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BASIC CIVIL DEFENSE

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Executive Office of the President

OFFICE OF CIVIL AND DEFENSE MOBILIZATION

(This Guide is a major revision of, and replaces, an earlier FCDA Instructor's Guide entitled, "Basic Course for Civil Defense," issued February 1955.)

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INTRODUCTION

The purpose of this guide is to help instructors teach the fundamental principles of civil defense to personnel responsible for performing emergency functions in case of enemy attack or disasters. The course is introductory, and is intended for personnel of Federal, State, and local governments and their auxiliary volunteer manpower reserves—who will be operating under *The National Plan for Civil Defense and Defense Mobilization.*

The course is concentrated on civil defense aspects and does not include many of the other responsibilities of the Office of Civil and Defense Mobilization and other agencies.

The course includes personal, family, and neighborhood protective measures as well as emergency operational functions.

Title: Basic Civil Defense.

Time: 10 hours.

Recommended number per class: 20 to 25.

Recommended for: Personnel responsible for performing emergency functions in case of enemy attack or disasters.

Prerequisites: None.

This guide is a major revision of, and replaces, an earlier FCDA Instructor's Guide entitled, *Basic Course for Civil Defense,* issued February 1955.

LESSON PLAN TITLES

		Hours
1.	The Role of Civil Defense in National Survival	1
2.	Civil Defense Organization and General Functions	1
3.	Section I— Effects of Nuclear Weapons Section II— Effects of Conventional, Chemical, and Biological Weapons	2
4.	Section I— Principles of Protection Against Nuclear Warfare Section II— Principles of Protection Against Conventional, Chemical, and Biological Warfare Section III—Principles of Individual and Family Protection	2
5.	Civil Defense in Natural Disasters	1
6.	Emergency Functions of Individuals	1
7.	Emergency Functions of Governments	2

The course in *Basic Civil Defense* is eligible under the Federal Contributions Program and is listed as a prerequisite for skills training courses specified in Chapter 7 of the FCDA (OCDM) *Federal Contributions* Manual, AM25-1.

Although the course is designed to be taught in five 2-hour sessions, the time spent on individual topics and the scheduling arrangements may be adapted to meet the needs of individual groups.

INSTRUCTOR QUALIFICATIONS

Instructors of the course in *Basic Civil Defense* should have demonstrated teaching ability and a thorough knowledge of civil defense plans and policies, as outlined in *The National Plan for Civil Defense and Defense Mobilization.* They should be graduates of the FCDA (OCDM) *Civil Defense Instructor's Course No. 3.3* or have equivalent experience. Professional teaching experience is desirable.

INFORMATION FOR INSTRUCTOR

The information outlined in the lesson plans is needed by all persons responsible for performing emergency functions in case of enemy attack or disasters. The *main topics* of each lesson have been expanded into *teaching points* that include information necessary for conducting the course. However, it is recommended that each lesson plan be supplemented by appropriate reference material and suitable examples and illustrations adaptable to the locality.

INSTRUCTION AIDS

Instructor's Guide (OCDM IG–3–2, rev.)

Lesson Plans: The lesson plans are guides to orderly step-by-step instruction.

Material in boldface type: Material in boldface type is information that should be especially emphasized in class discussion.

Material in italics: Material in italics is for the information and guidance of the instructor and is not part of the presentation to the class. This material is shown in parentheses.

TRAINING MATERIALS

Training materials listed in the lesson plans are aids to instruction but are not always essential for conducting the course. However, it is recommended that films and other visual aids such as charts and blackboards be used for more effective instruction.

The motion pictures cited in this Guide are 16 mm. films that are generally obtainable through your State Government Office of Civil Defense. Reference publications are also generally obtainable through the same source. An exception is *The Effects of Nuclear Weapons,* published by the U.S. Atomic Energy Commission. Paperbound copies of that publication are for sale, at $2.00 each, by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

"Federal Civil Defense Administration (FCDA)" on publications of the new OCDM will be changed to "Office of Civil and Defense Mobilization (OCDM)" as the publications are revised.

Certain charts, such as the *OCDM Organization Chart* in Lesson Plan No. 2, and *Responsibilities in Natural Disasters* in Lesson Plan No. 5, can be used effectively by passing out copies to each member of the class. Other charts, such as the damage zones shown in figures 3, 4, 5, 6, and 7 in Lesson Plan No. 3, can be used more effectively if presented to the class as wall charts or on an easel. Each recommended chart has been designed and prepared for distribution according to its intended use.

INSTRUCTION SUGGESTIONS

1. The instructional material is organized for presentation at five 2-hour sessions. Although the length of the sessions may be adapted to the needs of each group, two hours is generally considered maximum length. Provision should be made for a short rest period or break in each session.
2. The course may be reduced or extended in length as required. For example, a session may be extended over more than one meeting if the class requires it.
3. Every member of the class should be encouraged to express himself on the civil defense problems discussed, but do not hesitate to bring discussions to an end, as the allotment of time for each subject is limited.

4. Master the lesson content and delivery as thoroughly as possible before each class presentation, but if you do not know the answer to a question, do not hesitate to admit it. If the question is applicable and worthy, try to find the answer and present it at the next session.
5. Use the lesson plans judiciously to:
   a. Provide for maximum student interest.
   b. Orient the teaching to job requirements of the locality.
   c. Emphasize key points by repetition and different methods of presentation.
   d. Introduce training aids at the appropriate time.
   e. Adapt the information of each lesson to practical problems and situations of the community.
6. Apply the following steps in using training films:
   a. Preview the film and prepare to answer questions and clarify misconceptions that may arise.
   b. Prepare for showing the film by appropriate introductory remarks, and by checking the time and facilities available for its effective use.
   c. Show the film and call attention to significant points. Parts of the film may be reshown for emphasis.
   d. Following the film showing, summarize the important points through appropriate discussion and questions.
7. Make liberal use of referenced publications to broaden your information and understanding of civil defense—particularly *The National Plan for Civil Defense and Defense Mobilization.*

LESSON PLAN NO. 1

COURSE: Basic Civil Defense—OCDM No. 3.2

LESSON TITLE: The Role of Civil Defense in National Survival

TIME: 1 hour

TRAINING MATERIALS:

Blackboard, chalk, and eraser.
Film "Your Civil Defense" (rev.), 16 mm. motion-picture projector, and screen.

REFERENCES:

Executive Order No. 10773, July 1, 1958.
National Plan for Civil Defense and Defense Mobilization, The.
Public Law 920, 81st Congress, *Federal Civil Defense Act of 1950,* as amended.
Reorganization Plan No. 1 of 1958.

OBJECTIVES:

1. To develop an awareness of the nature and gravity of the threat to national survival.
2. To develop an understanding of civil defense, including historical and legal concepts concerning it.
3. To discuss civil defense responsibilities of existing governments, individuals, and families, as provided in *The National Plan for Civil Defense and Defense Mobilization.*

MAIN TOPICS	TEACHING POINTS
A. INTRODUCTION	*(The instructor should present the objectives of this lesson to the class and cover the following points:)*
Threat to the Nation	1. The United States is no longer free from the danger of sudden, devastating, enemy attack. a. The President announced on September 23, 1949, that an atomic explosion had been detonated in Russia. b. A Russian announcement on August 8, 1953, confirmed that the United States no longer had a monopoly on the hydrogen bomb. 2. The nature of thermonuclear weapons and the available means of delivering them preclude complete military protection. All sections of the Nation are vulnerable. a. Each populous industrial center is a potential target and could be destroyed. b. All persons throughout the Nation are potential victims of radioactive fallout. 3. All persons, including farmers with their livestock and crops, are potential targets for chemical and biological warfare. 4. The entire citizenry is potentially a target of psychological warfare and propaganda to undermine our will to fight the enemy and resist domination.

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MAIN TOPICS	TEACHING POINTS
Threat to the Nation—*Continued*	5. The existing threat to national security and survival requires that every effort be made to protect the people of the United States by both active and passive means of defense. 6. National nonmilitary courses of action to deter aggression and, in event of aggression, to enable the Nation to survive, recover, and win are established in *The National Plan for Civil Defense and Defense Mobilization.* 7. The Plan anticipates three principal contingencies: a. **International tension,** but not of such extreme nature as to require the invocation of full emergency authorities. b. **Limited war,** defined as a situation in which United States forces are engaged overseas, but in which there is no immediate expectation of nuclear attack on the continental United States c. **General war,** including massive nuclear attack. 8. The principles, responsibilities, requirements, and broad courses of action stated in the Plan are supported and amplified by annexes.
National Survival	9. Civil defense preparedness by government at all levels involves: a. Full use of existing governmental agencies and departments. b. Trained auxiliaries to supplement government personnel, and perform functions for which there are no counterparts in existing governments. These auxiliaries are primarily in three major areas: (1) National organizations, such as women's, veterans', civic, fraternal, and youth groups. (2) Industry and labor, as a source of equipment and skilled manpower. (3) Church organizations, as a source of trained personnel for medical, mass feeding, and family welfare activities, as well as shelter and emergency hospital facilities. (4) OCDM has programs in each of these three major areas. c. Cooperation for mutual protection among communities throughout the Nation. d. Individual awareness of protective and defensive measures for oneself, family, and neighborhood. 10. The skills in existing governments can be used to maximum advantage in planning emergency techniques such as: a. Evacuation of critical target and target areas. b. Proper use of shelter and refuge for protection against the effects of nuclear weapons. c. Rescuing trapped and injured persons. d. Effective methods in reducing fire losses. 11. The leaders of industry, agriculture, labor, and financial institutions are responsible in cooperation with appropriate government agencies, for planning and executing measures designed to assure the continued functioning or rapid restoration to functioning, of the essential elements of the national economy. *(The OCDM film "Your Civil Defense" (13½ minutes) should be presented at this time to emphasize the threat to the Nation, the important role of nonmilitary defense, and its relation to military defense.)*

