempt to utilize vehicles' capacities to their utmost in order to expedite rapid evacuation. The traffic control plan will usually provide that officers be placed on point control assignments at major intersections or at any other position from which they can most efficiently effect the mass movement of traffic. Any delay of traffic movement during emergencies requires police attention and control. Bottlenecks must

be immediately eliminated or reduced to provide swift and efficient movement of traffic.

Under circumstances where an area is closed to all or into which only rescue teams or officials are permitted, all avenues through which the public may enter must be covered by an officer. The positions or posts should be individually numbered so that supervisors may direct officers to these posts, and both he and the assigned officers are aware of the precise location of assignment.

### Point Control

When an officer\* is directing traffic it is necessary that the people using the highway know he is there for that purpose and that the officer knows and utilizes standardized, appropriate gestures and audible signals to stop, start, and turn traffic.

*To indicate that the officer is present for the purpose of directing traffic he should: position himself so that he can be seen clearly by all, usually in the center of an intersection or street; stand straight with weight equally distributed on both feet; allow hands and arms to hang easily at his sides except when gesturing; stand facing or with his back to traffic which he has stopped and with his side toward traffic he has directed to move.*

*To stop traffic the officer should first extend his arm and index finger toward and look directly at the person to be stopped until that person is aware or it can be reasonably assumed that he is aware of the officer's gesture. Second, the pointing hand is raised at the wrist so that its palm is toward the person to be stopped, and the palm is held in this position until the person is observed to stop. To stop traffic from both directions on a two-way street the procedure is then repeated for traffic coming from the other direction while continuing to maintain the raised arm and palm toward the traffic previously stopped. (Illustrations 1-4.)*

*To start traffic the officer should first stand with shoulder and side toward the traffic to be started, extend his arm and index finger toward and look directly at the person to be started until that person is aware or it can be reasonably assumed that he is aware of the officer's gesture. Second, with palm up, the pointing arm is swung from the elbow, only, through a vertical semi-circle until the hand is adjacent to the chin. If necessary this gesture is repeated until traffic begins to move. To start traffic from both directions on a two-way*

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\*Under some circumstances two officers are necessary for the control of some heavily traveled points, complicated and unusual intersections, or one-way movement in alternate directions around an obstruction. In these cases one of the officers will initiate all changes in traffic flow and direction and the other will assist. The purpose accomplished by this procedure is the prevention of confusion on the part of the traffic units being directed.

street, the procedure is then repeated for traffic coming from the other direction. (Illustrations 5 and 6.)

*Right turning* drivers usually effect their turns without the necessity of being directed by the officer. When directing a right turn becomes necessary, the officer should proceed as follows: if the driver is approaching from the officer's right side his extended right arm and index finger and gaze are first directed toward the driver, followed by swinging the extended arm and index finger in the direction of the driver's intended turn (Illustrations 7-9); if the driver is approaching from the officer's left side, either the same procedure may be followed utilizing the left arm extended or the extended left forearm may be raised to a vertical position from the elbow while closing the fingers so that the remaining extended thumb points in the direction of the driver's intended turn.

*Left turning* drivers should not be directed to effect their movement while the officer is also directing oncoming traffic to proceed. Therefore, the officer should either direct opposing vehicles to start while avoiding left turn gestures directed at turning drivers, which will lead them to complete their turn only when there is a gap in the oncoming traffic, or to stop or hold oncoming drivers, after which the left turning driver can be directed into his turn. The officer's right side and arm should be toward the oncoming traffic, and the left side and arm should be toward the left turning driver. After stopping oncoming traffic by using the right arm and hand, the right hand should remain in the halt gesture, then the extended left arm and index finger and officer's gaze is directed toward the driver who intends to effect a left turn. When the left turning driver's attention has been gained, the extended left arm and index finger are swung to point in the direction the driver intends to go. (Illustrations 10-12.)

In order to clear the lane occupied by a driver who intends to make a left turn, but cannot because of oncoming traffic, he can be directed into the intersection and stopped adjacent to the officer's position until the left turn can be safely completed. The driver should be directed into the intersection by pointing toward him with the extended arm and index finger which is then swung to point at the position at which the officer wishes the driver to stop and wait for clearing traffic. In the alternative, the driver may be directed to move with one arm and hand gesture while the other arm and hand are utilized to point to the position at which the driver is to stop. (Illustration 13.) After the driver is positioned within the intersection, the officer may either halt

oncoming traffic and direct the completion of the turn or permit the driver to effect the turn during a natural break in the oncoming traffic.

## Signalling Aids

*The whistle* is used to get the attention of drivers and pedestrians. It is used as follows:

1. *One Long* blast with a STOP signal.
2. *Two short* blasts with the GO signal.
3. *Several short* blasts to get the attention of a driver or pedestrian who does not respond to a given signal.

*The whistle should be used judiciously.* It should not be used to indicate frustration, but the volume should be just that sufficient to be heard by those whose attention is required. Therefore, whistle blasts directed at pedestrians should be moderate in volume. The whistle should be used only to indicate stop, go, or to gain attention, and when its purpose has been achieved the officer should cease sounding the whistle. If the whistle is utilized continuously it ceases to hold meaning for drivers and pedestrians.

*The voice* is seldom used in directing traffic. Arm gestures and the whistle are usually sufficient. There are numerous reasons why verbal commands are not used. Verbal orders are not easy to give or understand and often lead to misinterpretations which are dangerous. An order which is shouted can antagonize the motorist.

Occasionally a driver or pedestrian will not understand the officer's directions. When this happens the officer should move reasonably close to the person and politely and briefly explain his directions. No officer shall exhibit loss of temper by shouting or otherwise indicate antagonism toward those who do not understand or who do not wish to obey the officer's directions.

*The baton* is confusing unless properly used. *To stop* a driver with the baton, the officer should face the oncoming traffic, hold the baton in the right hand, bend the right elbow, hold the baton vertically, then swing the baton from left to right through an arc of approximately 45 degrees. (Illustration 14.)

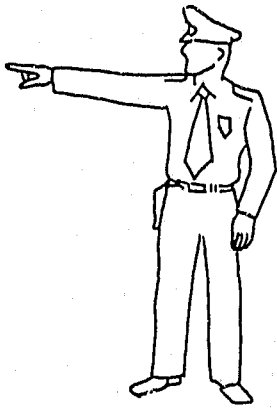
*The go* signal and the *left turn* direction are the same gestures as those previously described except that the baton acts as an extension of the hand and index finger. (Illustrations 15 and 16.)

Signals and directions given with the aid of the baton should be exaggerated and often need to be repeated

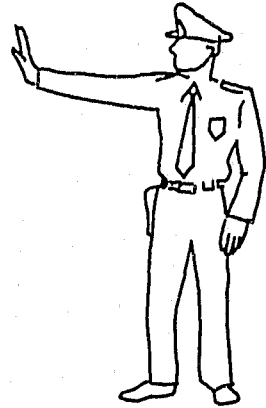
because of the poor visibility existing. The baton's light should be turned off when it is not being actively utilized to give directions.

A *flashlight* can be used to halt traffic. To stop traffic slowly swing the beam of the light across the path of

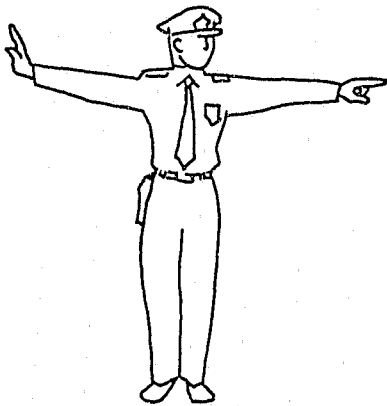
oncoming traffic. The beam from the flashlight strikes the pavement as an elongated spot of light. After the driver has stopped arm signals may be given in the usual manner, the vehicle's headlights providing illumination. (Illustrations 17 and 18.)



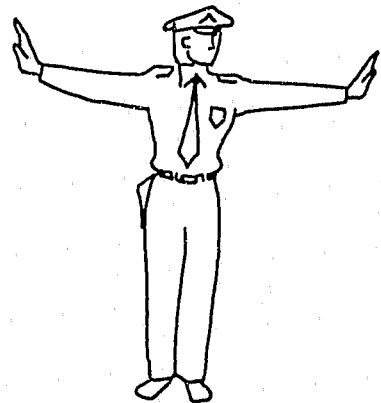
**Illustration No. 1**  
**Point**



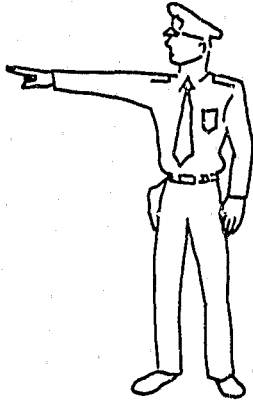
**Illustration No. 2**  
**Stop**



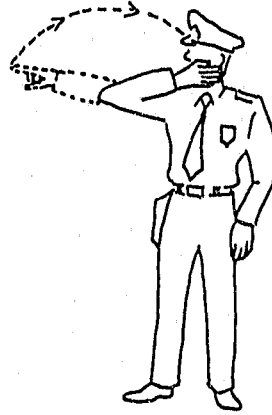
**Illustration No. 3**  
**Point**



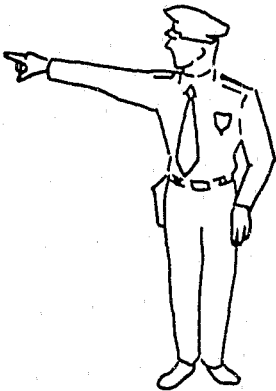
**Illustration No. 4**  
**Stop**



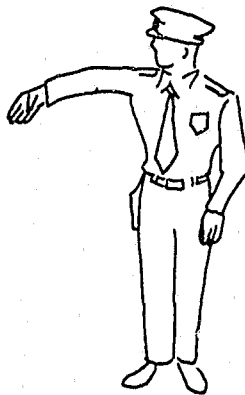
**Illustration No. 5**  
**Pointing**



**Illustration No. 6**  
**Starting**



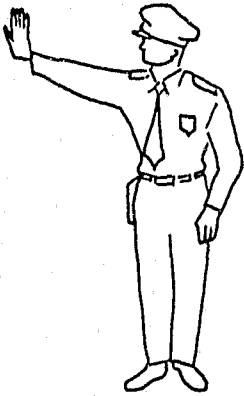
**Illustration No. 7**  
**Point at the driver**



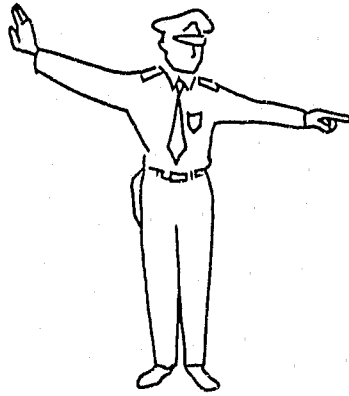
**Illustration No. 8**  
**Arm Swing**



**Illustration No. 9**  
**Point where driver  
is to go**



**Illustration No. 10**  
Halt opposing traffic  
with right hand



**Illustration No. 11**  
Hold opposing traffic  
and point to turning  
driver



**Illustration No. 12**  
Give turn signal with  
left hand



**Illustration No. 13**  
Direct driver into  
intersection



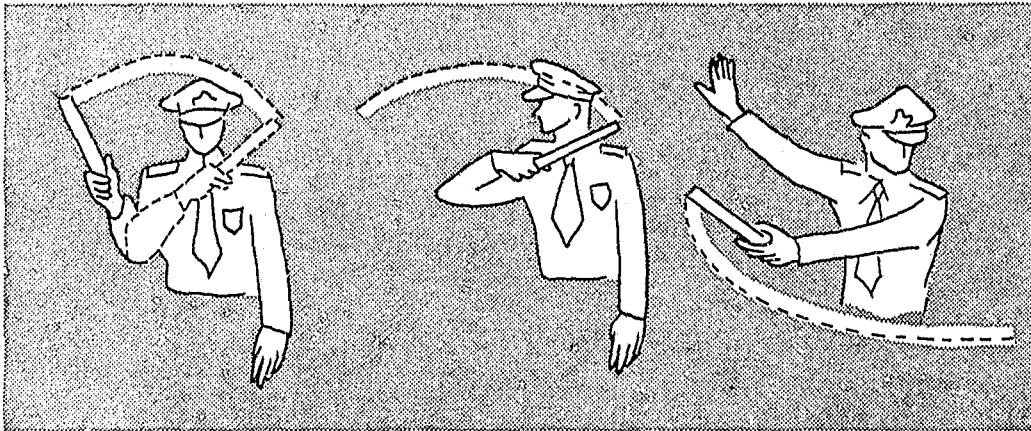


Illustration No. 14  
Stop signal

Illustration No. 15  
Go signal

Illustration No. 16  
Left turn

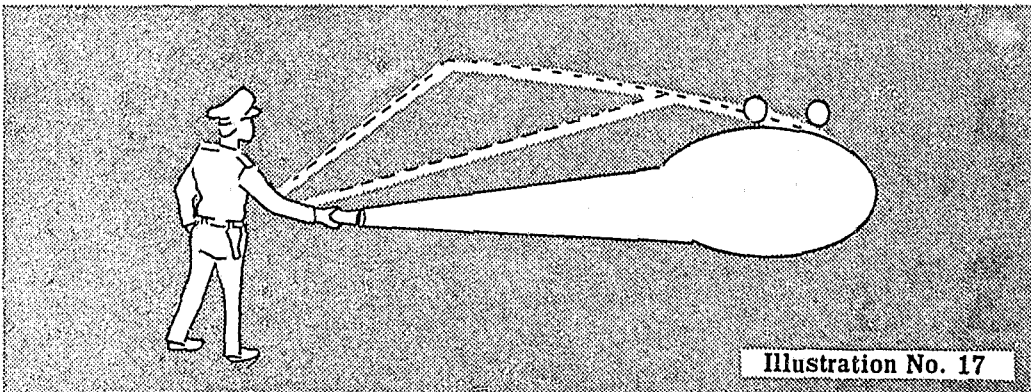


Illustration No. 17

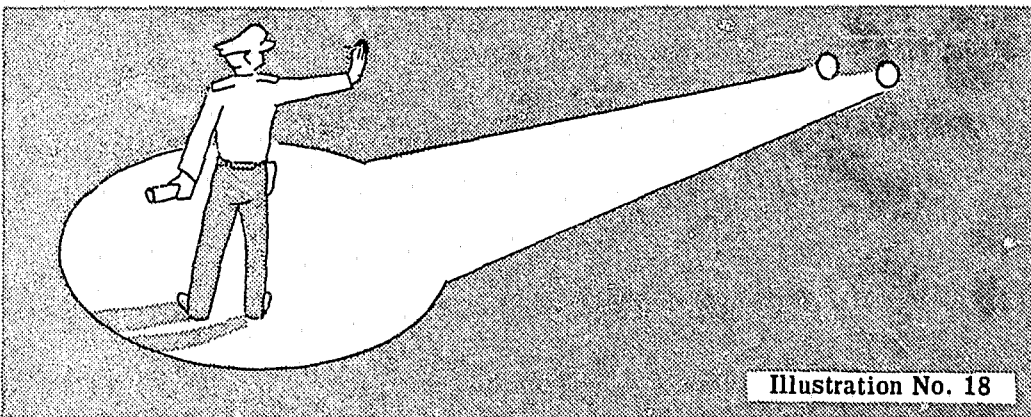


Illustration No. 18

## CROWD AND RIOT CONTROL

Every police officer who spends enough time on the job will eventually be faced with the difficult task of controlling or subduing a "crazy mad" individual who has lost his capacity for rational control of his emotions and goes on the attack, often with the "strength of ten." It is only the well trained officer who keeps his head and coolly proceeds to act appropriately who will be able to overcome and defeat such an attacker with the minimum force necessarily and effectively applied. In fact, in many cases the professional officer will be able to reduce the emotional stress being suffered by his opponent to the point at which force becomes unnecessary. However, the mistakes made by untrained and unprofessional officers who have acted out of personal antagonism or even rage can, and often have, escalated incidents into terribly destructive battles involving deadly force.

The same factors and influences are involved whether the police and those who must be controlled are acting as individuals or groups. The well trained, well directed, coolly professional group of officers working as a team will succeed, but a mob of enraged police will not. Success does not consist only of eventual control, but rather how and at what expense in lives, property, and antagonism it was attained.

During a period of civil unrest, tension, and overt disturbances, police capabilities are tested to the limit. There is no more trying situation or challenge to the professional performance of the police organization than the control of an unruly crowd or riotous mob. Auxiliary police officers must be trained and prepared to participate in the control of such disturbances and civil disorders because it is under such crisis situations that every available professionally trained officer is required to protect the community.

### **Crises Requiring Additional Manpower for Effective Control**

The crisis situations requiring the concentration of available police manpower or the mobilization of re-

serves to effect control can be categorized under four headings:

Disasters initiated by human activities—large fires, explosions, structural collapses, etc.

Natural disasters—tornadoes, floods, earthquakes, etc.

Civil disorders and disturbances—violence which is geographically limited in effect and initiated by economic, racial, social, or political tensions.

War or revolution—violence penetrated by the military forces of a foreign nation or the resident population in sufficient strength that orderly governmental processes at the state and/or national level are threatened.

Any type of disaster will affect the stability of some persons in the community and cause them to act aggressively and irrationally to the detriment of other individuals, groups, or even the whole community. Law and order is necessary to the protection of individuals and the public, therefore such must be maintained by the police until and unless the problem becomes so pervasive and severe that the military forces must take over.

### **Crowds, Mobs, and Riots**

It is useful to draw distinctions among various types of crowds, since they do not all require the active intervention of the police. It is as important for the police to know when not to intervene with active control methods as it is to know when and how much overt exercise of the police authority is required. It is necessary that the police be able to recognize the type of crowd with which they are dealing in order to take appropriate and timely preventive action before it evolves into an uncontrollable mob.

A crowd is a large number of persons collected into a close body without order. As a group, such will be unorganized and without leadership, hesitant to act cohesively, respectful of the law, and ruled by reason. A

physical or casual crowd is characterized by their denseness and lack of group behavior. For example, pedestrians at an intersection of a downtown shopping district. A psychological crowd, however, consists of persons with a common interest. For instance, a stadium of football fans. A psychological crowd can be hostile or aggressive. Should an official at the football game make an apparently erroneous decision the crowd could well become hostile at a hotly contended contest.

A mob is a disorderly crowd after its members have lost their sense of responsibility and their respect for the law. A mob is characterized by organization, leadership, common motive for action, and irrational, emotional, or enraged behavior. Mobs can be of three types according to their objectives, although there is often an intermingling of these purposes or effects. A mob which is motivated by the desire to attack or destroy people or property is an *aggressive* mob. An example would be a lynch mob or one which overturns and sets fire to vehicles. An *acquisitive* mob attacks for the purpose of obtaining some sort of property by force, such as food, clothing, arms, etc. An *escape* mob's purpose is to flee from danger, and they act in panic. The panicky escape mob has perceived a threat, believes they are entrapped, is faced with a partial or complete breakdown of an escape route, and suffers from lack of communication between those nearest the possible escape route and those farthest away. Orchestrating the emotions of a crowd for the purpose of inciting a riot is a leadership skill which has been deliberately acquired by some persons who are attempting to subvert ordinary governmental processes to gain an end. Some of the methods utilized to incite a riot are extensive preparatory propaganda, planned demonstrations, harangue by one or more fiery speakers, and deliberately caused inflammatory incidents. The following are some of the influences which favor the agitator: novelty, suggestion, contagion, imitation, anonymity, release from repressed emotions, sense of power, sense of righteousness.

### Principles of Crowd Control

A crowd is an essential prerequisite to the formation of a mob; thus, the proper control of it is indispensable to prevent its evolution into a mob. The following are some principles of crowd control:

As soon as possible after becoming aware of a crowd or the potential for a large gathering, acquire full information on the nature and character of the crowd.

Make plans for a definite course of action, including plans to cover any changes in the situation which may be foreseen.

Provide for an adequate force of personnel supplied with sufficient materials and equipment.

Have all equipment checked and repaired or replenished to assure proper function condition.

Be in position before the arrival of the crowd.

Establish a communication system among all police units.

Establish definite boundaries for the crowd.

Bearing in mind applicable laws and the constitutional limitations on personal liberties, isolate and quickly remove or reduce causes of tension such as:

Influence of agitators

Presence of a hated person or symbol

Acts of violence committed by crowd members

Antagonistic police actions which are not essential to maintaining control.

### Demonstration and Strike Control

Demonstrations are public exhibitions of sympathy with or in opposition to some political, economic, or social movement. Demonstrations do not develop over matters which are unopposed by others, therefore, antagonistic feelings are usually high because of the fervency of the beliefs held by the opposing parties. The intent of demonstrators is to focus attention on a problem and the persons or establishments against which action is believed necessary. The social and legal implications inherent in these situations are such that the law enforcement agency has neither the authority nor the legal responsibility to adjudicate or solve. However, the demonstrators, the opposition, and the community must be protected by the police in the public interest.

No single standard procedure can be established for all demonstrations. They will vary in their nature and the problems presented because of the character of the participants, their size, and the atmosphere in which they occur. Thus, plans must have sufficient flexibility to adjust to the situation as it develops. Deployment will be either by a show of force or strength in reserve approach. The show of force approach exists when the deployment of manpower is visible and mainly at the scene. Generally, officers act as a barricade between the opposing factions. The advantages of this type of action is that the police may gain immediate control of a bad situation, aggressive acts by demonstrators are discouraged, and inexperienced demonstrators may be bluffed out. The disadvantages of such deployment are that the officers are subjected to long tours of duty, the majority of police strength is visible to the leaders of the antagonistic groups. The show of strength will usually be most effective when demonstrators are few in number and inexperienced, and the danger to destruction of property is imminent.

The strength in reserve approach provides for a token force at the scene with a reserve force on hand nearby. The advantages to this system is that the police do not expose the total of their force to view, fresh manpower is available because of constant relief of the men on the line, and commanding officers have greater flexibility and mobility for their total operation. On the other hand, when few officers are in sight fights or other disturbances may start and the officers at the scene will not be strong enough to immediately effect control. When demonstrators are numerous, experienced, well-trained, and properly disciplined, the strength in reserve approach may well be preferable.

#### Civil Disobedience Arrest

Time is not usually of major importance in making arrests of civil disobedience demonstrators; there should be no more haste than necessary. In fact, the same methodical procedure which will be described here should also be used in non-violent situations to effect arrests made during a regular tour of duty on patrol. The procedure involves a statement by the officer to each person who is violating the law asking that the unlawful activity cease, followed by an opportunity for compliance, a declaration of arrest, a request that the arrested person walk to the transport vehicle, and humane physical removal of the lawbreaker. A typical arrest, assuming non-compliance at each stage, would be:

You are interfering with the free movement of vehicular and pedestrian traffic. Please move. (wait a few seconds for responsive action, but without engaging in debate concerning the merits or lawfulness of the person's action)

Will you move?

Your act prohibits the safe and peaceful movement of persons and vehicles in the public streets and prevents access to buildings. This is a violation of (state section number and code applicable) and amounts to disturbing the peace (or other short description of the violation being committed). Will you please move? (wait for compliance a few seconds)

You are now under arrest and charged with disturbing the peace (or other offense). Will you please walk to the patrol wagon?

Do you want to be carried to the patrol wagon?

If you do not walk to the wagon you will be in violation of (state section number and code applicable) and the additional charge of resisting arrest will be placed against you.

Will you please walk to the patrol wagon? (remove the demonstrator on a stretcher—subject may be

strapped to stretcher, and stretchers require fewer officers to effect the removal)

#### Strikes

A strike is a concerted and sustained refusal of employees to perform all of the services for which they were hired. Basically it is a demonstration, therefore all the suggestions made with relation to demonstrations are applicable to strikes. Peaceful picketing is the lawful congregation of workers on *public* grounds near the premises of the employer with whom they have a controversy. Picketing becomes illegal if it blocks streets or interferes with the free and immediate use of the sidewalk or with ingress or egress to any place.

The do's of strike control by police: be absolutely impartial and neutral; limit conversations to picket line captain and ranking company official; keep general public away from dispute as much as reasonable; place responsibility by issuing instructions to either picket line captain or ranking company official; be aware of professional agitators; forward all information to those command primarily concerned with labor dispute; give *verbal* instructions when asked direction by a disputant; be cautious in breaking lines to handle vehicles; give union officials an opportunity to take care of drunken or aggressive pickets; arrange for periodic relief of police on the line.

The don'ts of strike control by police: give impression by overt act (waving, smirking, etc.) of biased feelings; become provoked by derogatory remarks; drive or otherwise go onto company property unless action is necessary to enforce the law; talk over merits of the dispute with persons from either side; give any advice pertaining to injunctions; eat in establishments frequented by disputants; accept gifts, such as donuts or coffee, or other favors from disputants or their supporters; indicate in any way sympathy for either side.

#### Crowd Control Formations

There are several formations which the police employ to disperse mobs and crowds. The first is the *wedge*. It is the basic formation used to break up, split, or strike into a crowd. The second formation is the *diagonal*. This particular formation is used to move a crowd away from the side of a building, a wall or other object, and is also used to turn the direction of movement of a crowd. The third common formation is the *line*. The line is used as a holding formation to deny an area to a crowd, and is also used to drive a crowd from a confined area.

It is essential that a sufficient number of officers are utilized in the formation so that the particular objective

to be achieved can be attained. For example, unless the crowd is small, a squad wedge will be unsuccessful because it will be swallowed up immediately and surrounded as it penetrates the group to be controlled. A line of officers which fails to cover an exit completely will be unable to restrain some persons of the crowd from passing either through or around the ends of the line.

The appropriate interval between adjacent officers in any of the formations depends upon the type of crowd or mob being subject to control. A passive crowd can be controlled by officers at arms' length, either both arms or one arm depending on the degree of control necessary. Densely packed crowds may require the officers to be at close order (elbow's length). The interval necessary to restrain or control a mob will necessitate the officers standing shoulder to shoulder.

An important part of the training of officers in mob control is the proper use of the police baton. It is not to be used by swinging it or as a flail. Since the officers will be shoulder to shoulder, such will result in officers clubbing each other as much as the mob, and when swung the baton is likely to be torn from the one-handed grasp and then used to attack the police. In addition, when the baton is swung down upon the head and shoulders of opponents, three unfavorable results are likely to follow:

During the backswing the officer's whole body is open to attack.

The wildly swinging baton creates an extremely unfavorable appearance to the public.

The baton blows to the head leave opponents cut and bleeding, leading again to unfavorable public opinion.

The basic baton position is the "port" position. In this position, the handle end of the baton is just above the right hip and the tip approximately at the height of the left shoulder; angle to the ground is approximately 45 degrees. The arms are held bent at the elbows, the right hand grasps the handle end from the top and the left hand grasps the tip end from the bottom side. Both hands should be so close to their respective end of the baton that only one or two inches remain exposed, not enough to be grabbed and held by an opponent. The only part of the baton which an opponent can grasp is the center, therefore the officer can twist it away because the location of his hands (at the ends) gives him the superior leverage. Blows with the baton are applied by pushing, swinging, or punching toward an opponent with the center section or the ends while retaining the two handed grip. The vital target areas of the body are illustrated.

When in immediate contact with a mob, officers in formation and utilizing the baton move forward by stepping ahead with their left foot then dragging their right foot forward. The left foot always is in the leading position with the right trailing for best balance at all times; a sort of stamp and shuffle movement.

The movements in formation and use of the police baton for riot control previously described is not used in combating a mob armed with and utilizing forearms. Such conditions required armed combat tactics and weapons.