MAIN TOPICS	TEACHING POINTS
B. Historical Aspects of Civil Defense Principles	1. Mutual assistance by the American citizenry in colonial times and in pioneering and settling the West exemplified civil defense principles of self and group protection. a. Self-defense and group defense by banding together to fight their enemies. b. Neighbors helping each other to clear land for new farms and build new homes in the wilderness. c. Mutually solving community problems in the old town meeting. 2. Military developments of World War I resulted in legislation that contributed to civil defense concepts. a. In August 1916, Congress established the Council of National Defense to coordinate industries and resources for national security and welfare and to create relations to provide immediate use of national resources when needed. The Council consisted of the Secretaries of War, Navy, Interior, Agriculture, Commerce, and Labor; and a 7-member Advisory Commission was appointed. b. State and local defense councils numbered 182,000 on Armistice Day, November 11, 1918. 3. Military developments of World War II resulted in the establishment of the Office of Civilian Defense by Executive Order No. 8757 on May 20, 1941, to: a. Coordinate defense relationships with Federal, State, and local governments. b. Obtain information and take necessary steps for securing cooperation of Federal Departments and Agencies in dealing with emergency needs. c. Assist State and local governments in coordinating civilian defense activities. d. Study and plan measures for protection of life and property in emergencies. e. Promote activities to sustain morale and provide opportunities for constructive civilian participation in the defense program. 4. The Office of Civilian Defense was abolished on June 30, 1945, by Executive Order No. 9562. Later, civilian defense planning and responsibilities were under the direction of the following: a. The War Department Civil Defense Board (November 25, 1946). b. The Office of Civil Defense Planning in the Department of Defense (March 27, 1948). c. The National Security Resources Board (March 3, 1949). 5. The Federal Civil Defense Administration (FCDA) was established by the *Federal Civil Defense Act of 1950,* Public Law 920, 81st Congress, signed by the President on January 12, 1951. 6. **The Office of Defense and Civilian Mobilization (ODCM) was established under Reorganization Plan No. 1 of 1958 and implemented through Executive Order No. 10773, effective July 1, 1958. It delegated and transferred the functions and affairs of the FCDA and the Office of Defense Mobilization (ODM) to the ODCM, a new Agency in**

MAIN TOPICS	TEACHING POINTS
B. Historical Aspects of Civil Defense Principles—*Continued*	**the Executive Office of the President. Reasons for this action were as follows:** a. Existing statutes assigning responsibilities for central coordination and direction of nonmilitary defense were out of date. b. Rapid technical advances of military science had led to a serious overlap of functions among agencies responsible for nonmilitary defense leadership and planning. c. The importance of nonmilitary defense transcends the responsibility of any department or agency. 7. **The designation, "Office of Defense and Civilian Mobilization" was changed on August 26, 1958, to "Office of Civil and Defense Mobilization."**
C. *Federal Civil Defense Act of 1950,* Public Law 920, 81st Congress, as Amended	1. The Congress declared its intent and policy to be as follows: *(1958 amendments by Public Law 85–606 are indicated in bold face in this section.)* a. To provide a plan **(in 1958, the Act was amended to provide a system of civil defense)** of civil defense for the protection of life and property in the United States from enemy attack. b. To vest the primary responsibility for civil defense in the States and their political subdivisions. **(In 1958, the Act was amended to vest the responsibility jointly in the Federal Government and the States and their political subdivisions.)** c. That the Federal Government shall provide necessary **(amended in 1958 to include direction)** coordination and guidance, be responsible for operation of the Federal Civil Defense Administration **(now OCDM)**, and provide necessary assistance as authorized by the Act. 2. The Act defines *civil defense* to be all those activities and measures designed to: a. Minimize the effects upon the civilian population caused or which would be caused by an attack upon the United States. b. Deal with the immediate emergency conditions which would be created by any such attack. c. Effectuate emergency repairs to, or the emergency restoration of, vital utilities and facilities destroyed or damaged by any such attack. 3. Civil defense measures in preparation for enemy attack include but are not limited to: a. Establishing appropriate organizations, operational plans, and supporting agreements. b. Recruiting and training personnel. c. Conducting research. d. Procuring and stockpiling necessary materials and supplies. e. Providing suitable warning systems. f. Constructing or preparing shelters, shelter areas, and control centers. g. Nonmilitary evacuation of civil population when appropriate.

MAIN TOPICS	TEACHING POINTS
C. *Federal Civil Defense Act of 1950,* PUBLIC LAW 920, 81ST CONGRESS, AS AMENDED—*Continued*	4. Civil defense measures in case of attack include but are not limited to: a. Enforcing nonmilitary defense regulations prescribed by established military and civil authorities. b. Evacuating personnel to shelter areas. c. Controlling traffic and panic. 5. Civil defense measures following attack include but are not limited to activities for: a. Fire fighting, rescue, emergency medical, health, and sanitation services. b. Monitoring for specific hazards of special weapons. c. Unexploded ordnance reconnaissance. d. Essential debris clearance. e. Emergency welfare measures. f. Immediately essential emergency repair or restoration of damaged vital facilities. 6. **As amended in 1958, the Act permits the OCDM Director to make financial contributions to the States for civil defense personnel and administrative expenses on the basis of approved plans. Financial contributions for these purposes were previously prohibited.** 7. **As amended in 1958, the OCDM Director is authorized to procure, maintain, and distribute by grant or loan to the States on his prescribed terms for civil defense purposes, the following:** a. **Radiological instruments and detection devices.** b. **Protective masks.** c. **Gas detection kits.**
D. SUMMARY	(*Throughout the lesson the instructor should promote group discussion. The information on each topic should be summarized and related to current events when applicable. Close the class session by focusing attention on the following points:*)
Points to Remember	1. Providing effective civil defense for survival of the Nation is the responsibility of all existing governments—Federal, State, and local. 2. All government personnel, and auxiliary personnel, volunteers, and specialists will be needed for successful emergency actions by government. They must be trained in appropriate emergency responsibilities and skills. 3. The public must be kept informed of emergency plans and procedures for their protection. 4. Individuals and families must prepare for emergencies.
Sample Discussion Questions	1. How does the current military threat to the Nation differ from those threats we have faced in the past? 2. What preparations are necessary to develop the readiness and the capability of our governments (Federal, State, and local) to cope with the effects of enemy attack? 3. How does your concept of civil defense principles resemble those principles of American life that you recall from history? 4. What is the declared intent and policy of the Congress concerning civil defense?

MAIN TOPICS	TEACHING POINTS
Sample Discussion Questions—*Continued*	5. According to the *Federal Civil Defense Act of 1950,* as amended, what measures and activities constitute civil defense? 6. What are the civil defense responsibilities of governments, organizations, communities, individuals, and families?

LESSON PLAN NO. 2

COURSE: Basic Civil Defense—OCDM No. 3.2

LESSON TITLE: Civil Defense Organization and General Functions

TIME: 1 hour

TRAINING MATERIALS:

Blackboard, chalk, and eraser.
OCDM Organization Chart.
OCDM Field Organization Chart.

REFERENCES:

Executive Order No. 10773, July 1, 1958.
National Plan for Civil Defense and Defense Mobilization, The.
Public Law 920, 81st Congress, *The Federal Civil Defense Act of 1950,* as amended.
Reorganization Plan No. 1 of 1958.

OBJECTIVE:

To develop an understanding of the organization and general functions of civil defense on Federal, State, and local levels.

MAIN TOPICS	TEACHING POINTS
A. Review of Preceding Instruction	1. We considered the seriousness of the threat to our survival and clarified the issues involved. 2. We defined civil defense and identified the historical and legal aspects of its principles. 3. We discussed the civil defense responsibilities of existing governments, individuals, and families.
B. Introduction	1. **Functional organization for carrying out civil defense responsibilities within existing governments is the key to effective civil defense. This organization should make maximum use of material and human resources for survival of the Nation.** 2. A functional civil defense organization provides: a. A deterrent effect upon an enemy considering an attack upon us. b. Protection in case of actual attack. c. A mechanism for emergency rehabilitation work following an attack.
C. Federal Organization	1. The Office of Civil and Defense Mobilization, in the Executive Office of the President, is organized to carry out, among other things, the Federal Government's civil defense functions, including those defined in Public Law 920, 81st Congress, the *Federal Civil Defense Act of 1950,* as amended. a. The OCDM is headed by a Director appointed by the President with the advice and consent of the Senate. A Deputy Director and

MAIN TOPICS	TEACHING POINTS
C. FEDERAL ORGANIZATION—*Continued*	three Assistant Directors are also appointed by the President with the advice and consent of the Senate. b. The Director and part of his staff maintain offices in Washington, D. C., primarily for establishing policy and for facilitating contact and liaison with other Federal agencies and officials. c. A major portion of the OCDM staff is located at OCDM Operational Headquarters in Battle Creek, Mich., where the FCDA National Headquarters was moved in 1954 from Washington, D. C., as part of the dispersal program for key Federal agencies. *(Fig. 1 shows the organizational pattern of the OCDM. If available, hand out copies of the OCDM Organization Chart for use by the students.)* Facilities are available at Battle Creek for the control of nationwide civil defense operations in an emergency.
Civil Defense Advisory Council	2. The Civil Defense Advisory Council, established by the Federal Civil Defense Act, advises and consults with the Director concerning general or basic civil defense policies. The OCDM Director is chairman, and 12 additional members appointed by the President represent State governments, State political subdivisions, and the citizenry of the United States.
Civil and Defense Mobilization Board	3. The Civil and Defense Mobilization Board advises the OCDM Director, at his request, concerning his responsibilities. Executive Order No. 10773 of July 1, 1958, as amended by Executive Order No. 10782 of September 6, 1958, established this Board. a. The OCDM Director is chairman of the Board. With their consent, he may designate the heads of Federal executive departments and agencies as members. b. The OCDM Director may establish subsidiary units of the Board and assign them suitable names. With their consent, he may designate the heads of Federal executive departments and agencies as members. The Director is chairman of any subsidiary unit of which he is a member, and he names the chairman of other subsidiary units from its membership.
National Security Council	4. The OCDM Director is a member of the National Security Council, as provided in Reorganization Plan No. 1 of 1958.
OCDM Field Organization	5. The links between the States, their political subdivisions, and the OCDM national staff are the eight OCDM Regional Offices (see fig. 2), which assist the States and coordinate civil defense activities of the States within each Region. a. States, counties, and cities may accept or reject, as they choose, Federal assistance in planning, organizing, training, coordinating, and operating civil defense systems. b. Regional Directors coordinate and, in appropriate circumstances, direct the civil defense and defense mobilization activities of Federal agency field establishments within their regions. Regional Directors may also, at the request of a State government, or if the State government is unable to act, direct the civil defense and defense mobilization activities of such State.