( SQUAD WEDGE )

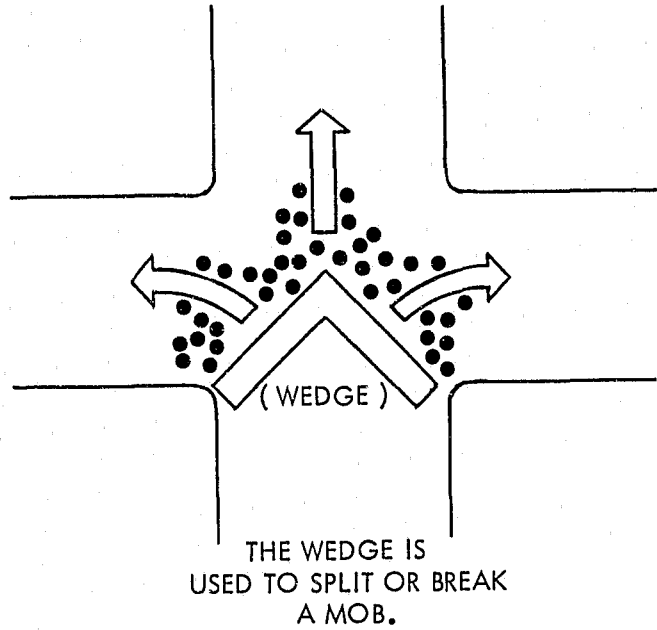
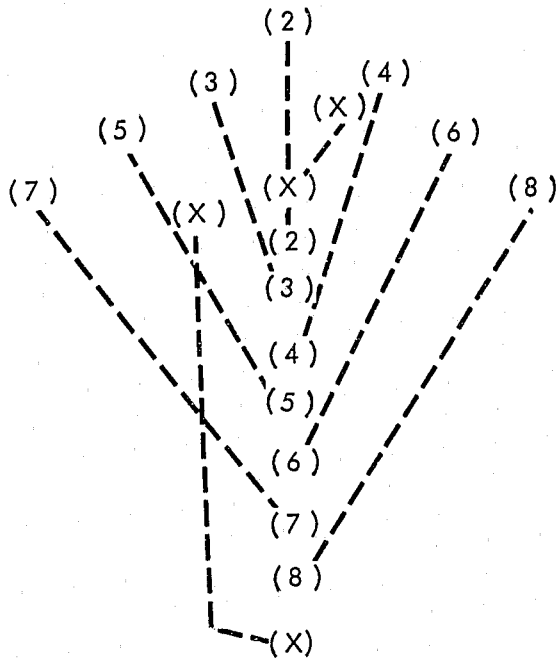


Figure 1

( COMMANDS TO BE GIVEN IN FORMING THE SQUAD WEDGE )

1. FALL, IN
2. COUNT, OFF
3. RIGHT, FACE
4. SQUAD WEDGE, ( MOVE )

Source: School of Police Administration and Public Safety, Michigan State University.

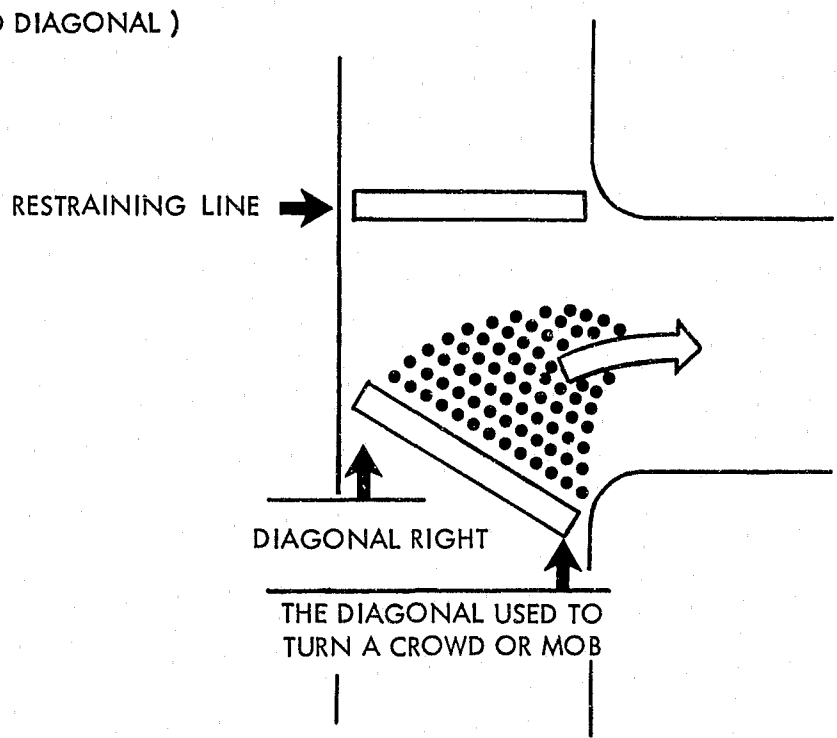
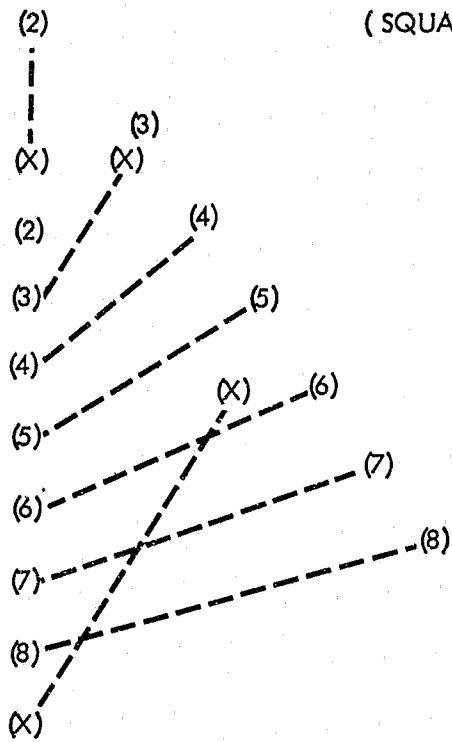
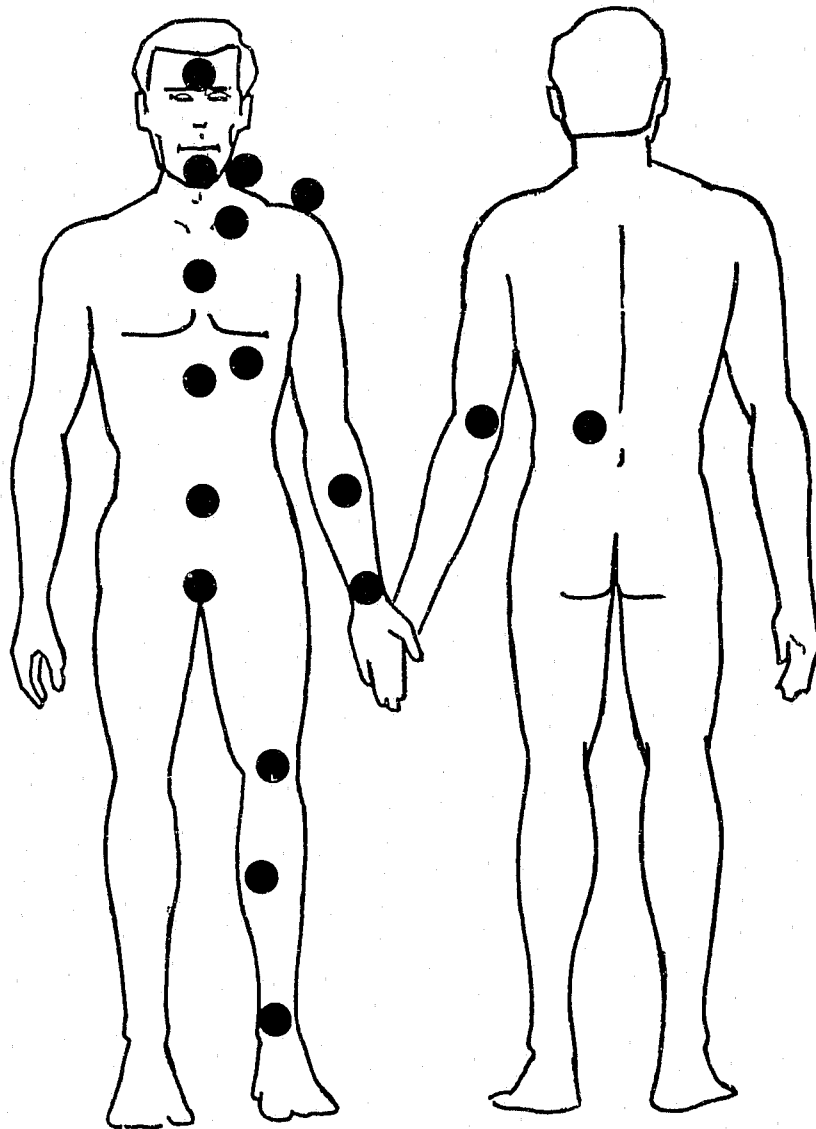


Figure 2

( COMMANDS TO BE GIVEN IN FORMING THE SQUAD DIAGONAL )

1. FALL, IN
2. COUNT, OFF
3. RIGHT, FACE
4. SQUAD DIAGONAL, RIGHT, ( OR LEFT ), MOVE

Source: School of Police Administration and Public Safety, Michigan State University.





## SHELTER DUTIES

Both the regular and auxiliary police officer will perform an extremely important function in a shelter community. References to "police" and "police officers" in the remainder of this chapter include both auxiliary and regular police officers. Indeed, the police function under shelter conditions may be especially trying and difficult because of the unusual conditions existing at the time; for example, heightened sense of fear and insecurity, crowding, personal disorientation, and unfamiliar surroundings.

The local shelter system, with which you will become familiar in the course of your training, has been designed and developed as a result of considerable planning and expense by all levels of government. While a fallout shelter may not provide a great deal of protection against thermonuclear blast, initial radiation, and thermal effects, it is adequate to protect the population from the more widespread and long-lasting fallout radiation effects. The most important element in a complex of protective systems is the fallout shelter system. While surveying, marking, and stocking of existing fallout shelter space is a continuing project for civil defense authorities, additional shelter space is a continuing project for civil defense authorities, additional shelter space is also being developed along with preparations for postattack recovery actions following emergence of the population from the shelters.

### Shelter Manager Responsibilities

The shelter manager's responsibilities are broad and far-reaching. He is responsible for the control, direction and coordination of people, staff, equipment, and supplies within a particular shelter. It is his responsibility to organize, staff, and inspect the shelter facility as well as direct the shelter operations.

Shelter management is an extremely sensitive and critical function, and one which requires the best brains of the community. The person filling such a position must possess a high degree of executive skill, decisiveness, and leadership capabilities. The position in large shelters can be compared to that of a modern city

manager, since the shelter manager heads a temporary self-contained governmental unit, being legally appointed by the chief executive of the local government to exercise broad governmental authority within the shelter.

### Shelter Staff

Generally speaking, key staff members of any given shelter would include the following members: shelter manager, deputies, division and unit leaders (depending upon the size and organization of the particular shelter), members of the advisory committee, and persons in charge of functional groups, such as law enforcement personnel, radiological monitors, and others. (See type organization chart, figure 1.) Key shelter staff jobs demand a knowledge of civil defense operations as well as a specific knowledge of a specialty involved in the shelter program. They also demand that the persons performing these critical functions must have status in the community and possess administrative and leadership capabilities.

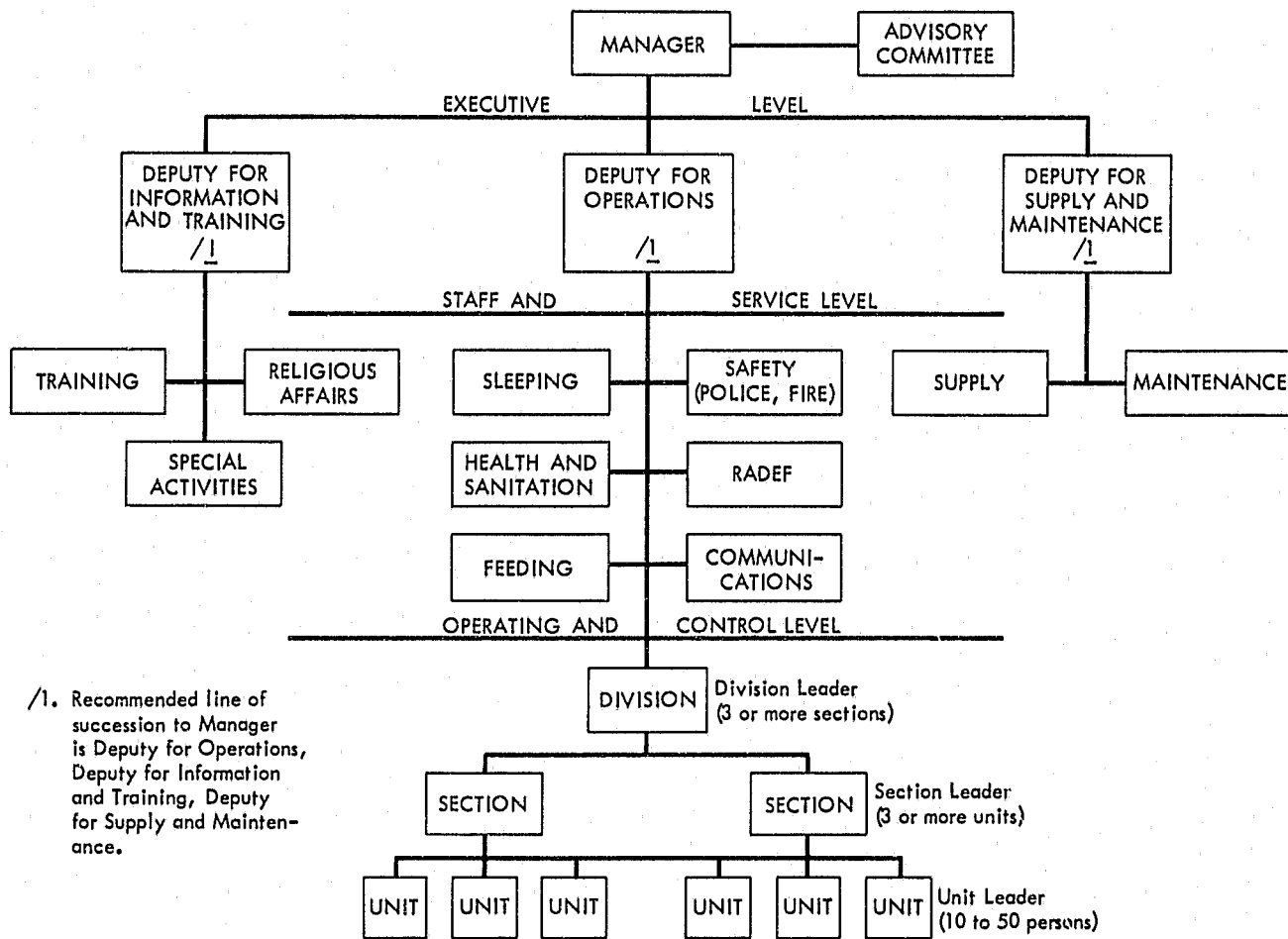
The head of the police unit within the shelter should be under the administrative supervision of the shelter manager, but should function in accordance with the policies, procedures and training provided by the police agency.

Ordinarily the head of the police unit will be the senior regular police officer present, or the senior auxiliary policeman if no regular is present. In some shelters there may be no police personnel present, in which case the shelter manager will need to designate one of the occupants of the shelter as head of the police unit.

### Police Shelter Duties

In general, the mission of police personnel within the shelter is to support the shelter manager and his staff by enforcing criminal laws and other lawful rules and regulations, and by implementing policy decisions of the shelter manager and his staff.

**EXAMPLE  
TYPE SHELTER ORGANIZATION**  
(Use Local Organization Chart if Available)



/1. Recommended line of succession to Manager is Deputy for Operations, Deputy for Information and Training, Deputy for Supply and Maintenance.

Figure 1

More specifically, these functions can be described as follows:

1. Maintaining law and order (protection of life and property, prevention of crime).
2. Providing for detention of prisoners.
3. Supporting and assisting shelter manager in—
  - a. Providing for quick entry of people into the shelter and directing them to appropriate locations.
  - b. Developing an emergency exit-from-shelter plan.
  - c. Preventing unauthorized entry to or exit from shelter.
  - d. Enforcing rules and regulations of the shelter.
4. Training selected shelterees in postattack police duties.

Other chapters in these training materials discuss some of these items in more depth. For example, see the chapter on "Detention Procedures" in Student Manual, part B.

In carrying out these broad responsibilities, the police officer in a shelter will carry on a variety of activities. The following description of these activities is suggestive, not exhaustive.

Fundamentally, the shelter activities of police personnel will be similar to the routine activities which they perform prior to entry into the shelter. They must maintain periodic selective patrols within the shelter; locate and if possible correct illegal or improper actions; and apprehend offenders (where other methods do not suffice). Police personnel should confiscate such items as weapons, flammable liquids, and narcotics, receipt for them and keep them in a place of safety. They should identify and report known criminals to the shelter manager and his staff as soon as possible after entry into the shelter.

Police personnel should advise the shelter manager on matters pertaining to law and order so that appropriate shelter action may be taken. Some typical examples are:

1. Hazards and potential hazards to health and safety of the shelter community.
2. Interpersonal and intergroup conflicts.
3. Potential troublemakers.
4. Deviates.
5. Persons exhibiting dangerous or potentially dangerous behavior.
6. Conditions threatening group morale, such as rumors or lack of respect for law and order, including shelter rules and regulations.
7. The need for additional specific rules, regulations, and policies relating to law enforcement.
8. Other developing or potential problems, such as overcrowding, poor ventilation, etc.

### Some Guiding Principles

The following principles are offered for the guidance of those carrying out law enforcement functions in shelters:

1. The police officer will need to keep in mind the distinction between his responsibility for enforcement of the law (including the regulations of the shelter manager and his staff), and the responsibility of the shelter manager and his staff for adjudicating cases and assessing penalties, if any.
2. The simpler the rules of individual and group conduct are, and the more they are based on group consensus, the easier will be the job of enforcing them.
3. The more unobtrusive and tactful enforcement methods are, the better. Heavy-handed or officious methods are apt to be self-defeating, particularly under shelter conditions. Most shelter populations will be relatively law abiding, but they will be living under conditions of discomfort and stress in which minor irritations and frictions can become serious issues if not handled properly.
4. Serious violations, such as assault, revolt against authority, etc., must be dealt with promptly and authoritatively.
5. Judicious patrolling will do much to enable the policeman and shelter manager to anticipate and prevent trouble.
6. Minor infractions of rules should be handled by leaders of groups of shelterees where possible rather than by law enforcement personnel, whose prestige and authority should be kept in reserve for more serious situations.
7. Major infractions should be brought to the attention of the shelter manager. Unless immediate sanctions are required, the shelter manager can submit such cases to his advisory committee for recommendations.
8. Such controls as denial of social and recreational activities, segregation from the groups, and assignment to work details, imposed and officially announced by the shelter manager, are effective punitive measures for minor infractions. Confinement should be used as a last resort and only for serious or repeat offenders. (Note the caution above regarding the limitations of the police officer regarding judging cases and assessing penalties.)

In short, the police officer is the eyes and ears of the shelter manager and his staff, and is depended on for constructive advice, intelligent information, and assistance, just as a city manager or mayor would depend upon his police chief under normal conditions to provide

him with information relative to the health, safety, and morals of a community. During a time of crisis such as a thermonuclear attack these responsibilities will be greatly expanded. An alert, energetic and intelligent police officer may make the difference between a controlled social situation and one which is disrupted and disorganized. The police officer is not an isolated entity within the shelter. He does not enforce the law

separate from and above the people within the shelter. He represents the people and is a member of a team.

NOTE: Through continuing study, the Defense Civil Preparedness Agency will attempt to refine in guidance to States and local governments, the role of the police (both regular and reserve) in a nuclear fallout situation and in the operation of a community fallout shelter system.

## PROTECTION OF PROPERTY AND PREVENTION OF LOOTING

The aftermath of a nuclear attack or natural disaster will produce conditions which will heighten individual and social disorganization. Such conditions will provide additional opportunities for disorderly and criminal activity. Some members of society, always looking for a chance to prey upon others, will take advantage of catastrophic situations to steal or destroy the property of others. Some persons, ordinarily law abiding, will attack or take from the weak, believing the survival or well being of family or friends to be superior to others' needs.

Under disaster conditions, police must be alert to prevent looting and other types of crimes against persons and property. Such police activity will not only be functioning during the mass movement of people to safety, but also during and after their return. Police activity for the protection of property and the prevention of looting will need to be vigorous because essential items such as food, clothing, fuel, etc., will be at a premium during a disaster period.

Members of the criminal element are always present, and this element will become particularly dangerous before, during, and after a disaster. Confusion and interruption of normal patterns of life will give them additional opportunities to commit crimes of theft, destruction, and violence. Indeed, under such conditions some normally law-abiding people lose control of their emotions and sense of judgment, and during a period of stress and excitement will disregard or violate laws, regulations, and the rights of others.

### Protection During the Warning Period and Return

Because time may be severely limited between a disaster warning and its onset, police attention will be primarily directed to the expeditious movement of people to safety during that period. However, this does not mean that an entire area will be immediately uninhabitable. The police and other emergency personnel may be able to conduct their operations for a time after the general population is evacuated. During the movement to shelters or relocation areas the police must

be especially alert to prevent vandalism, looting, and other acts which may occur and require police action.

After the movement of citizens to safety, police will be required to take measures for the protection of essential supplies, equipment, and other resources. For example, in highly developed business or commercial sections of a community where critical or valuable items are concentrated, it may be necessary to prevent or restrict entrance by the general public.

### Protection Within Shelter or Relocation Area

The auxiliary police officer assigned to a shelter must prevent theft and similar offenses within the shelter. In addition to the auxiliary's primary responsibilities (protection of life and property and enforcement of regulations) he must also assist the shelter or area manager and staff in such matters as organizing people, calming the frightened, and allaying fears. In short, he must insure the maintenance of law and order within the newly structured, temporary community.

### Protection After Return from Safety

When people return from shelters or relocation areas, security measures will be required immediately. This will be a critical period, since postdisaster operations will begin and cooperation among the citizenry will be of the utmost importance. The effective protection of people, facilities, supplies, and equipment will be vital. Vigorous patrol will be necessary to discourage looting and to prevent other types of crimes against persons and property. It may be necessary to install cordons around the highly developed business and commercial areas again. Law enforcement agencies will also be responsible for such activities as checking vehicles, providing general assistance to the public, and providing special protection for stores and storage facilities containing alcohol, narcotics, medical supplies, food, and other essential items.

One of the most heinous acts a person can commit is to loot or destroy the property of others when disastrous conditions prevail in a community or a nation.

Nevertheless, the officer still must function within the limitations of the law. While statutes of the several States will vary to some extent in language, in substance there is a great deal of similarity regarding larceny laws. All States have laws prohibiting larceny or stealing. Your instruction and subsequent lessons in this course will discuss the pertinent laws relative to this crime so as to give you some idea of the seriousness of the offense, particularly when it occurs under disaster conditions.

Ultimately, the most important factor in the prevention of looting (or any other crime) in a disaster emergency is the individual officer. If he faces his responsibilities with fortitude and intelligence his value to the community is immeasurable. The courage and calmness an officer displays under emergency conditions will do much to discourage and eliminate criminal acts, and to bring a measure of peace and security to the community.

## MODERN WEAPONS AND RADIOACTIVE FALLOUT

The general background on modern weapons and radioactive fallout gained by reading this chapter will assist you in understanding the means that a policeman can use to protect himself from the hazards of radiation. It will also prepare you to take a more active part in the classroom session which includes handling and use of radiological defense instruments.

Both the military forces and the civilian population of the United States may be endangered by the effects of modern weapons. Our country must prepare to defend itself against any weapon which might be used in an attack. There are four possibilities: conventional, chemical, biological, and nuclear.

### Conventional Weapons

Weapons which depend on TNT or similar non-nuclear explosives for their effectiveness are classified as "conventional." These include many of the weapon types used during World War II, the Korean war and Middle East conflicts—shells, torpedoes, rockets, missiles, mines, and bombs. Preparation for defense against nuclear attack is more than adequate to prepare for coping with conventional weapons; the converse is not true.

### Chemical and Biological Agents

Studies of the potential threat, conducted for the Defense Civil Preparedness Agency, indicate that chemical agents could be used overtly or covertly against the United States in the event of an attack. Chemical agents, however, are not considered a major strategic threat as they are effective mainly if used against tactical targets of limited area. These studies also indicate that biological agents are a potential threat for the future. Knowledge about practical application of biological agents is insufficient to indicate when, if ever, this threat might become a reality. Hence, research on methods of

detecting, identifying, reporting, and analyzing and defending against biological agents will continue. This potential threat is being kept under constant review.

## Nuclear Weapons

### Destructive Capabilities

A nuclear weapon is usually described in terms of the total energy it can release in comparison to the number of tons of TNT required to release the same amount of energy when exploded. Thus, the detonation of a 1-megaton (1-MT)<sup>1</sup> nuclear bomb releases the same amount of energy as the explosion of approximately 1 million tons of TNT.

The results of the World War II bombing attack on Coventry, England, and Hiroshima, Japan, can be compared. In the Coventry raid, the largest mass air raid on England, 437 aircraft dropped 394 tons of high-explosive bombs, 56 tons of incendiary bombs, and 127 parachute bombs. The results were: 380 persons killed, 800 injured. At Hiroshima, one bomber dropped one nuclear bomb. The results were: 70,000 killed, 70,000 injured. The weapon used in the Hiroshima raid was of the 20-kiloton (20-KT)<sup>2</sup> "A-bomb" class (equal in explosive force to approximately 20,000 tons of TNT). Yet, the Hiroshima bomb is now considered a weapon of limited power when compared to current thermonuclear weapons which can produce explosions equivalent to the explosion of many millions of tons of TNT.

A nuclear explosion releases a fairly large proportion of its energy in the form of light or heat. Its intense light and heat can cause skin burns and fires at great distances from the point of detonation. Powerful blast and shock are also produced.

Nuclear explosions alone among the various types of weapons produce nuclear radiation. The initial (immediate) nuclear radiation that accompanies the blast and heat wave is usually defined as the radiation occurring

<sup>1</sup> Megaton—(1 million tons).

<sup>2</sup> Kiloton—(1 thousand tons).

within the first minute after explosion. Its effects are limited to the immediate neighborhood of severe blast damage.

About 90 percent of the total energy released by a nuclear weapon appears in the forms mentioned above. The remaining 10 percent of energy is released as the residual nuclear radiation associated with the radioactive materials from the explosion. These materials and other debris are drawn upward into the ascending cloud, returning to earth as FALLOUT.

An enemy might use nuclear weapons in various ways, depending on the results he seeks. He must consider the systems for delivering the weapons, such as aircraft for dropping nuclear bombs or missiles armed with nuclear warheads. He must also consider the effects of various weapon yields and types of burst, because the power of an explosion and its point of detonation largely determine how much of an area would be destroyed, what types of partial or total damage would be inflicted, and how widespread the radioactive fallout and other secondary effects would be. For instance, a nuclear weapon may be detonated high in the air, or at the surface of land or water, or even after the weapon has penetrated below the surface.

An air detonation results in the formation of very small fallout particles which travel with upper level winds for long periods of time. When the particles drift down to earth, they are widely distributed and pose a relatively small radiation danger. However, detonations at or near the surface or land, or below the surface, result in "local fallout," which means that much larger particles are formed and a large fraction of them settle to earth during the first 24 hours. This early contamination near the burst and for many miles downwind is a far greater hazard than fallout released high in the air by an air detonation, which may take years to settle out.

#### Effects of the Explosion

The point directly beneath the center of a nuclear explosion is called ground zero. The surrounding land, objects, and persons would suffer varying amounts of damage, depending on their distance from that point and the size of the weapon. For weapons which burst at or near the surface, damage may be expected to vary generally with distance from ground zero. Closest to ground zero, destruction may be virtually complete with few survivors to be found. Moving away from ground zero, the probability of survival increases, while damage and destruction of structures tends to become less severe. The area of light but appreciable damage (shattered

glass, shingles blown off roofs) extends as much as 10 miles for a 5-MT burst.