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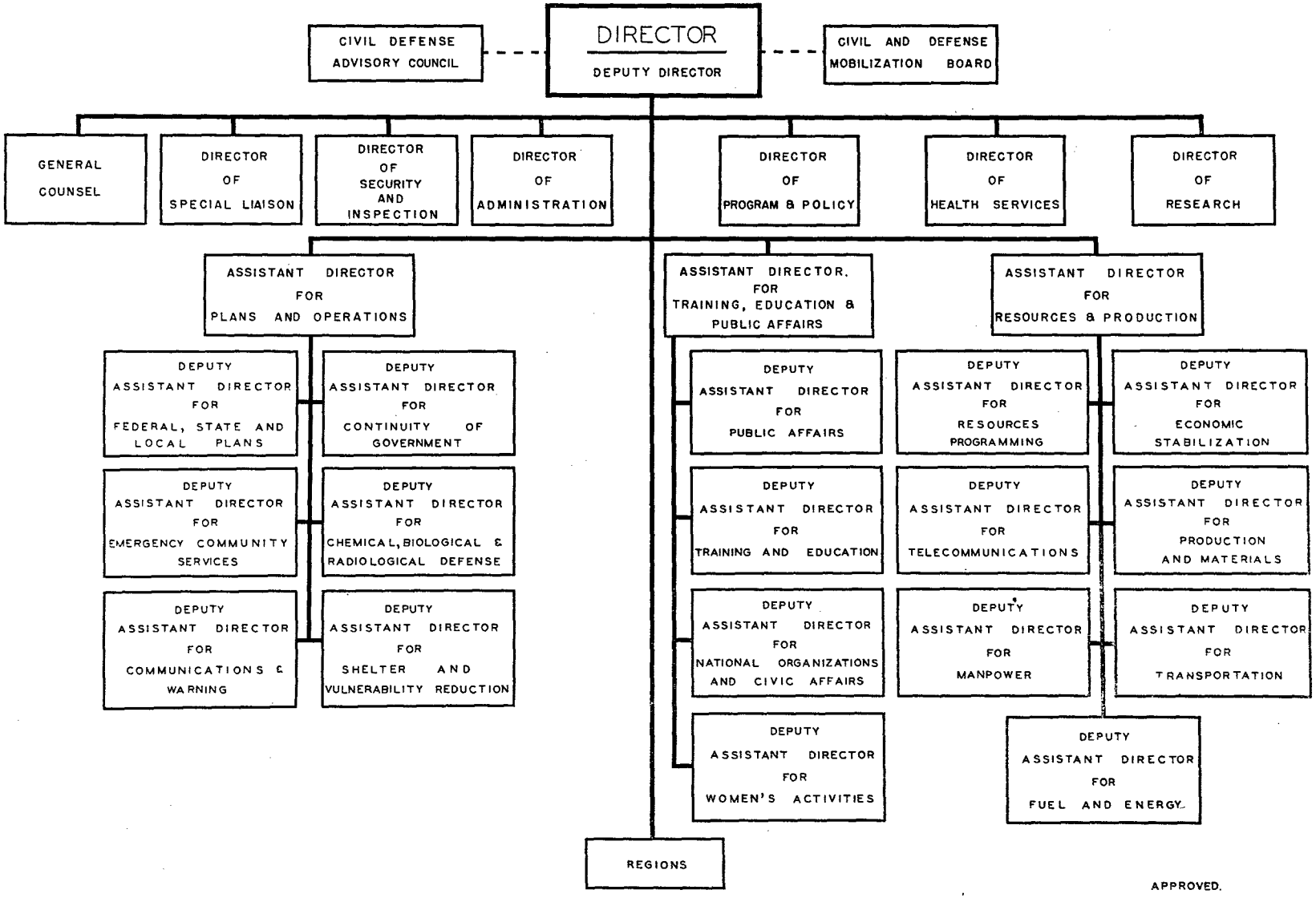
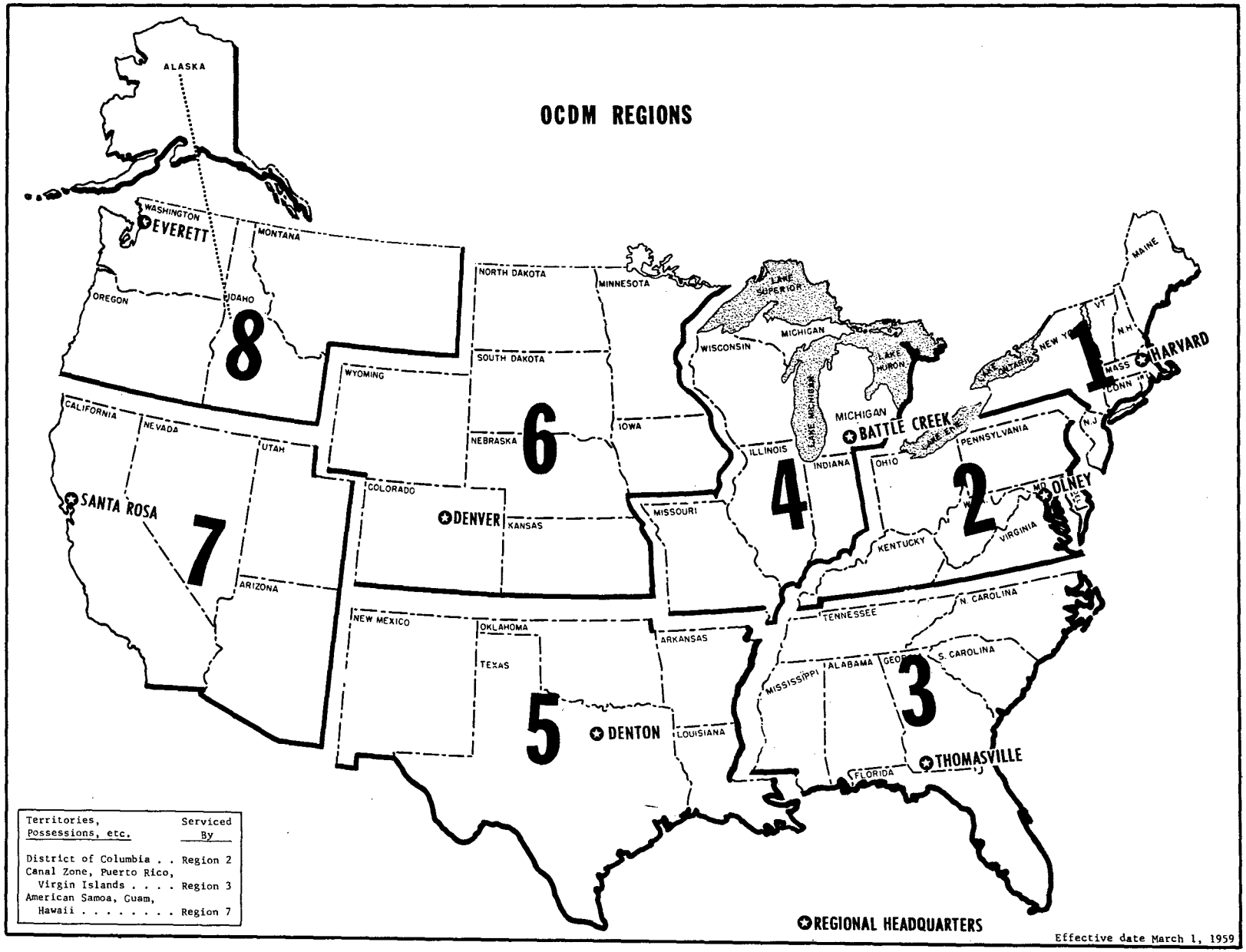
EXECUTIVE OFFICE OF THE PRESIDENT

OFFICE OF CIVIL AND DEFENSE MOBILIZATION



APPROVED.
LEO A. HOEGH, DIRECTOR
OCTOBER 9, 1958

Figure 1.—OCDM Organization Chart



Territories, Possessions, etc.	Serviced By
District of Columbia . .	Region 2
Canal Zone, Puerto Rico, Virgin Islands	Region 3
American Samoa, Guam, Hawaii	Region 7

Figure 2.—OCDM Field Organization

MAIN TOPICS	TEACHING POINTS
D. STATE ORGANIZATION	1. **Civil defense planning is based on the concept that the operational control of all emergency activities of government should be directed by the chief executive at each government level.**
	2. **At State level, the Governor's authority to carry out the functions and responsibilities of his office under emergency conditions are derived from the people of the State acting through the State constitution or from the statutes of the State.**
Civil Defense or Emergency Legislation	3. **Needs for emergency actions may extend far beyond the resources at the disposal of Governors. Civil defense or emergency legislation is therefore necessary to provide State governments with powers required to meet the needs of government in an emergency.** A model civil defense act for the States, issued by the Council of State Governments, has been followed closely by most States. The legislative purposes set forth in the model act are: a. To create a State Civil Defense Agency and to authorize creation of local civil defense organizations. b. To confer emergency powers upon the Governor and executive heads of local political subdivisions. c. To provide ways and means for mutual aid among political subdivisions of the State, the State government, and the Federal Government. d. To coordinate State civil defense activities to the maximum extent with comparable functions of the Federal Government.
Administration of Civil Defense Functions	4. The organizational pattern for administering civil defense functions varies from State to State, depending upon the needs and conditions in the State concerned. Although in most States civil defense functions are directed by the Governor through a separate executive department headed by a director responsible only to him, in some States, civil defense functions are administered by the Adjutant General's Department. a. **The importance that a State places upon its civil defense program is the chief factor in determining its effectiveness. However, to be an effective mechanism for civil government in emergencies, capable of achieving the necessary coordination and direction of the combined State executive departments, the State civil defense authority must be at least equal in status to the State agencies it proposes to coordinate.** b. Establishment of operational area offices within a State is a means of carrying out the civil defense program in a manageable fashion in regard to local governments.
Integration of Civil Defense Functions Into Existing State Government	5. **The civil defense task is too big an undertaking for all functions to be accomplished by one department or agency. Integration of civil defense functions into existing government agencies by assigning them appropriate civil defense responsibilities is therefore necessary.** Examples are the