The pattern of effects in an actual explosion would resemble a series of distorted, roughly concentric areas, never neat circles, because of interference of hills, and valleys, large buildings or other obstacles. As the altitude at which the bomb is detonated is increased, the areas of physical damage at first will increase and then decrease until at high altitude detonations the blast wave may not reach the ground and the predominant effect would be the thermal radiation.

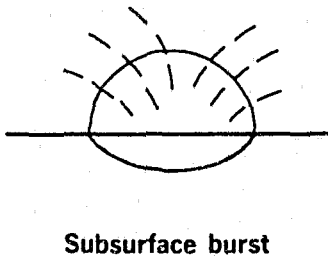
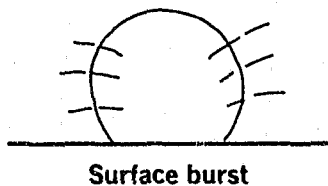
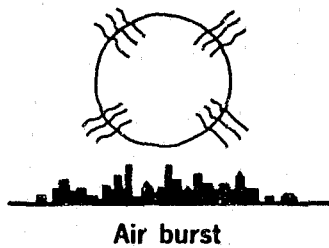
#### Fire Hazards

A large portion of the energy in the detonation of a nuclear weapon is given off as heat. This heat is intense enough, beyond the range of any physical damage to structures, to ignite "kindling fuels" exposed to it either outside or inside buildings through windows. Papers, fabrics, and thin or dry rotten wood are "kindling fuels." Fires in these materials may spread to heavier fuels—furniture, rooms, fences, porches, etc.—and then grow to involve entire buildings or groups of buildings in the absence of any attempts to extinguish the fires when small. In the presence of a ground wind the fires would merge and form probably several large moving fires or "conflagrations." These conflagrations would be similar to those which have swept through Chicago in 1871, Baltimore in 1904, the Maine forests in 1947, and the Bel Air section of Los Angeles in 1961. In the absence of a ground wind and in combination with several other factors—large congested area with many fires—a "fire storm" might develop. The fires merge into a large fire with a vertically rising column of hot gases and smoke. Strong inblowing winds are created which, in turn, fan the fire to a greater intensity. The conditions for this type of fire are believed to exist in only certain portions of a few American cities and are not regarded as serious a threat as thousands of individual fires and numerous conflagrations which could more likely occur. The spread of fires from a nuclear attack would be limited by barriers such as open space, rivers, wide expressways, rainfall, and distribution of burnable material. The number of fires that might initially occur from a nuclear attack could be significantly reduced by attention to proper maintenance of buildings and cleanup programs, and extinguishment of those individual fires that did occur while they were still small and easily controlled by simple measures.

An example of the possible effects are illustrated by the following description of a 5-MT surface burst. Other



## TYPES OF BURSTS



An **air burst** is defined as one in which the bomb is exploded in the air so high above land or water that the fireball (at maximum brilliance) does not touch the surface. Great blast and heat hazards are produced. The heat wave resulting from the explosion of a one-megaton nuclear weapon can cause moderately severe burns of exposed skin as far as 12 miles from the point of detonation. The warmth may be felt at a distance of 75 miles. Practically no early or close-in fallout is produced.

In a **surface burst**, the ball of fire touches the ground. Because of its intense heat, large amounts of rock, soil, and other materials will be vaporized and will rise up into the cloud. An important difference between a surface burst and an air burst is that in the surface burst the atomic cloud is much more heavily loaded with this vaporized material; therefore, a surface burst causes much more early radioactive fallout than an air burst.

A **subsurface burst** is one in which the center of a nuclear explosion occurs under the ground or under water. Underground or underwater shock is produced, and according to the depth at which the explosion occurs, some of the shock will escape to produce air blast. Much of the heat wave and immediate nuclear radiation is absorbed within a short distance by the ground or water. However, large amounts of earth or water near the explosion will be contaminated with radioactive materials.

Consider a one-megaton blast 50 feet underground. The resulting crater would be about 300 feet deep and 1,400 feet across. This means that 10 million tons of rock and soil would be hurled upward from the earth's surface.

FIGURE 1.—Types of bursts.

weapons of larger sizes are possible and detonations may be at various altitudes—all of which would change the effects from those listed in the following paragraphs:

#### Effects of a 5-Megaton Burst

A 5-megaton nuclear weapon explodes with a brilliant flash that lasts about a minute. A quick burst of nuclear and heat radiation emerges from the fireball.<sup>3</sup> The spurt of initial nuclear radiation can be lethal within a radius of 2 miles. The heat rays and immediate radiation are followed by a blast (shock) wave which loses much of its damaging force over a distance of about 10 miles. With the blast wave is a violent wind which picks up loose objects and carries them outward.

A 5-MT burst at ground level would leave a crater about one-half mile wide in the area of the explosion; it would destroy nearly everything within the radius of a mile from ground zero. It would also destroy most buildings 2 miles from the point of explosion, push steel-frame buildings sideways, and start fires.

The destruction 5 miles away would be less severe, but fire and early fallout could be significant hazards.

Ten miles away, most buildings would remain intact and fires would be started by the heat radiation. The blast wave could rupture gaslines and short circuit wires within houses and buildings, which would add to fire hazards. Flying glass and early fallout would also be major dangers.

Somewhat farther away, all buildings would remain standing. The fading blast wave would take longer to arrive, but would still shatter many windows. The most acute danger at these greater distances downwind from the explosion would be from early fallout, which might begin to arrive in some areas within one-half hour to a few hours, depending upon the distance and wind conditions at the time.

The blast, heat, and fire caused by a nuclear explosion could cause widespread destruction, but radioactive fallout would be a much greater hazard. It could spread over thousands of square miles, covering a much greater area than the area endangered by fire and blast, and sicken or kill unprotected people many miles from the point of detonation. Although only a small fraction of the total energy expended by a nuclear explosion is released as nuclear radiations, it is a highly important fraction. What, then, is radioactive fallout?

<sup>3</sup>The fireball is the large, swiftly expanding sphere of hot gases, producing brilliant light and intense heat, that is the first manifestation of a nuclear explosion. After about a minute, the fireball has cooled enough to lose its brilliance.

## The Nature of Fallout

In a surface burst, large quantities of earth or water enter the fireball at an early stage and are fused or vaporized. When sufficient cooling has occurred, the fission products and other radioactive residues become incorporated with the earth particles as a result of the condensation of vaporized fission products into fused particles of earth, etc. A small proportion of the solid particles formed upon further cooling are contaminated fairly uniformly throughout with radioactive fission products and other weapon residues, but in the majority the contamination is found mainly in a thin shell near the surface. In water droplets, the small fission product particles occur at discrete points within the drops.

As the violent disturbance due to the explosion subsides, the contaminated particles and droplets gradually fall back to earth. This effect is referred to as the "fallout." It is the fallout, with its associated radioactivity which decays over a long period of time, that is the main source of the residual nuclear radiations.

#### Time of Fallout Arrival

It takes time for fallout to drop from the nuclear cloud, even close to the burst, and the size of the particles is an important factor in determining the rate of its return to earth.

Significant amounts of fallout begin to arrive in the immediate vicinity outside a blast area about 30 minutes after an explosion. People some 20 miles away may have an hour to seek protection from the fallout. At a distance of 100 miles, the fallout may not arrive for 4 hours or more. The fallout will continue to cover an increasingly larger area, and may eventually cover several thousand square miles. Some areas that will receive fallout might not get it until 24 hours after the explosion, and lighter deposits of fallout may continue for many hours afterwards. Outside of areas affected by blast and heat, then, the earliest and most immediate serious danger following a nuclear attack could be from local fallout.

The time of fallout arrival at various distances and directions from the points of explosion (ground zero) depends on the winds and upon the height of the explosion. Layers of air move in various directions at different heights. Fallout distribution is determined primarily by high-altitude winds that often blow in a quite different direction from the ground level winds. In a 1954 test of an H-bomb, the fallout reached a point

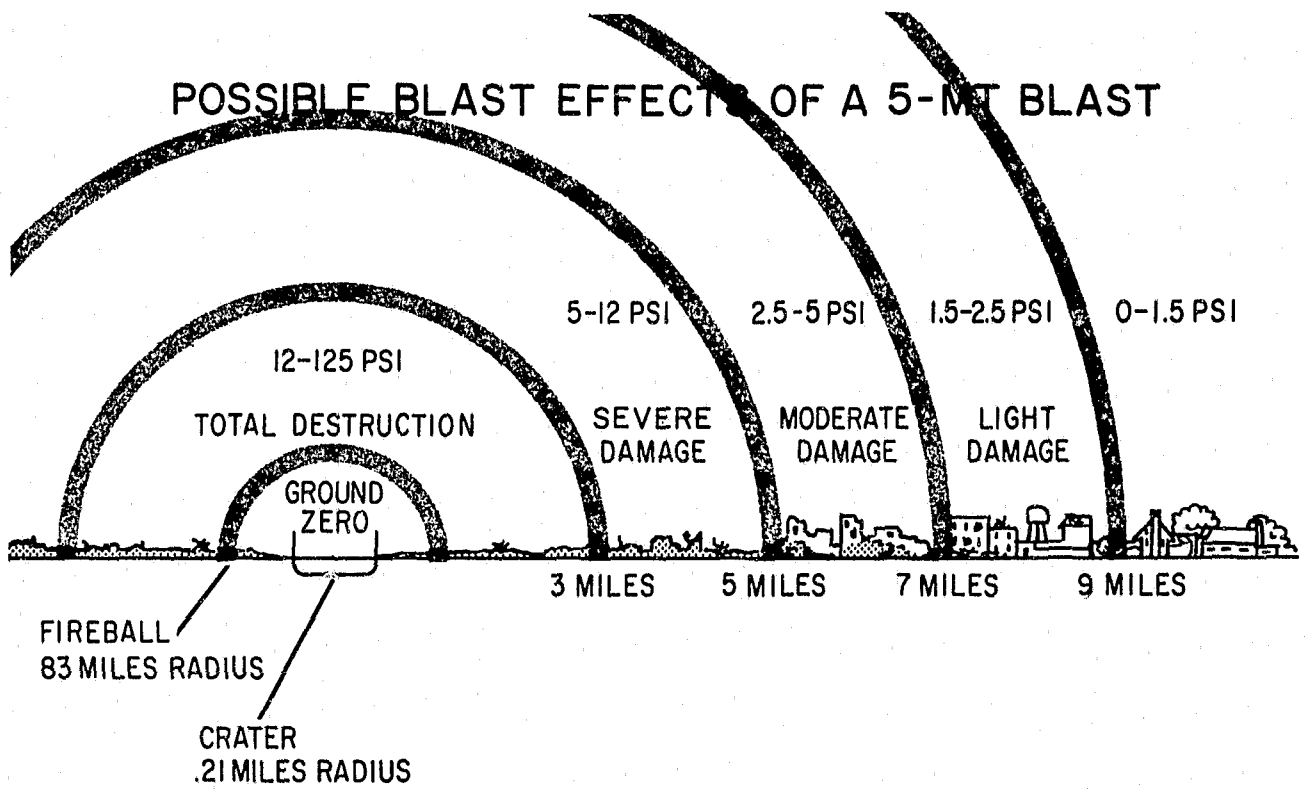


FIGURE 2.—Possible range of damage—surface burst.

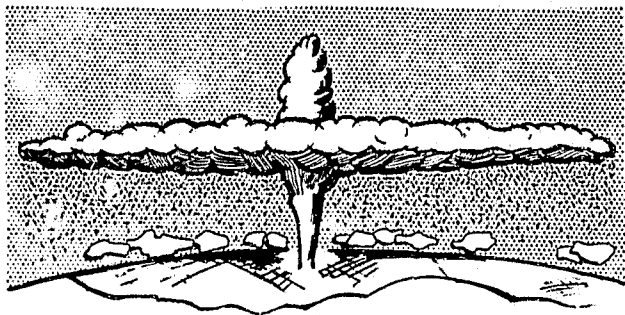


FIGURE 3.—General shape of a nuclear cloud and the fallout from it.

160 miles downwind about 8 hours after the explosion and continued to fall for several hours.

As much as 80 percent of the radioactive material from a land-surface burst of a nuclear weapon may return to the earth as early fallout within the first day, and will assume an irregular pattern stretching from the downwind neighborhood of the blast-damaged area. Early fallout descends so quickly and in such heavy concentration that the hazard from it is much greater than that of the widely distributed, slow-falling types of worldwide fallout. The remaining radioactive material rises high into the sky, is blown around the world by high winds and falls back to earth over a period of months or years.

Some peacetime tests of nuclear weapons have caused worldwide fallout. Quantities of radioactive isotopes have risen into the stratosphere and have come down slowly afterwards as very light fallout, creating fears of health hazards. It should be understood that slow-falling worldwide fallout resulting from a war waged with nuclear weapons would be much greater in quantity than the fallout from peacetime tests. However, the main concern should be protection against wartime close-in or local fallout.

#### Area of Severe Fallout

The region of severe local fallout lies downwind from the point of burst. It is impossible to predict with accuracy how large this area will be or what shape it will take because so many conditions can affect it. The area of severe local fallout might stretch 5 miles or more upwind of ground zero and 150 to 200 or more miles downwind depending on the strength of the wind and the bomb yield. The pattern could be irregular in outline, and fallout within the area might not be evenly distributed. There might be local or regional hot spots as well as other areas with very little fallout. These variations could result from differences caused by local hills, valleys, lakes, and streams or from wind, rain, and

other local weather conditions. Also, heavier deposit in central areas than at the periphery is the rule.

The extent and location of a fallout area and the levels of radiation in that area are determined by:

1. Altitude of the bomb burst.
2. Power and design of the bomb.
3. Size, shape and density of the fallout particles.
4. Atmospheric conditions such as air currents and the direction and speed of the winds, particularly those up to perhaps 80,000 feet.
5. Snow and rain.
6. Nature of the ground surface.

#### Electromagnetic Pulse (EMP)

To this point we have discussed the major effects of a nuclear weapon explosion as being blast, thermal (heat), ground shock, initial and fallout radiation. There is one more effect. It is sort of special. It is the Electromagnetic pulse effect or EMP. It is special because we don't have to concern ourselves about the effects on people. EMP is totally harmless to living things.