MAIN TOPICS	TEACHING POINTS
Integration of Civil Defense Functions Into Existing State Government—*Continued*	assignment of civil defense functions, such as the following, to existing State departments or agencies: *Civil Defense Function* — *Existing Dept. or Agency* Training — Education Engineering — Public Works Fire Protection — Fire or Public Safety Manpower — Labor and Industries Health and Medical Care — Health Police — Public Safety Water and other Utilities — Public Utilities Welfare — Public Welfare
General Functions	6. The general civil defense functions of State governments are as follows: a. Preattack, the staff role is program planning and development of operational capability within the State. b. Postattack, the staff role is to provide the competence necessary to enable the Governor to direct effective emergency operations and provide support in performing all operational functions within the State. c. State Governments are primarily responsible for statewide direction, coordination, and support of tactical operations conducted by their political subdivisions, and for directing statewide operations in consonance with regional requirements.
E. Local Organization	1. Organized civil defense on the local level (county, metropolitan area, city, town, village) is established according to State and local laws and policies under ordinances and directives administered by heads of governments—such as mayors, city managers, or boards of county commissioners. 2. The mayor or other chief executive of the local unit of government is responsible for civil defense in his community. The organizational pattern varies according to needs and conditions of the community concerned, but should include such features as: a. A civil defense director responsible to the local chief executive for coordinating all local civil defense activities; an advisory council to assist in establishing local policies; a technical advisory committee for guidance in specialized areas. b. Assignment of civil defense responsibilities to appropriate local departments of government such as police, fire, and public health. c. Recruitment and training of sufficient auxiliary workers to build civil defense capability into local government. d. A self-protection and information program to make civil defense effective among the citizenry.
General Functions	3. The development of a comprehensive survival plan, fully coordinated with plans of the State and neighboring communities, is essential. The plan should contain detailed procedures for action in the following contingencies: Preattack strategic warning period; tactical

MAIN TOPICS	TEACHING POINTS
General Functions—*Continued*	warning period; attack—with or without warning time; and post-attack—the immediate postattack phase up to the start of restoration and rehabilitation. 4. Emergency functions include: a. Warning and communications b. Emergency information c. Evacuation and shelter d. Radiological defense e. Police f. Fire fighting g. Rescue h. Health and medical care i. Welfare j. Engineering k. Supply and transportation l. Resources control m. Training 5. Emergency actions are to be carried out by established departments of local governments, augmented by auxiliaries as needed for specific tasks. The following are examples of civil defense assignments to government units: a. *Police department.*—(Warning; maintenance of order; evacuation; rescue; first aid; radiological monitoring, reporting, and decontamination; explosive ordnance reconnaissance in cooperation with military units; and communications.) b. *Fire department.*—(Warning; fire fighting; rescue; first aid; radiological monitoring, reporting and decontamination; and communications.) c. *Public health department.*—(Health protection, first aid, immediate lifesaving surgery; disposal of the dead; radiological monitoring, reporting, and decontamination; chemical warfare and biological warfare detection and preventive measures; and care of the sick and injured among the surviving population.) d. *Welfare department.*—(Provision of personal necessities, such as food, clothing, and shelter; and registration and locator information service.) e. *Street, utility, and structural engineering departments.*—(Shelter, evacuation, rescue, debris clearance, decontamination, and restoration of essential public facilities.) f. *Local government administrative personnel* and other personnel assigned to *supply* and *transportation* duties.—(Transportation and supply.)
F. SUMMARY	*(The instructor should provide for group discussions on each topic as it is presented. He should supplement the topics with specific information applicable to the civil defense organization and functions as they exist in his own State and political subdivision. In closing the session, attention should be focused on points such as the following:)*
Points To Remember	1. Functional civil defense organization at all levels of government is important to deter enemy attack, provide maximum protection in case of attack, and provide emergency rehabilitation following an attack.

MAIN TOPICS	TEACHING POINTS
Points To Remember—*Continued*	2. OCDM is organized to carry out the functions defined in the *Federal Civil Defense Act of 1950*, as amended. Important components of OCDM are the Civil Defense Advisory Council and the Civil and Defense Mobilization Board. OCDM Regional Offices are the links between the States, their political subdivisions, and the Federal Government. 3. Operational control of emergency activities at each level of government is the responsibility of the chief executive of that government. 4. The organizational pattern and functions of civil defense in the States and their political subdivisions are determined by State and local laws and policies.
Sample Discussion Questions	1. How have State and local laws and policies been used to build civil defense readiness and capability into your State and/or local government? 2. What emergency functions could or would the departments of your State and/or local government perform in case of enemy attack? 3. How could your local government be augmented in resources and personnel to cope with the effects of enemy attack? 4. What do you consider the essential provisions for an effective survival plan in your community? *(The instructor should divide the class into small work groups, so they can develop the answers to the discussion questions that will reflect the needs and status of civil defense in their community.)*

LESSON PLAN NO. 3

COURSE: Basic Civil Defense—OCDM No. 3.2

LESSON TITLE: TIME: 2 hours

Section I—Effects of Nuclear Weapons
Section II—Effects of Conventional, Chemical, and Biological Weapons

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TRAINING MATERIALS:

Blackboard, chalk, and eraser.
Easel for presentation of charts.
OCDM Film *"Operation Ivy,"* 16 mm. motion picture projector, and screen.
Charts:

Figure 3.—Estimated extent of A, B, C, and D zones of damage that would result from the surface (ground) detonation of a 20–MT nuclear weapon.

Figure 4.—Estimated percentages of casualties that could result from the surface (ground) detonation of a 20–MT nuclear weapon under a condition of no warning.

Figure 5.—Estimated degrees of damage to buildings that would result from the surface (ground) detonation of a 20–MT nuclear weapon.

Figure 6.—Estimated peak overpressures to be expected from the surface (ground) detonation of a 20–MT nuclear weapon.

Figure 7.—Extent of fire damage to be expected from the surface (ground) detonation of a 20–MT nuclear weapon.

Table 1.—Radii and areas of damage zones from nuclear detonations of various sizes.

REFERENCES:

Chemical Agent Detector Kit, CD V–810, FCDA (OCDM), TB–11–29.
Chemical Warfare Agents of Special Significance to Civil Defense, FCDA (OCDM), TB–11–28.
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General Concepts of Chemical Warfare, FCDA (OCDM), TB–11–26.
Introduction to Chemical Warfare, FCDA (OCDM), TB–11–25.
National Plan for Civil Defense and Defense Mobilization, The.
War Gas Decontamination, FCDA (OCDM), TB–11–32.

OBJECTIVES:

1. To develop understanding of the effects of nuclear weapons.
2. To develop understanding of the effects of conventional, chemical, and biological weapons.

SECTION I–EFFECTS OF NUCLEAR WEAPONS

MAIN TOPICS	TEACHING POINTS
A. Review of Preceding Instruction	1. We considered the nature of civil defense organizations needed on Federal, State, and local levels. 2. We considered the general functions that government must be able to perform for civil defense readiness and capability.
B. Introduction	1. The atomic bombing of Hiroshima and Nagasaki and the testing of nuclear weapons have provided many facts concerning the effects of nuclear weapons. Knowledge and understanding of these effects are necessary for an appreciation of the protective and emergency measures needed. *(The instructor will find detailed information in the Atomic Energy Commission (AEC) publication, "The Effects of Nuclear Weapons.")* 2. Nuclear weapons and conventional (TNT) bombs are similar in that both result in explosions. An explosion is the rapid release of large amounts of energy in a limited space. The destructive effect in air is generally called *blast* because it resembles and is accompanied by a very strong wind. In water or under the ground the effect is called *shock* because it is like a sudden impact. 3. The effects of nuclear weapons require special consideration because they can involve many thousands of times more power than the largest conventional TNT bombs, and differ from them fundamentally as follows: a. A fairly large portion of the energy in nuclear explosions is emitted in the form of light and heat, generally called *thermal radiation.* It is capable of causing skin burns and of causing fires at considerable distances. b. Nuclear explosions are accompanied by highly penetrating and harmful, but invisible, rays, called *initial nuclear radiation.* c. The substances remaining after a nuclear explosion may be radioactive, emitting radiation harmful to living organisms over an extended period of time. This radiation is called *residual nuclear radiation* or *residual radioactivity.*
C. Types of Bursts	1. Although there is no clear line of distinction between them, it is convenient to consider types of bursts defined as follows: a. *Air burst.*—One that occurs at sufficient height above the surface to prevent the fireball from touching the surface of the earth. The fireball is an intensely hot and luminous, roughly spherical mass formed almost at the instant of a nuclear explosion. b. *Surface burst.*—One that occurs at the actual surface of the earth or sufficiently close enough to the surface for the fireball to touch land or water. c. *Subsurface burst.*—One in which the center of the explosion is beneath the ground or under water. 2. The effects peculiar to nuclear weapons are present as the result of all types of bursts, but some effects are more prominent with a particular type of burst. a. Surface and near-surface bursts cause the greatest danger from radiation because they contaminate large quantities of dirt and