A nuclear detonation also emits electromagnetic radiation of longer wavelengths (lower frequency) than the infra-red and visible light of the thermal pulse. Most of this energy is radiated in the frequency bands commonly used for radio and TV. EMP is electromagnetic radiation of longer wavelength than infra-red and visible light of the thermal pulse.

Two kinds of damage would be caused by the electromagnetic pulse:

1. *Functional damage* requiring replacement of components or a piece of equipment.
2. *Operational* upset, a temporary interruption or impairment of electrical equipment. Such as the opening of circuit breakers or erasure of a portion of the energy of a computer.

The greatest significance to civil preparedness is functional damage since temporary interruptions of communications are not likely to be crucial.

Experiments have shown that civil preparedness radiation detection equipment, hand held walkie-talkies, and FM radio receivers are not susceptible to direct EMP effects. It has also been found that communications equipment employing bipolar transistors (tubes are even more resistant) with self-contained batteries and loop antennas are not particularly susceptible to EMP damage. Similar equipment with stick antennas less than 40 inches are not expected to suffer damage from EMP.

In summary. EMP radiation is a form of electromagnetic energy that is radiated in the frequency bands commonly used for TV and radio communications. There are two burst conditions of major concern with respect to EMP: (1) the surface or near-surface and

(2) the high altitude detonations. These two types of bursts produce the highest EMP intensities with detonations at altitudes between these conditions producing much lower intensities of EMP. The EMP is created by X and gamma radiation from nuclear weapon detonation.

In some cases damage from EMP can affect several thousand square miles, even several States could be subjected to EMP. The energy can be picked up by long conductors and delivered to sensitive communications equipment resulting in functional damage or temporary upset. The intensities of EMP can be expected in the thousands or tens of thousands volts-per-meter.

Steps that can be taken to avoid EMP from crippling communications are:

1. Provide and switch to emergency power.
2. Provide fast-acting gas-gap shunting devices.
3. Place equipment in a "shielded" room or enclosure.
4. Disconnect antennas and power plugs when not in use.
5. Bury transmission lines.

### The Nature of the Atom

All matter is made up of one or more simple materials known as elements. The total number of naturally occurring elements is 92. Among the common elements are the gases—hydrogen, oxygen, and nitrogen; the solid nonmetals—carbon, sulfur, and phosphorous; and various metals such as iron, copper and zinc. A less familiar element, which is used as a source of atomic (or nuclear) energy, is uranium, normally a solid metal.

The smallest part of any element that can exist, while still retaining the characteristics of the element, is an atom of that element. Thus, there are atoms of hydrogen, or iron, or uranium, and so on. The hydrogen atom is the lightest of all atoms, but the atoms of uranium are among the heaviest found in nature. The atom of one element is the smallest unit that can combine with the atom of another element to produce a chemical reaction. For example, common salt known as sodium chloride (NaCl) is a combination of one atom of sodium (Na) and one atom of chlorine (Cl). When atoms unite chemically, they form molecules; for example, one atom of oxygen is represented by the symbol O, but the normal oxygen molecule exists as a combination of two atoms, or O<sub>2</sub>.

### Atomic Structures

The atom contains three primary types of particles—protons, neutrons, and electrons. The inner core of the atom, called the nucleus, is composed of both protons and neutrons. The protons are electrically charged and are referred to as having a positive (plus) charge, whereas

the neutrons are not electrically charged. The only atom which is an exception to the above is that of ordinary hydrogen, which does not contain a neutron.

Electrons are very tiny particles that carry a charge of negative electricity. They surround the nucleus and can be thought of as revolving around it in about the same fashion that the earth and other planets revolve around the sun. Every atom can be pictured as a tiny "solar system". The "sun" of the atom is its nucleus and the "planets" of this sun, revolving in orbits around it, are the electrons.

### Radioactivity

The essential difference between atoms of different elements lies in the number of protons in the nucleus. A hydrogen atom, for example, contains only 1 proton; a helium atom has 2 protons; and a uranium atom has 92 protons. Although all the nuclei of a given element contain the same number of protons they may have different numbers of neutrons. The resulting atomic species, which have identical atomic numbers but which differ in their masses, are called "isotopes" of the particular element.

Radioactivity is the process whereby isotopes of certain elements spontaneously emit particles and/or rays from the nuclei of their atoms. Some elements are naturally radioactive, whereas others can be made artificially radioactive by bombarding the nuclei. Significant initial radiation from a nuclear explosion includes gamma radiation and neutrons. Significant later radiation (fallout) includes gamma rays and beta particles. Beta particles are high-speed electrons, and gamma rays are similar to X-rays although usually more penetrating than X-rays.

Natural radioactivity is characterized by the ability of certain types of atomic nuclei to decay spontaneously, giving off alpha, beta, or gamma radiations, or combinations of these. Radium, for example, is one of about 50 naturally radioactive atomic species.

In a nuclear explosion, various isotopes of many normally stable elements can be created. Although most are radioactive, they produce beta and gamma radiation.

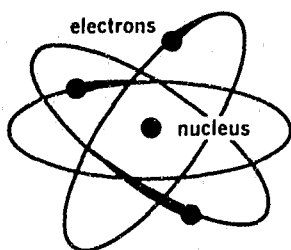
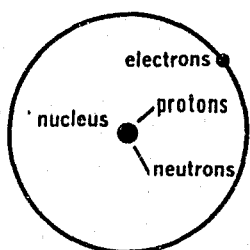
### Fission

Nuclear fission is the splitting of heavy atomic nuclei. The nucleus of an atom of a heavy element such as uranium may be split into two or more parts. This atom splitting is accompanied by the release of energy.

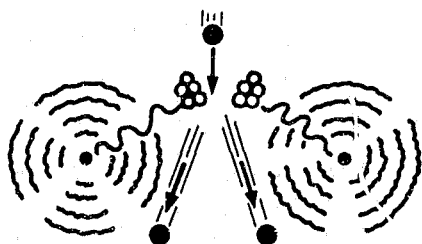
Self-sustaining fission reactions occur only with the heavy elements uranium, plutonium, or thorium. When a fissionable nucleus is split by a neutron, it releases energy and one or more neutrons. These released neutrons may split other fissionable nuclei, releasing

# NUCLEAR ENERGY

All matter is made up of atoms

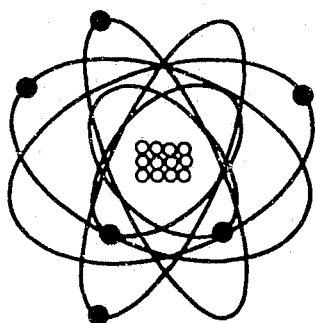


Energy is locked inside the heart, or nucleus, of an atom. The nucleus of every element except Hydrogen contains neutrons.

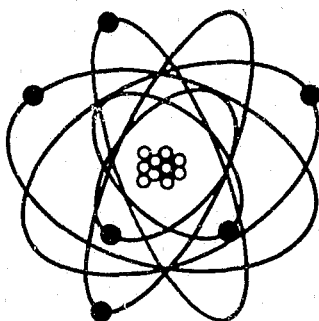


**FISSION.** In the process of "fission" (splitting), the atoms of some heavy element, usually Uranium, are broken into and divided. As each nucleus is split, neutrons break free and energy is released.

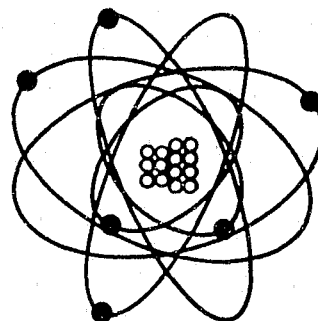
Carbon 12



Isotope  
(Carbon 10)



Isotope  
(Carbon 14)



During the process of fission, **isotopes** are created. Isotopes are forms chemically like normal elements but atomically different, in that they have a different number of neutrons.

FIGURE 4.—Nuclear energy.

more energy and more neutrons. In an atomic explosion this reaction becomes self-sustaining.

### **Fusion**

Nuclear fusion, on the other hand, is the joining together of light atomic nuclei to form a heavier nucleus. Such fusion can only be accomplished under conditions of very high temperature (millions of degrees). If two nuclei of light atoms fuse, the fusion is accompanied by the release of a great deal of energy. The energy of the sun, for example, results from the fusion of certain light atoms to form heavier ones. Much of the power from the so-called hydrogen bomb (H-bomb) results from the fusion process. Atoms formed by the *fusion process* are *not radioactive*; atoms formed by *fission process* are *radioactive*.

### **Detecting the Presence of Fallout**

Radioactive debris—fallout—may be of many sizes. Of course, the larger, heavier particles come down closer to the explosion. Particles the size of sand or table salt may be carried some miles downwind from the explosion. Smaller particles stay in the air much longer and travel much farther before reaching the ground. Whether or not the particles are visible, the nuclear radiation given off by them cannot be detected by the senses directly. The radiation from fallout cannot be seen, heard, smelled, tasted, or felt; instruments must be relied upon to detect and measure the radiation.

particles are on the body of the person or animal, instruments may detect nuclear radiation coming from that contamination but, if the fallout particles are removed, no radiation will be detected.

If radioactive fallout drops on a body of water, the water itself does not become radioactive. After the radioactive fallout has been removed the water itself is not radioactive. The same principle applies to water in storage tanks, or to food in cans or other containers. Mere exposure to radioactive fallout does not make the water or food dangerous.

### **Kinds of Radiation**

Fallout from a nuclear explosion emits beta particles and gamma rays.

Beta particles have a maximum range of only 10 to 12 feet in open air (average range 3 to 4 feet) but they do not penetrate materials easily. Several layers of clothing can protect the body. But if enough new fallout remains on exposed skin for some time (hours), the beta particles can cause severe burns. Some beta particle emitters have long half-lives, and if substantial amounts enter the body, some damage may result.

Gamma rays pose the greatest threat, since they are long range and extremely penetrating. They may be likened to a kind of invisible light to which all things are partly transparent. In contrast to the thin amount of material needed to stop beta particles, only 50 percent of the gamma rays are stopped or absorbed by about 17 inches of wood. In a fallout area the amount of gamma rays reaching the body can be reduced to acceptable levels by putting enough shielding (mass) between a person and the source of radiation. In general, the denser the material, the less thickness is required for shielding. If the shielding is thick enough and dense enough, it would cut gamma radiation to such a low level that it can do little harm.

### **Fallout Distribution**

The size and design of a nuclear weapon, type of burst, and wind condition chiefly determine the amount and distribution of radioactivity in a fallout area. Since these things can't be predicted, actual field measurements of nuclear radiation would be necessary following an attack.

Measurements of radiation levels are made at sheltered monitoring stations, where monitors can take quick readings outside of shelter, and by mobile monitors when levels are low enough to allow extended field activity. An area of high radioactivity may be monitored from an airplane.

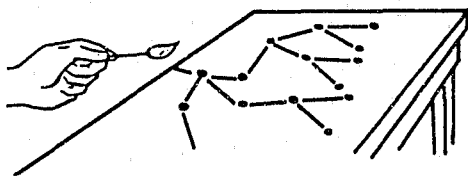
Radiation exposure is measured in units called the "roentgens" (pronounced "rent-kins"). It is named after W.K. Roentgen, the discoverer of X-rays, and is the measurement of X-ray or gamma radiation. A smaller unit often used is a milliroentgen, which is one-thousandth of a roentgen. Remember that the roentgen is a unit of radiation exposure.

## **Health Hazards from Radiation**

### **Internal and External Radiation**

During the early postattack period, external radiation is the primary problem and is the major concern in this section. However, radiation damage can result from either internal or external nuclear radiation. Consumption of heavily contaminated food and water could cause some internal radiation damage. This damage would be minor in relation to the external radiation danger.

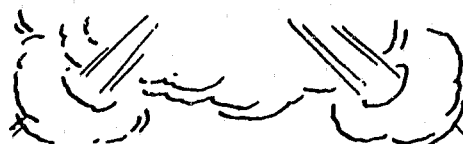
Food stuffs contaminated with fallout contain many different radioisotopes. Once inside the body, some of these isotopes are concentrated in specific organs,



The free neutrons released by each atom-splitting can, under certain conditions, cause the splitting of others, leading to what is called a chain reaction. It is like one match lighting two others, that in turn light others, and so on.



"A-bombs" (atomic bombs) are fission weapons. When conditions are just exactly right for a chain reaction, within an extremely small fraction of a second the reaction builds up within a very small space to release enormous amounts of energy. From a relatively small amount of material, there comes a tremendous explosion, many times more violent than is obtained from chemical explosives like dynamite.



**FUSION.** In nuclear fusion, a pair of light nuclei unite (or fuse) together, to form a nucleus of a heavier atom. An example is the fusion of the hydrogen isotope known as deuterium or "heavy hydrogen." Under suitable conditions, two deuterium nuclei may combine to form the nucleus of a heavier element, helium, with the release of energy. The fusion of all the nuclei present in one pound of deuterium would release roughly the same amount of energy as the explosion of 26,000 tons of TNT

FIGURE 5.—Nuclear energy.—Continued



**" I DON'T FEEL A THING ! "**

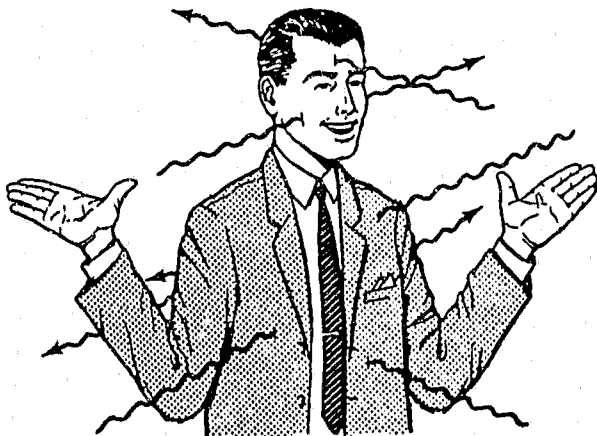


FIGURE 6.—Man being bombarded by "invisible" rays.

tissues, and bones. For example, iodine 131 concentrates in the thyroid gland. Strontium 90 behaves much like calcium and is deposited primarily in the bones.