MAIN TOPICS	TEACHING POINTS
C. TYPES OF BURSTS—*Continued*	debris with radioactive material that rises with the ascending nuclear cloud, and may fall to the ground over an area many miles from the detonation point. *(See Main Topic G, Radioactive Fallout.)* b. Air bursts cause more severe thermal radiation than subsurface bursts in which the thermal radiation is largely absorbed by the land or water. c. Air bursts cause the most severe air blast and also cause some ground shock if close to the ground. d. Subsurface bursts cause the greatest ground or water shock.
D. SEQUENCE OF EVENTS ACCOMPANYING A NUCLEAR BURST. (Air burst used for this example.)	1. Immediately following detonation of a nuclear weapon a fireball is formed. It consists of intensely hot and luminous gases that emit thermal radiation capable of causing skin burns and fires at considerable distances. 2. Harmful nuclear radiation (gamma rays and neutrons) that has a long range in air is emitted in greatest amount during the first few seconds following detonation. 3. Soon after the explosion a tremendously destructive shock (or blast) wave develops in the air and moves rapidly away from the fireball. When the primary shock (or blast) wave from the explosion strikes the ground, another shock (or blast) wave is produced by reflection. At a certain distance from the point directly under the center of the blast (ground zero), the reflected and primary shock fronts fuse near the ground to form a reinforced front called the "Mach front." The point at which this occurs depends upon the height of the explosion and the energy of the bomb. 4. The fireball soon loses its luminosity but continues to rise rapidly. It causes air to be drawn inward and upward similar to the updraft in a chimney. If the burst occurs at a sufficiently low altitude, the strong air currents, or "afterwinds," resulting from this process raise dirt and debris from the surface and form the stem of what finally appears as a mushroom cloud. 5. Vaporized products from the nuclear weapon then condense to form a cloud of highly radioactive particles. The radioactive cloud then formed, contains varying amounts of dirt and debris, depending upon the altitude of the burst. 6. The radioactive cloud is dispersed by winds at high altitudes, and particles from it settle to the earth. This is called radioactive fallout.
E. DESTRUCTIVE POWER OF NUCLEAR WEAPONS	*(The film "Operation Ivy" (28 min.) should be presented at this time to illustrate the points already discussed and show the destructive power of nuclear weapons.)* 1. The thermonuclear device tested at Eniwetok Atoll in the Pacific in November 1952, produced a fireball 3¼ miles in diameter, total destruction over a radius of 3 miles, heavy to medium damage over a radius of 7 miles, and light damage over a radius of 10 miles. 2. The blast destroyed the tiny island of Elugelab, leaving a crater about 1 mile in diameter and 175 feet deep.

MAIN TOPICS	TEACHING POINTS
F. Areas of Comparative Damage From a Nuclear Weapon	1. The damage areas are generally regarded as circular zones around the point of detonation or the point (ground zero) directly under it. Zone A is the area of complete destruction; Zone B is the area of heavy damage around the ring of complete destruction; Zone C is the area of moderate to light damage around the ring of heavy damage; Zone D is the area of partial to light damage. (See fig. 3.)
Estimated Damage from a 20–MT Weapon	2. Figures 3, 4, 5, 6, and 7 show the estimated damages from a 20-megaton (MT) nuclear weapon detonated on the ground. (This size of weapon is used as an example only.) a. The damage rings (see fig. 3) illustrate the approximate circular pattern of blast and thermal effects. b. Figure 4 shows the percentage of population estimated to be casualties in each zone, under a condition of no warning. c. Figure 5 shows the estimated blast damage to buildings in each zone. d. Figure 6 shows the estimated peak overpressures for each zone, in pounds per square inch. e. Figure 7 shows the extent of fire damage to be expected in each zone.
Damage and Size of Weapon	3. Increasing the power of a nuclear weapon one thousand times does not increase its damaging effects in the same proportion. **A weapon one thousand times more powerful would increase the radius of damage 10 times, and the damage area would be one hundred times larger, not one thousand times. (See table 1.)**
	4. Damage zones for weapons of various sizes can be constructed from table 1.
G. Radioactive Fallout	1. **Radioactive fallout from nuclear weapons endangers life far beyond the damage zones.** It consists of thousands of tons of earth and debris forced up into the atmosphere when the pulverizing force of a large detonation hits the ground. These small particles become contaminated with radioactive material from the explosion, are dispersed by the winds, and later fall to earth in the form of small particles (sometimes visible) carrying radioactive materials.
	2. The United States Weather Bureau issues fallout forecasts four times daily for use by OCDM, the States, and local governments in forecasting areas likely to be affected by radioactive fallout following a nuclear attack.
	3. By a process called radioactive decay, the radioactivity and the associated radiation decrease with time. However, it is expected that in case of enemy attack, large areas of the country could be subject to radioactive fallout sufficiently intense to endanger life unprotected by adequate shelter.

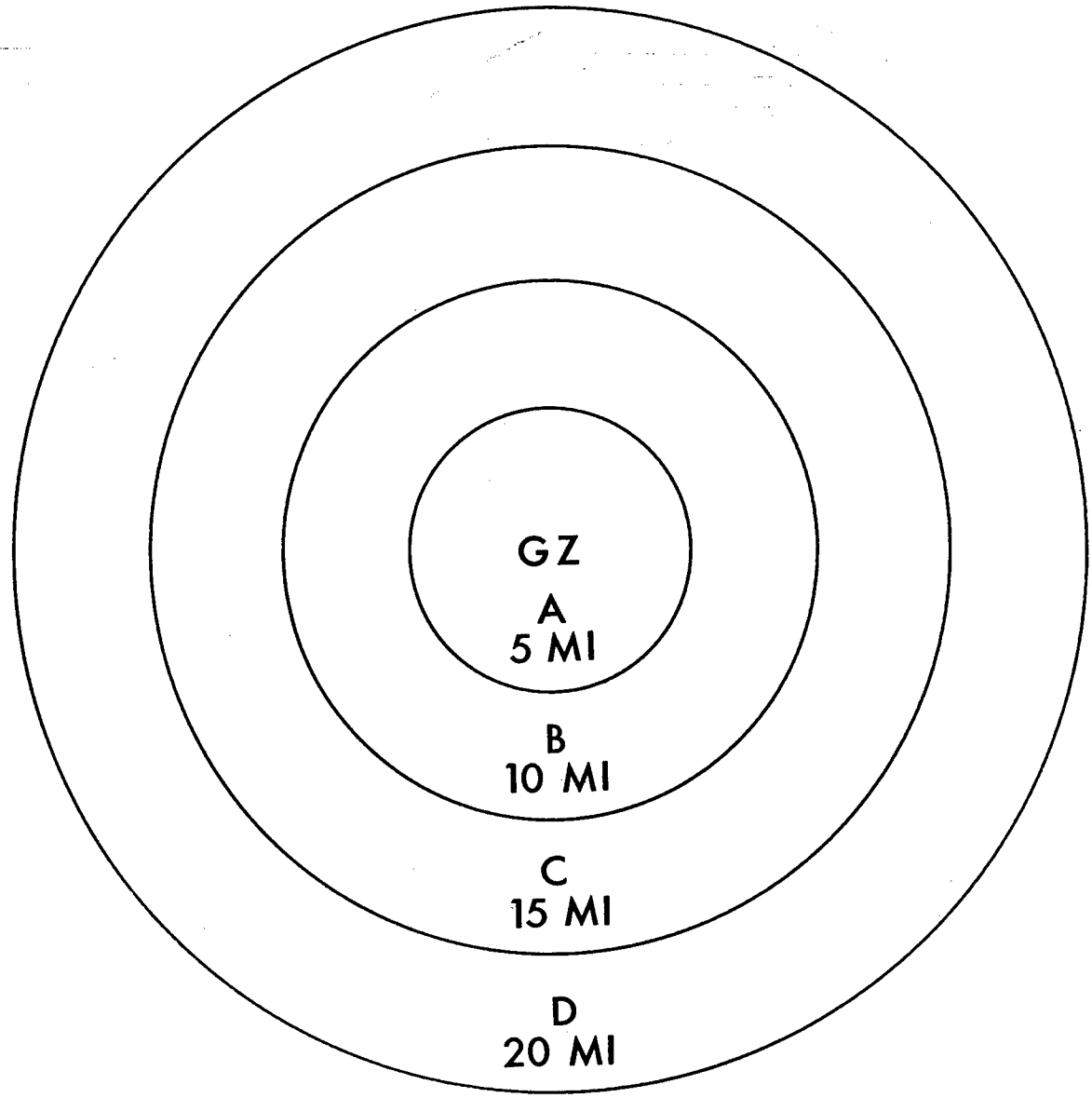

FIGURE 3.—Estimated extent of A, B, C, and D zones of damage that would result from the surface (ground) detonation of a 20-MT nuclear weapon.