#### Radiation From Natural Sources

Living things are exposed to radiation from natural sources every day. Natural nuclear radiation comes from radioactive rocks and soil; other radiation comes from far out in space. The individual sees nothing and feels nothing, but the radiation damages or destroys some of the body cells. The effects of an individual's health are not serious because very few cells of the body are involved.

Inside the body there are very small amounts of naturally radioactive materials (potassium 40 and carbon

14). Additional amounts are taken in through food, water, and air. Soil and rocks contain potassium 40 and uranium, thorium, and radium. Tiny amounts of these materials are taken into the body with food and water.

Small amounts of radiation can be received for medical purposes without significant harm. The average tuberculosis chest X-ray exposes the chest to an amount of between one-tenth to one-half roentgen. Even large amounts of radiation can be applied to limited areas of the body without being fatal. Cancer specialists often bombard a cancerous area with massive doses of radiation, destroying more cancer cells than normal cells.

During the average lifetime, every human being receives about 10 roentgens of radiation from natural sources.

#### Exposure to Radiation

When large amounts of radiation are absorbed by the whole body in short periods of time, sickness and death may result. In general, the effects of radiation exposure stay with people and accumulate over a period of time. Few people get sick who have been exposed to 100 roentgens or less. Exposure to more than 500 roentgens over a period of a few days will cause sickness and may cause death. And death is expected to ensue for almost everyone who receives an exposure of 600 roentgens over a period of a few days. The effects of similar exposures over a period of months or years are still under study, though in general, even a fairly large exposure of radiation absorbed over months or years is not as dangerous as when absorbed over a few days. In the former case, the body is able to repair much of the cell damage as it occurs.

The table below shows the effects of various amounts of short-term radiation exposure.

### PROBABLE RELATIONSHIPS BETWEEN BRIEF RADIATION INJURY AND ACUTE INJURY

Brief, whole, body gamma exposure	Type of injury	Medical care required	Able to work	Percent of mortality	Comments
12 to 50 R	Asymptomatic	No	Yes	0	
50 to 200 R	Acute radiation sickness, Level I	No	Yes	Less than 5 percent	Deaths in 60 days or more.
200 to 450 R	Acute radiation sickness, Level II	Yes	No	Less than 50 percent	Deaths within 30 to 60 days.
450 to 600 R	Acute radiation sickness, Level III	Yes	No	More than 50 percent	Deaths in about one month.
More than 600 R	Acute radiation sickness, Levels IV and V	Yes	No	100 percent	Deaths in two weeks or less.

### Radiation Sickness Not Contagious

Persons and animals exposed to large amounts of radiation will develop radiation sickness. *Radiation sickness is neither contagious nor infectious; a person cannot "catch it" from others.* People or animals suffering from radiation sickness can be helped without fear of "catching" radiation injury from them. However, a person or animal with "radiation sickness" could be suffering from a massive infection, and should be treated accordingly.

## YOU CANNOT "CATCH" RADIATION SICKNESS FROM VICTIMS



FIGURE 7.—Giving aid to a victim of radiation sickness.

Again, fallout radiation cannot make anything radioactive. Food and water that have been exposed to fallout radiation are contaminated only to the extent that they contain fallout particles or dissolved radioactive material. Exposed food that may have particles on it should be washed, brushed, or peeled. Fallout particles can be removed from water supplies by sedimentation or filtering. People who have fallout particles on their bodies or clothing probably would not carry enough to endanger other people, but they should clean themselves for their own protection.

### Radiation Sickness

People may show symptoms of radiation sickness if they have received an exposure of from 100 to 550 or more roentgens. Such symptoms as nausea, vomiting, or diarrhea, may appear in the first day or so, then about a week may pass before other symptoms appear. These later symptoms may include loss of weight, loss of appetite, bleeding, discolored spots on the skin, paleness,

redness, swollen mouth and throat, and general discomfort.

Symptoms of three degrees of radiation sickness are: *Mild*—the especially sensitive person will show some nausea, lack of appetite, and fatigue within a few hours after exposure. He should rest but can continue normal activities. Recovery will be rapid. *Moderate*—the same symptoms appear, but well within 2 hours of exposure, and more markedly. Vomiting and even prostration may occur. By the third day, recovery may seem complete, but symptoms may recur in the next few days or weeks. *Severe*—again all the early symptoms show up and may vanish after a few days. But after a week or more, fever, mouth soreness, and diarrhea may appear; gums and mouth ulcerate and bleed; and, in about the third week, the patient's hair may start to fall out. Recovery may take 7 to 8 weeks. When exposure has been overwhelming, death comes in hours.

Symptoms should be treated in this way: General rest. Aspirin for headache. Motion sickness tablets for nausea. Liquids for diarrhea and vomiting, but not until vomiting has stopped (ideally, 1 tablespoon of table salt to 1 quart of cool water, to be sipped slowly). This solution can be used as a mouthwash for sore mouth.

It is important to remember that certain of the symptoms may also appear in people who do not have radiation sickness at all. Symptoms such as nausea, lack

## RADIATION SICKNESS

Early Symptoms: Nausea, Vomiting, Diarrhea

Later Symptoms: Loss of Weight, Appetite  
Bleeding  
Discolored Spots on Skin



FIGURE 8.—Radiation sickness symptoms.

of appetite, and fatigue may be seen in persons subject to extreme anxiety and emotional stress.

### Individual Exposure

Exposure to radiation of individuals should be kept as low as possible. This would be done in the immediate postattack period by using the best available shelter for the period of time necessary to ensure survival. If it becomes necessary to leave shelter for essential items, the exposure rate and the time of exposure will determine the amount of radiation that an individual receives. A simplified method of calculating exposure would be to multiply the exposure rate by the time of exposure (e.g., 3 roentgens per hour times 4 hours equals 12 roentgens). Generally, individuals should obtain guidance on permissible exposure from their local civil defense officials.

### Median Lethal Exposure

A measuring point for the effects of extreme whole-body exposure that is often used is called the *median lethal exposure*. It is the radiation exposure delivered over a short period of time that is expected to kill 50

percent of exposed persons (or animals) within about a month. An acute exposure is that received when the whole body is exposed for a short period of time—up to about a week. About 450 roentgens (acute exposure) is the estimated median lethal exposure for man, as compared to about 325 roentgens for dogs or 800 to 900 for rats.

### Radioactive Decay

Radiation rate or intensity from fallout decreases with time—that is the radiation level, as measured in roentgens per hour, drops lower and lower. This falling off is known as radioactive decay.

The “half-life” of a radioactive element is the time that it takes for a given amount of the isotope to decrease in radioactivity to half its original value. For instance, a form of cobalt (cobalt 60) has a half-life of about 5 years. This means that a measurement of 200 R/hr., if repeated 5 years later, would have fallen to about 100 R/hr.; 5 years after that it would have fallen to about 50 R/hr., and so on.

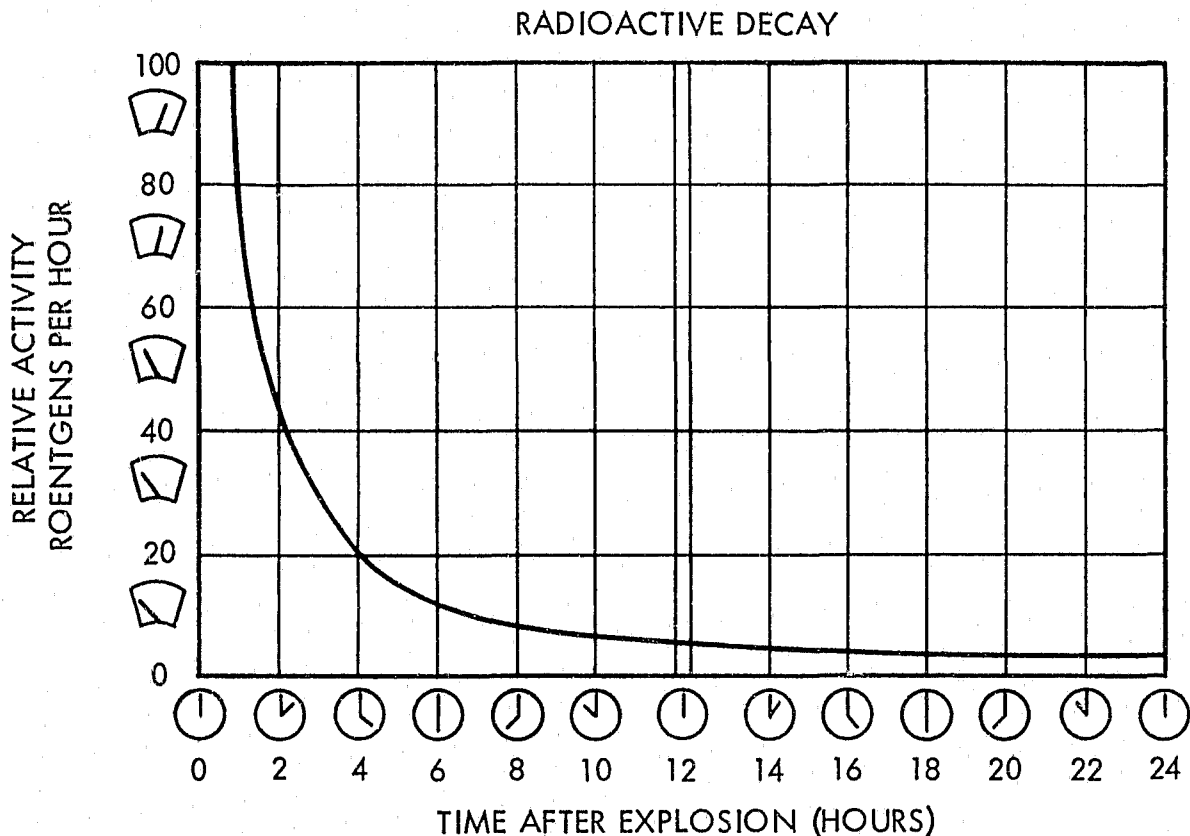


FIGURE 9.—Radioactive decay chart.

Each radioactive isotope has a different half-life, and this ranges from a small fraction of a second to billions of years. The passage of seven half-lives of a radioactive isotope decreases its radiation level to about 1 percent of its initial radiation level. The passage of 10 half-lives decreases the radiation to about one-tenth of 1 percent of the initial radiation.

The mixture of isotopes formed after a nuclear burst—the mixture that makes up fallout—is so complex that it is not possible to calculate the exact decay rate. However, from experimental measurements, a rough approximation indicates that for each sevenfold increase in time, the radioactivity of the mixture found in fallout drops to about one-tenth of its former value. In general, the radioactivity at 49 hours after the explosion will have dropped to about 10 percent of its amount at 7 hours. Within about 2 weeks, the radioactivity can be expected to decay by another factor of 10. But even this level of radiation can be dangerous if there is a heavy concentration of fallout, and the decay rate may differ in some cases.

#### **Decay Cannot Be Speeded Up**

It must be emphasized that the nuclear radiation in fallout cannot be destroyed. Neither boiling nor burning, treatment with chemicals, nor any other action will destroy or neutralize radioactivity. Because of radioactive decay, fallout will become less harmful with the passage of time, but there is no known way to speed up the decay process. Fallout cannot be made harmless quickly. However, fallout can be removed from many contaminated surfaces.

### **Protective Measures Against Radiation**

Protection from external radiation exposure is a combination of three things: Time, distance, and shielding. That is, a person may protect himself by:

1. Shielding (shelter).
2. Distance (decontamination, movement).
3. Exposure control (combination of 1 or 2 above with time-scheduled exposure).

In a fallout area, shielding is the only dependable means of protection. People within a well stocked shelter have placed mass between themselves and the source of radiation, and they should remain behind this mass until the radiation has decayed to levels permitting activity outside of the shelter.

#### **Defense Against Fallout**

Persons seeking shelter after a nuclear attack should remember that the introduction of radioactive material into shelter areas can be minimized by such ordinary precautions as closing doors and windows. Unnecessary movement in and out of shelters should be avoided whenever there is a possibility that fallout is near. Prolonged contact with fallout material is hazardous.

Following a nuclear attack the air would be contaminated by radioactive fallout to the extent that it contained fallout particles. The most hazardous fallout particles—early fallout—would reach the earth in the first day after the detonation, but their mere passage through the air would not contaminate the air. Some radiation will probably penetrate all shelters, but fallout particles in harmful amounts should be and can be kept out of shelters. People in underground shelters could keep fallout particles out of their shelters by having a simple hood over the air-intake pipe. Special filters are not needed for small basement family shelters. However, group shelters that have high velocity air-intake fans might need filters on the air-intake system to keep fallout particles out.

#### **Special Clothing Offers Little Protection**

Fallout gamma radiation would pass through any type of protective clothing that would be practical to wear. Heavy and dense materials such as earth and concrete are needed to stop the highly penetrating gamma rays. Tightly woven outer clothing could be useful—particularly for emergency workers—in keeping fallout particles off the body, but the wearer would not be protected from the gamma radiation given off by the particles. The worker would wear the outer clothing when in a fallout contaminated area and then leave it outside or brush or wash it thoroughly before entering a noncontaminated area.

#### **No Special Antiradiation Medicines**

Many experiments have been conducted to develop a special medicine to protect against the effects of radiation. Thus far, there seems little likelihood that a pill, or any other type of medicine, will soon be developed that can protect people from the effects of fallout radiation.

#### **Decontamination**

Contamination is the deposit of radioactive material on the surface of structures, area, objects, or people following a nuclear explosion.

Decontamination is the reduction or removal of contaminating radioactive fallout from a structure, area, object, or person.

### Self-decontamination

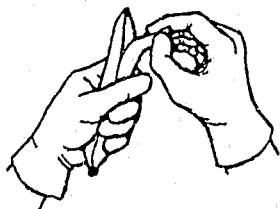
Contamination could be caused by fallout material settling on persons outdoors while fallout was descending or by entering a very dusty area after fallout had ceased.

Self-decontamination should be accomplished only after a person has assured himself that he is protected from the far greater hazard of the fallout field of radiation in his area. Therefore, if one is caught in the open when fallout begins he should immediately seek shelter and then remove any contamination from his person by brushing, shaking or washing as appropriate under the circumstances. Some community shelters may contain a decontamination area in which showers would be available and a change of clothing might be appropriate. In most cases simple wiping or washing of hands, face, and clothing, would reduce the contamination to insignificant levels.

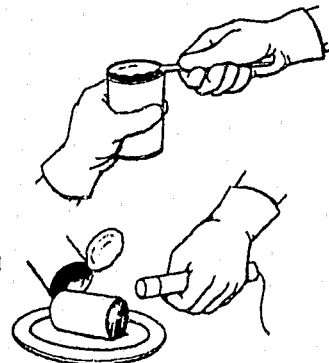
### Decontaminating Food and Water

It is unlikely that food and water inside a building would be sufficiently contaminated to be dangerous to eat or drink. If food supplies do become contaminated many types of food can be treated to remove the radioactive material. Fresh fruits and vegetables can be washed or peeled to remove the outer skin or leaves. Food in cans, covered jars or closed containers such as plastic bags can be decontaminated by washing or wiping the material off the container. The contents would not be contaminated. Similar cleaning methods appropriate to the type of food involved would in most cases be sufficient.

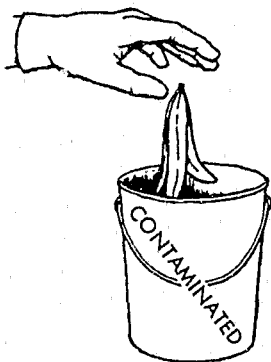
Water supplies in the home (water heater or toilet tank) or shelters would not require decontamination. However, there is a possibility of contamination of public water supplies. Serious contamination of public water supplies is unlikely. Should this occur, however, a water softener in the home is an effective method of decontamination, as is distillation, when practical. It should be noted that mere boiling of water contaminated with fallout is of absolutely no value in removal of



Contaminated fruits and vegetables may be eaten safely if the contaminated skins or outer layers are carefully removed and discarded.



If contaminating fallout has settled on the outsides of cans or other containers, the food within may be eaten safely if it is carefully removed. If possible, the removed food should be checked for radioactivity.



Place discarded outer skins and containers in a can marked "CONTAMINATED" and place this can where it will not expose people to radiation from the discarded materials.



FIGURE 10.—Decontaminating food.

the radioactivity. It is of interest also, that the regular water treatment (coagulation, sedimentation, filtration) by public authorities will remove most of the contaminated material.

#### **Area Decontamination**

The decontamination of buildings, streets, and equipment, might be necessary before an area could be used for its intended purpose. Civil defense authorities would undertake this type of decontamination operation. Since radioactive contamination is similar to dirt, its removal by water or sweeping could be done by fire department or public works personnel using their day-to-day operation equipment. Many communities have organized decontamination teams for this purpose.

For the individual who might have occasion to decontaminate in his home, common methods of cleaning could be used. Thus, brooms, or vacuum cleaners might be useful. But this should be undertaken only on instructions from local authorities.

#### **Measurement of Radiation**

As mentioned previously, the unit of measurement for gamma radiation exposure is roentgens or milliroentgens.

In evaluating the effect of nuclear radiation on living things, we are concerned not only with total amounts of radiation received, that is the exposure, but also with the exposure received within a given amount of time—the exposure rate. We want to know not only how much the total exposure is, but also how fast the exposure is building up.

Total accumulated radiation exposure, or total exposure, is expressed as so many roentgens. The rate of radiation exposure at a place of interest is expressed as roentgens per unit of time (usually roentgens per hour). This is sometimes called radiation intensity, or radiation level, but more often "exposure rate." Because the human senses cannot detect nuclear radiation, special instruments have been developed to measure it. These devices are either ratemeters or dosimeters.

A ratemeter will indicate the intensity of the radiation. It is analogous to a speedometer in a car except that it measures roentgens per hour rather than miles per hour. Thus, an indication of whether to leave the shelter

for a brief period can be obtained from a ratemeter reading made outside the shelter. The dosimeter can be used to show the total amount of radiation to which a person has been exposed during an emergency period. It is analogous to a mileage indicator in a car, but it measures total roentgens rather than miles.

#### **Relation of Federal, State, and Local Monitoring**

Wind currents determine where fallout would be deposited as the result of a nuclear attack. Therefore, in the event of an emergency the U.S. Weather Bureau would prepare and issue forecasts and estimates of areas likely to be covered by fallout to States and territories. These forecasts can be used to predict where fallout is likely to be deposited and approximately when it will arrive there. The intensity of fallout radiation, however, would not be predicted. Intensity can be determined only after the attack when measurements will be made with instruments.

DCPA has established a monitoring station network where radiological monitors and monitoring stations are integrated into the National system for detecting, measuring, and reporting fallout radiation levels.

Each community should have an Operational Radiological Monitoring Station with trained monitors assigned, and at least one instrument kit per station. If the community is a large one, it should have monitoring stations spaced in grid-like intervals of approximately two or three miles.

#### **Radiological Monitoring in Community Shelters**

Most community shelters are equipped with radiological monitoring kits that contain dosimeters, survey meters, and instruction booklets for their use. Many communities have trained and assigned radiological monitors to these shelters.

Some community shelters will be selected to serve as monitoring and reporting stations. Such stations will evaluate and report the radiological situation in the shelter and also will measure and report unsheltered exposure rates to the local area Emergency Operating Center.

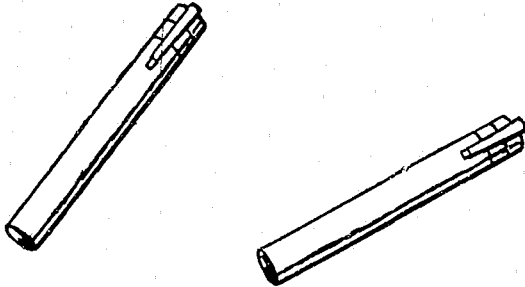
A Radiological Defense (Radef) Officer, serving in the local Emergency Operating Center, directs the technical operations of radiological monitors in the selected monitoring and reporting stations.

# NUCLEAR ENERGY

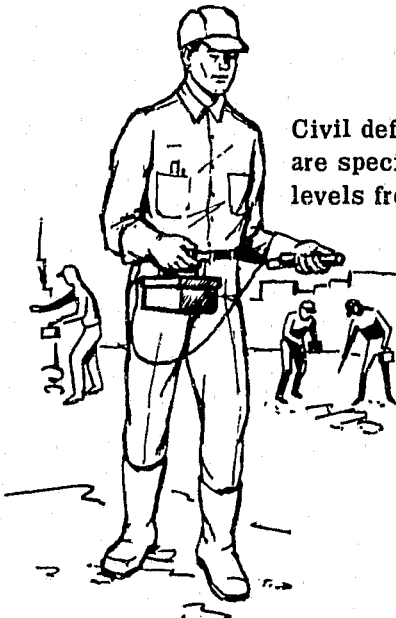
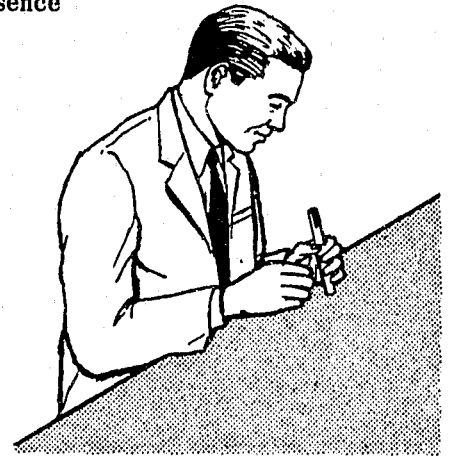
## DETECTING NUCLEAR RADIATION

DETECTING NUCLEAR RADIATION  
YOU CAN'T SEE IT — HEAR IT — SMELL IT —  
FEEL IT — TASTE IT

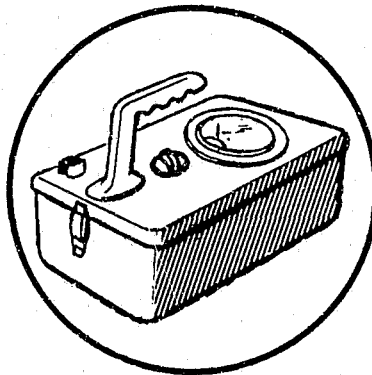
instruments are needed to detect its presence



DOSIMETERS measure total radiation exposure (roentgens or "milliroentgens" — a milliroentgen is 1/1000 of a roentgen)



Civil defense Radiological Monitors are specially trained to read radiation levels from these instruments



SURVEY METERS measure exposure rate (roentgens or milliroentgens per hour)

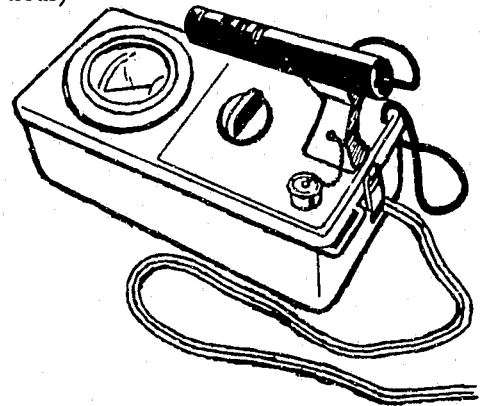
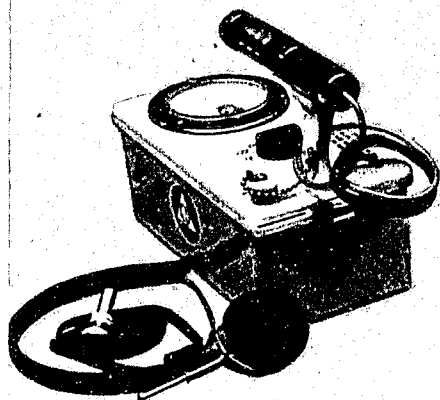


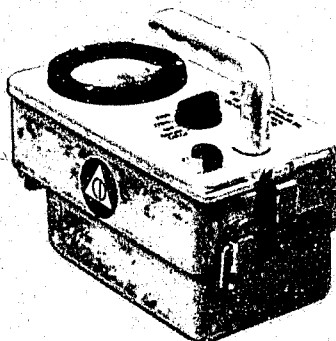
FIGURE 11.—Detecting radiation.

## RADEF MONITORING SUPPORT SET (CD V-777A)

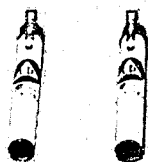
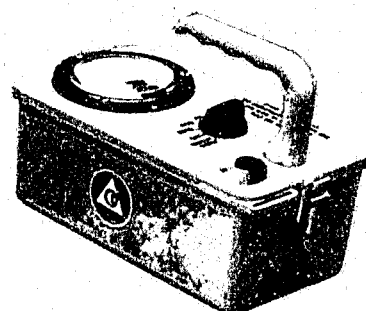
GEIGER COUNTER  
CD V-700



REMOTE ION CHAMBER  
CD V-717



ION CHAMBER  
CD V-715



DOSIMETERS  
CD V-742

DOSIMETER CHARGER  
CD V-750

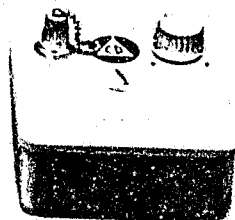


Figure 12.—Radiation detection instruments.



## TYPICAL CODE OF ETHICS

As a law enforcement officer, my fundamental duty is to serve mankind; to safeguard lives and property; to protect the innocent against deception, the weak against oppression or intimidation, and the peaceful against violence or disorder; and to respect the constitutional rights of all men to liberty, equality, and justice.

I will keep my private life unsullied as an example to all; maintain courageous calm in the face of danger, scorn, or ridicule; develop self-restraint; and be constantly mindful of the welfare of others. Honest in thought and deed in both my personal and official life, I will be exemplary in obeying the laws of the land and the regulations of my department. Whatever I see or hear of a confidential nature or that is confided to me in my official capacity will be kept ever secret unless revelation is necessary in the performance of duty.

I will never act officiously or permit personal feelings, prejudice, animosities, or friendships to influence my decisions. With no compromise for crime and with relentless prosecution of criminals, I will enforce the law courteously and appropriately without fear of favor, malice, or ill will, never employing unnecessary force or violence and never accepting gratuities.

I recognize the badge of my office as a symbol of public faith, and I accept it as a public trust to be held so long as I am true to the ethics of police service. I will constantly strive to achieve these objectives and ideals, dedicating myself before God to my chosen profession . . . law enforcement.

Source: Adopted 1956, The Peace Officers' Association of the State of California.

## TYPICAL APPLICATION FOR CIVIL DEFENSE AUXILIARY POLICE SERVICES

Please print or type all answers

Name ----- (Last) ----- (First) ----- (Middle) -----  
 Address ----- Zone -----  
 Telephone ----- Occupation -----  
 Working Hours ----- Employer -----  
 Business Address -----  
 Age ----- Birthdate ----- Marital Status -----  
 Height ----- Weight ----- Do You Have Any Physical Defects: Serious Overweight,  
 Amputations, Epilepsy, Etc.? Explain -----  
 -----  
 Distinguishing Marks or Scars -----  
 Color of Hair ----- Color of Eyes -----  
 Military Service: Yes ----- No ----- Branch ----- Date of Discharge -----  
 Present Military Reserve Affiliation, If Any -----  
 -----  
 Have You Ever Been Convicted of a Felony? -----  
 Explain -----  
 References (Names of Two (2) Reputable Citizens Who Know of Your Character and Are Not Related to You).  
 Name ----- Address ----- Occupation -----  
 Name ----- Address ----- Occupation -----

\* \* \* \* \*

*I hereby acknowledge my complete understanding that the standby law enforcement assignment I am volunteering for carries with it the requirement that I will, without question, obey and execute to the best of my ability the legal orders of those designated to supervise and command my activities; that I am to complete all assigned training courses; and that any violation or disregard of the rules and regulations of my organization will be cause for disciplinary action or dismissal. Furthermore, I understand that any false statements intentionally made in my application disqualifies me for membership in the ----- Department Civil Defense Auxiliary Organization.*

SIGNED: -----

DATE: ----- 19-----

Source: Adapted from form used by Milwaukee Police Department.