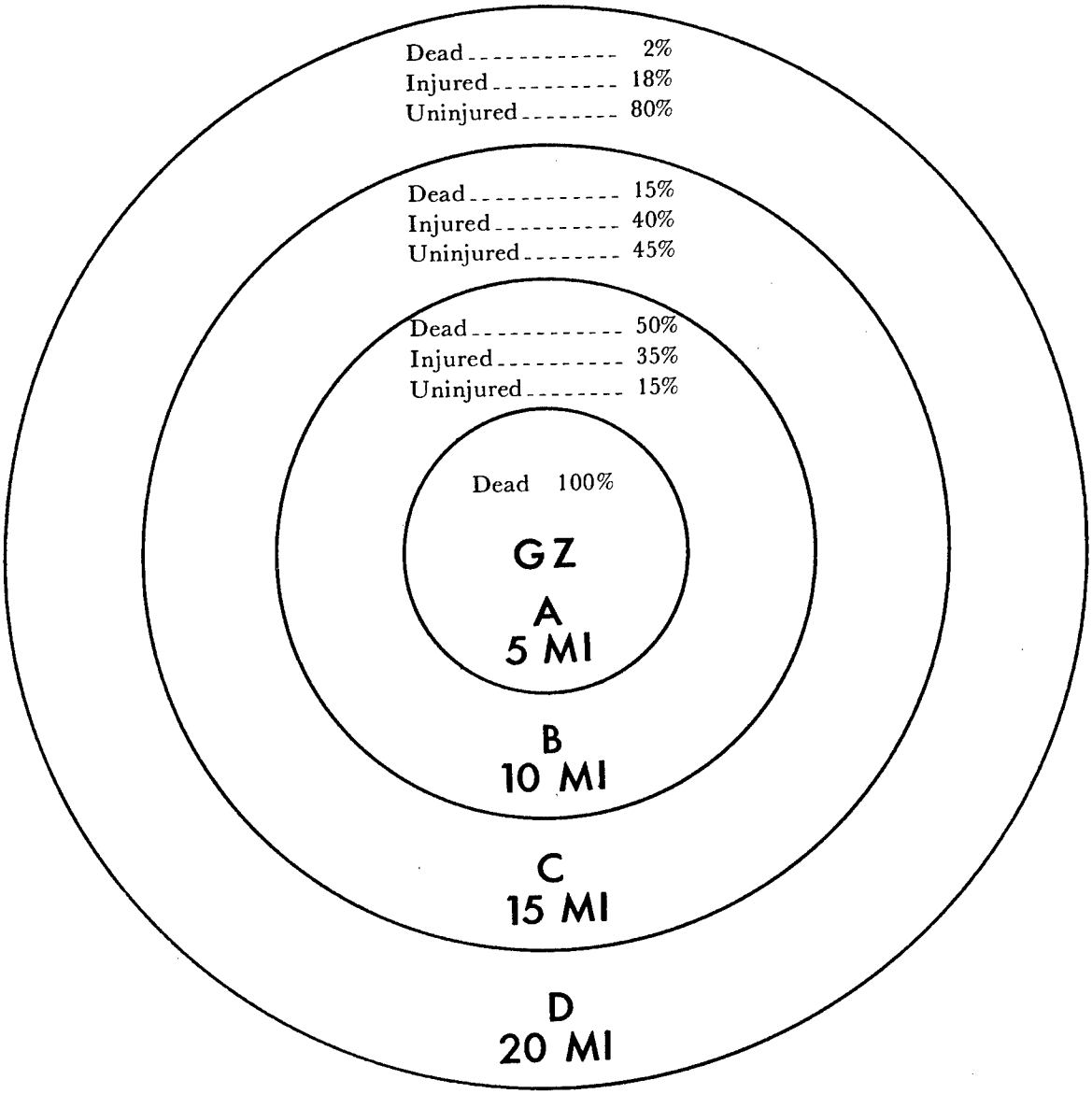

FIGURE 4.—Estimated percentages of casualties that would result from the surface (ground) detonation of a 20-MT nuclear weapon under a condition of no warning.

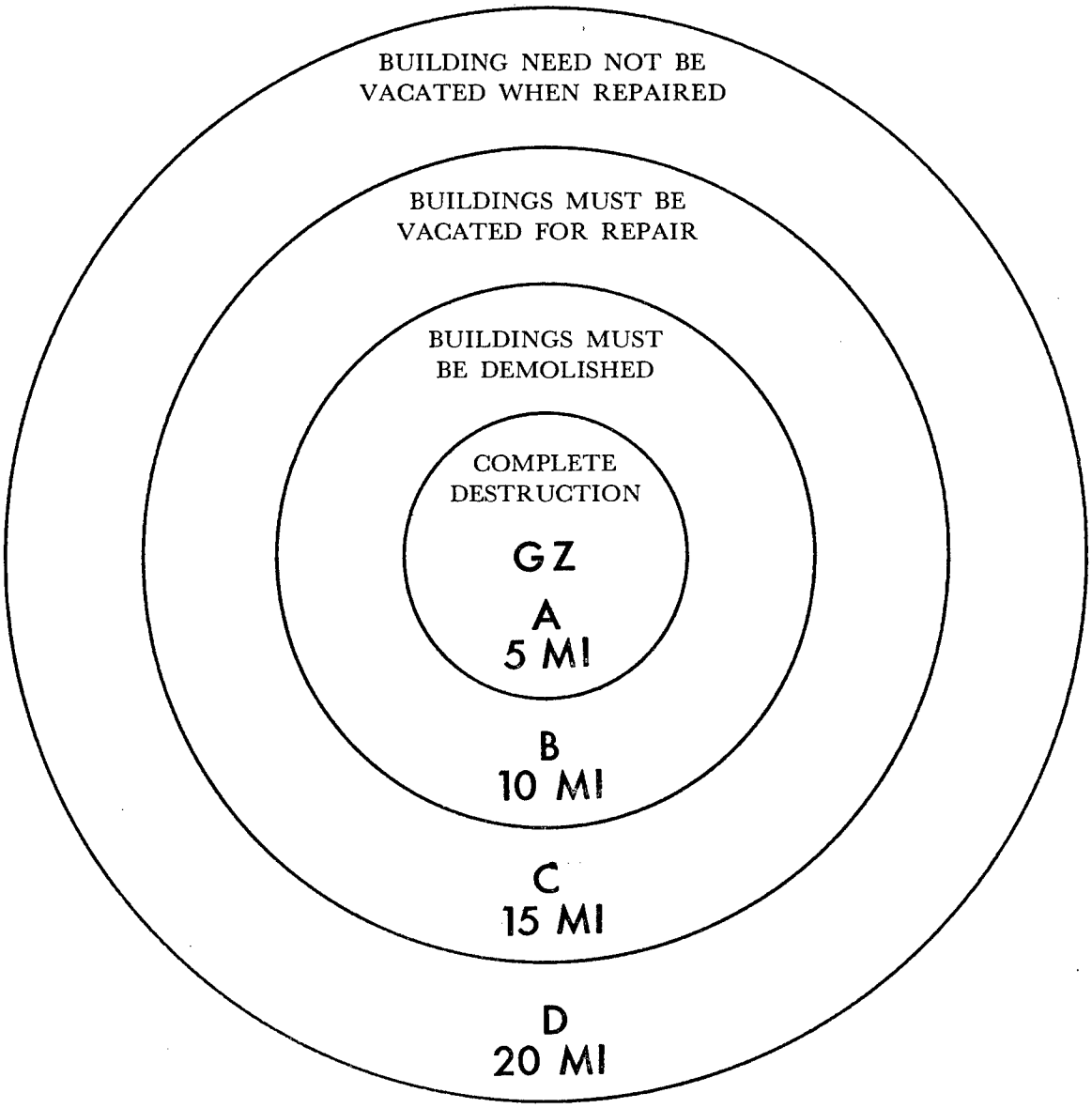

FIGURE 5.—Estimated degrees of damage to buildings that would result from the surface (ground) detonation of a 20-MT nuclear weapon.

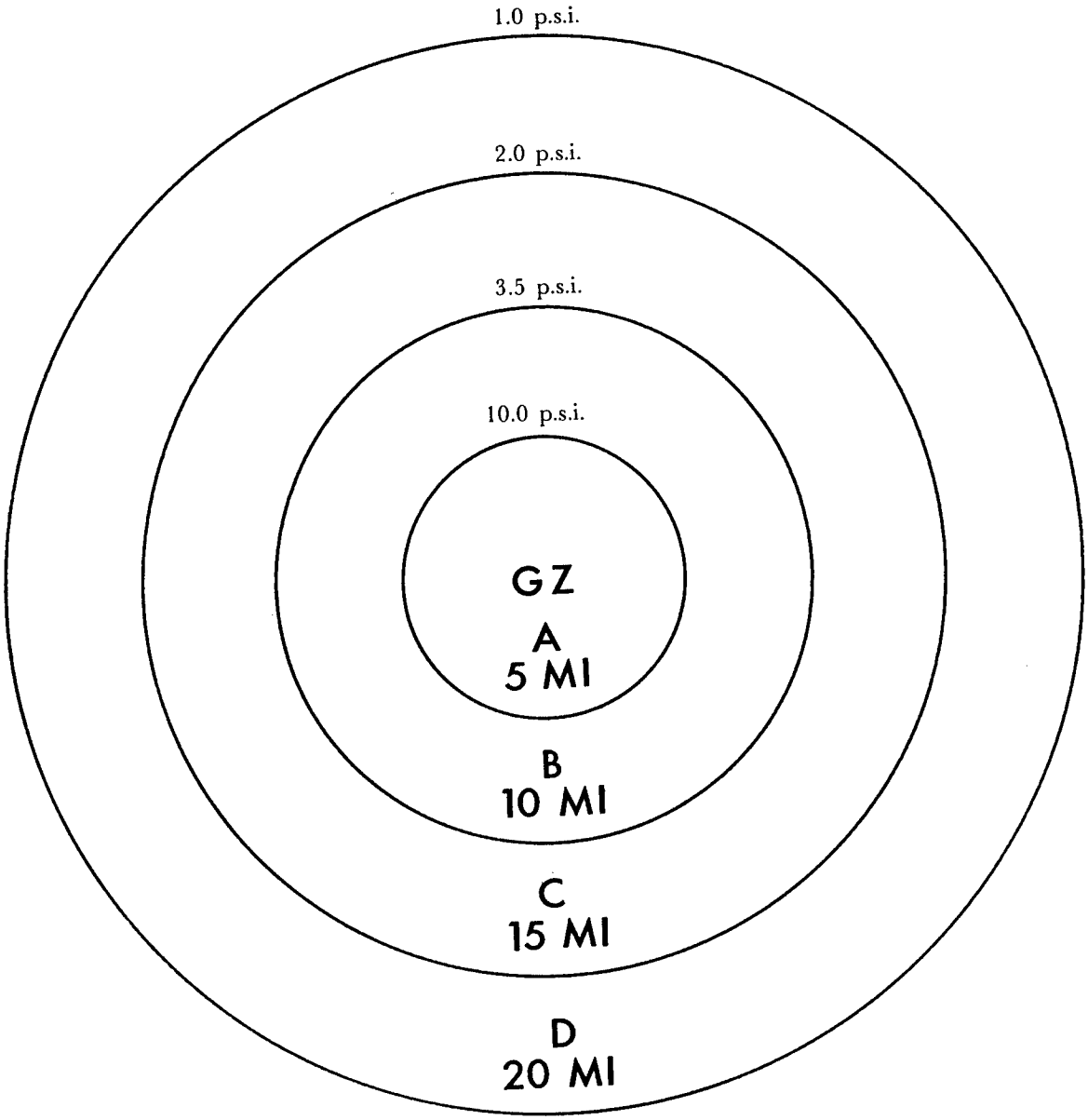

FIGURE 6.—Estimated peak overpressures to be expected from the surface (ground) detonation of a 20-MT nuclear weapon.

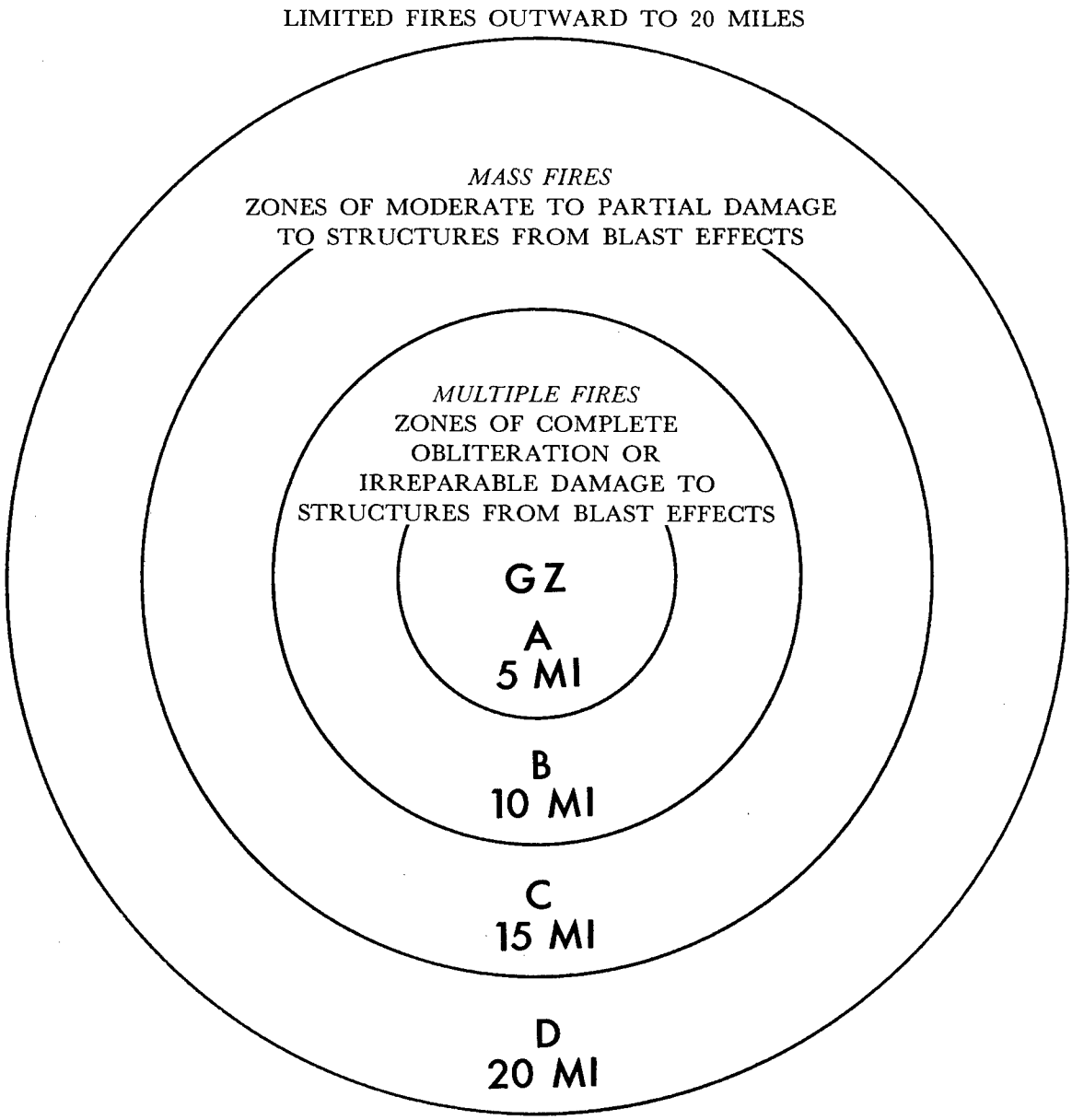

FIGURE 7.—Extent of fire damage to be expected from the surface (ground) detonation of a 20-MT nuclear weapon.

TABLE 1.—*Radii and areas of damage zones from nuclear detonations of various sizes*

Bomb size			Zone of A-damage		Zone of B-damage		Zone of C-damage		Zone of D-damage	
			Radii	Area	Radii	Area	Radii	Area	Radii	Area
KT [1]	X [2]	MT [3]	Miles	Sq. miles	Miles	Sq. miles	Miles	Sq. miles	Miles	Sq. miles
20	1		0.0–0.5	0.8	0.5–1.0	2.3	1.0–1.5	3.9	1.5–2.0	5.5
40	2		0.0–0.6	1.3	0.6–1.3	3.8	1.3–2.0	6.2	2.0–2.5	8.7
100	5		0.0–0.9	2.3	0.9–1.7	6.9	1.7–2.6	11.5	2.6–3.4	16.1
200	10		0.0–1.1	3.7	1.1–2.2	11.5	2.2–3.3	19.0	3.3–4.4	26.6
500	25	0.5	0.0–1.5	6.8	1.5–3.0	21.5	3.0–4.5	35.3	4.5–6.0	49.4
1,000	50	1	0.0–1.8	10.9	1.8–3.6	29.8	3.6–5.4	51.3	5.4–7.2	70.8
2,000	100	2	0.0–2.0	12.6	2.0–4.0	37.7	4.0–6.0	62.7	6.0–8.0	113.0
5,000	250	5	0.0–3.0	28.3	3.0–6.0	84.7	6.0–9.0	113.0	9.0–12.0	226.4
10,000	500	10	0.0–3,8	45.5	3.8–7.6	135.9	7.6–11.4	227.0	11.4–15.2	317.5
15,000	750	15	0.0–4.1	50.0	4.1–8.2	160.9	8.2–12.3	264.1	12.3–16.4	470.6
20,000	1,000	20	0.0–5.0	80.0	5.0–10.0	230.0	10.0–15.0	390.0	15.0–20.0	550.0

[1] Kiloton=1,000 tons of TNT.
[2] X=20,000 tons of TNT.
[3] MT=1,000,000 tons of TNT.

MAIN TOPICS	TEACHING POINTS
H. Means of Launching a Nuclear Attack	1. Enemy capability exists for launching a nuclear attack against the United States with weapons of various sizes. The National Plan assumes that delivery systems in the next few years would be predominantly man-operated, with a resulting probable tactical warning of initial attack of 3 hours for the Nation as a whole; thereafter delivery systems would be predominantly unmanned, with maximum tactical warning of initial attack reduced one-half hour for the Nation as a whole. 2. The Plan emphasizes that at any time during this period **attack could come with no tactical warning.** Strategic warning is a possibility.

SECTION II—EFFECTS OF CONVENTIONAL, CHEMICAL, AND BIOLOGICAL WEAPONS

MAIN TOPICS	TEACHING POINTS
A. Introduction	1. Although the use of nuclear weapons (predominantly of multimegaton yield) is considered more likely by an enemy in an initial attack against the continental United States, the use of conventional, chemical, and biological weapons is possible. 2. The possibility of the use of conventional, chemical, and biological weapons is considered to be less than that of nuclear weapons, but we cannot afford to overlook the serious effects they would have if used against us by a determined enemy.
B. Conventional Weapons	Important conventional weapons are high-explosive "blockbusters," fragmentation, and napalm bombs. Their blast and fire effects are similar to those of nuclear weapons—although on a much smaller scale. a. High-explosive bombs result in shock or blast waves that destroy structures, start fires, and produce secondary missiles consisting of bomb fragments and debris. b. Fragmentation bombs break into pieces that form secondary missiles. They can be especially effective as antipersonnel weapons, used to hinder fire fighting and rescue operations. c. Napalm bombs usually contain gelatinized gasoline, and are used to start fires. They are especially adaptable for attacking highly combustible materials, such as found in munitions plants, oil refineries, and chemical plants.
C. Chemical Weapons	1. Chemical weapons may be in gaseous, liquid, or solid form and may be used alone or in combination with other weapons. Chemical warfare agents can be spread by mortar or artillery shells, guided missiles, aerial bombs, candles, pots and burners, or sabotage. Nerve gas and mustard gas are important chemical weapons.
Nerve Gas	2. Nerve gas is normally introduced as a liquid that yields toxic vapors, which are colorless and odorless. These vapors cause death within a few minutes. a. Nerve gas in vapor form may enter the body through the respiratory tract. In liquid form it may enter through the skin, the mucous membranes of the eyes, and the swallowing of contaminated saliva. b. A mild exposure to nerve gas causes constriction of the pupils of the eyes and difficulty in breathing. A small drop of it in liquid form on the skin causes death in a few minutes. c. Effective treatment for victims of nerve gas consists of immediate injection of atropine sulfate, removal of contamination, and artificial respiration.
Mustard Gas	3. Mustard gases are practically colorless vapors from brownish liquids, with an odor similar to that of garlic or horseradish. a. These gases are persistent and may contaminate an area for 4 or 5 days—or longer in cold weather. b. Mustard gases irritate and poison body cells.

MAIN TOPICS	TEACHING POINTS
Mustard Gas—*Continued*	c. Persons exposed to mustard gas should remove contaminated clothing, remove the agent from the skin, apply protective ointment, wash with soap and water, and flush the eyes with water.
D. Biological Weapons	1. Biological warfare agents are living organisms, such as vectors and pests; bacteria and virus that cause sickness or death of persons, plants, or animals; toxins, such as diphtheria and botulism, that are produced by living organisms; and growth regulators. a. Lethal quantities of biological agents can be spread through various means, including use of free balloons and insects—and by spraying from aircraft and with aerosol bombs and other spray devices. b. Animal or plant diseases, such as anthrax, foot-and-mouth disease, and rusts; or pests, such as Japanese beetles or corn borers, could be used to destroy our food supplies. c. Pollution of food and water supplies could cause death and illness.
E. Summary Points To Remember	*(Focus attention on points, such as the following:)* 1. The damage zones for surface detonations of 20–MT or smaller nuclear weapons can be estimated for any community by use of table 1. The expected damage effects can then be estimated as illustrated in figures 3, 4, 5, 6, and 7. 2. **The radioactive fallout hazard from a nuclear explosion extends far beyond the blast and thermal damage zones. No part of the Nation can be assumed to be safe from radioactive fallout in case of widespread nuclear attack.** 3. The effects of conventional, chemical, and biological weapons also are important considerations.
Sample Discussion Questions	1. What relationship is there between the size of nuclear weapons and size of the areas they would damage? 2. What size nuclear weapon would cause most of your community (or metropolitan area nearest you) to be in Damage Zones A, B, C, and D? 3. What causes radioactive fallout? Describe its formation. 4. Which types of bursts are more likely to cause most radioactive fallout? 5. What type of burst causes most blast damage? 6. What type of burst causes greatest damage by thermal radiation? 7. What are the types of important conventional, chemical, and biological weapons?

LESSON PLAN NO. 4

COURSE: Basic Civil Defense—OCDM No. 3.2 TIME: 2 hours

LESSON TITLE:

Section I— Principles of Protection Against Nuclear Warfare.
Section II— Principles of Protection Against Conventional, Chemical, and Biological Warfare.
Section III— Principles of Individual and Family Protection.

TRAINING MATERIALS:

Blackboard, chalk, and eraser.
Film "Nerve Gas Casualties and Their Treatment," 16-mm. motion picture projector, and screen.
Canister Type or Organizational Mask, CD V-800.
Chemical Agent Detector Kit, CD V-810.
Geiger Counter, CD V-700.
Survey Meter, CD V-710.
Dosimeter, CD V-730.
Dosimeter, CD V-740.
Charger, CD V-750.

REFERENCES:

Between You and Disaster, OCDM, L-2-1.
Chemical Agent Detector Kit, CD V-810, FCDA (OCDM), TB-11-29.
Chemical Warfare Agents of Special Significance to Civil Defense, FCDA (OCDM), TB-11-28.
Emergency Sanitation at Home, FCDA (OCDM), H-11-1.
Family Fallout Shelter, The. MP-15.
First Aid: Emergency Kit, Emergency Action, OCDM, L-2-12.
Hoegh Announces National Policy on Shelters, FCDA (OCDM), FYI No. 517.
General Concepts of Chemical Warfare, FCDA (OCDM), TB-11-26.
Home Protection Exercises, FCDA (OCDM), MP-2-1.
Introduction to Chemical Warfare, FCDA (OCDM), TB-11-25.
National Plan for Civil Defense and Defense Mobilization, The.
Procedures for Evacuation Traffic Movement Studies, FCDA (OCDM), TM-27-1.
Protection Against Fallout Radiation, FCDA (OCDM), TB-11-19.
Radiological Instruments for Civil Defense, FCDA (OCDM), TB-11-20.
War Gas Decontamination, FCDA (OCDM), TB-11-32.
What You Should Know about Biological Warfare, FCDA (OCDM), PA-B-2.

OBJECTIVE:

To develop an appreciation of:

1. Principles for protection against nuclear warfare.
2. Principles for protection against conventional, chemical, and biological warfare.
3. Individual and family protection.

SECTION I—PRINCIPLES OF PROTECTION AGAINST NUCLEAR WARFARE

MAIN TOPICS	TEACHING POINTS
A. Review of Preceding Instruction	1. We presented and discussed some of the information concerning the effects of nuclear, conventional, chemical, and biological weapons necessary to develop a practical understanding of modern warfare.
B. Introduction	1. An understanding of aiming and support area concepts is important in developing and applying protective principles against nuclear warfare. a. The "aiming area" is the geographic area within which it is assumed that an enemy would probably place one or more nuclear weapons to assure the destruction of the target. b. "Support areas" are generally groupings of nonurban or rural communities surrounding and outside the aiming areas, which have been assigned support functions in respect to aiming areas. 2. Persons outside the aiming area and those evacuated from aiming areas would require shelter from radioactive fallout. Persons remaining in aiming areas would require shelter from blast, shock, and fire, as well as from radioactive fallout. Shelters giving adequate protection against blast, shock, and fire would also decrease the hazards of nuclear radiation. 3. The best protection against nuclear weapons is "distance" (evacuation) and "shielding" (shelter). The National Plan includes planning for the movement of people from target cities and contiguous areas if time and conditions permit, and also use of shelters for protection from radioactive fallout. (See FYI No. 517.) 4. Evacuation to better shelter or to less contaminated areas is practical only if a radiological defense system includes capability for monitoring and evaluating the hazards of fallout radiation and for accomplishing the required countermeasures, such as decontamination. a. In the event of nuclear attack, fallout shelters offer the best single nonmilitary defense measure for the protection of the greatest number of people. b. Concerning blast shelters, there are still many difficult problems such as the uncertainty of missile accuracy, and the effectiveness of our active defense. There is no assurance that even the deepest shelter would give protection to a sufficient number of people to justify the cost—and the development of missile capabilities may preclude sufficient warning time to permit the effective use of blast shelters.
C. Evacuation	1. Evacuation is the organized, timed, and supervised movement of civilians from dangerous and potentially dangerous areas, and their reception and care in safer areas. Evacuation may be strategic, tactical, or remedial. a. Strategic evacuation is that conducted during a period of international tension preceding actual warning when it would be desirable to move certain dependent, nonproductive people away from danger areas.

MAIN TOPICS	TEACHING POINTS
C. EVACUATION—*Continued*	b. Tactical evacuation is that conducted after a warning is received that attack is probable. c. Remedial evacuation is that conducted after an attack when all persons not needed for emergency tasks may be moved to safer areas. 2. The Federal Government recommends that local governments make: (See TM-27-1.) a. Traffic surveys. b. Determinations of egress, ingress, and circulation routes that can be used for evacuation by emergency units. c. Plans for control of emergency units.
D. SHELTER	1. The Federal Government has prepared and distributed family shelter designs (see MP-15) and specifications for protection against radioactive fallout. 2. Decision for orders to take cover in whatever refuge exists at the time of an alert or enemy attack, or for evacuation, must be made by the local government official in charge of emergency operations. 3. If attack comes, people will have to take advantage of whatever refuge may be available. The Federal Government is giving priority to guidance on the provision of shelter to protect from radioactive fallout in the belief that fallout shelter would give the greatest return in terms of lives saved in the event of nuclear attack. 4. The Federal Government recommends that State and local governments: a. Determine within their jurisdictions and in accordance with standards provided by the Federal Government, requirements for shelter, and make surveys to determine the possibility for refuge within existing structures. b. Facilitate construction of shelters by providing suitable legislation concerning their construction in both urban and rural areas. 5. The Federal Government is continuing a program of research into the problems of evacuation and shelter, and guidance is provided to State and local governments.
E. RADIOLOGICAL DEFENSE	1. Survivors of the initial effects of a nuclear attack would then be faced with the threat of radioactive fallout. This hazard cannot be detected by the human senses: radiological instruments and trained monitors are required to measure it and inform the people of it. (See TB-11-20). The instructor should show some of the following instruments, if available, and describe their uses: Geiger counter, CD V-700; survey meter, CD V-710; dosimeter, CD V-730; dosimeter, CD V-740; charger, CD V-750.) 2. **OCDM considers radiological defense to be one of its chief priority programs. The major goals of the program are the immediate development of at least some protective measures through use of existing resources, and a major increase in capability for radiological defense during the next few years.**

MAIN TOPICS	TEACHING POINTS
E. RADIOLOGICAL DEFENSE—*Continued*	a. Some capability for radiological defense already exists within the Federal, State, and local governments, and private industry. This capability is based on a nationwide monitoring system to determine the extent and severity of the hazard from fallout. An example of an ancillary program is the provision by the United States Weather Bureau of wind data for making fallout forecasts. Radiological monitoring, however, is necessary to determine the *intensity* of radiation. b. Public education and technical instruction is needed for thorough public understanding of radiation dangers and protective actions. OCDM has issued several publications for this purpose, and conducts a Radiological Defense School to improve operational capabilities in radiological defense at Federal, State, and local levels. Under Public Laws 112 and 623, 84th Congress, OCDM procures radiological instruments and makes them available to the States for training purposes. States and political subdivisions may procure additional instruments by grant, loan, or on a matching funds basis. OCDM Regional Offices assist the States in training monitors. c. The Federal Government is engaged in a major long-term effort in research and development to strengthen the radiological defense program. 3. The Federal Government recommends that localities devise plans to inform the public of radioactive fallout conditions, including instructions for taking shelter or evacuation, in the event of attack. The presence of radiation could interfere with many postattack emergency operations, and radiological monitoring would be a continuing requirement. a. All operational elements of local government will, to some extent, be involved in radiological defense duties, such as radiological monitoring, reporting, and decontamination. b. Reports from several emergency units (e. g., police, fire) should be continuously collated and analyzed. Local reports of radiation levels should be summarized and sent to the county level (or equivalent), where countywide reports on the radiation hazard can be prepared. Summary, transmission, and dissemination of information should occur similarly at State area, State, OCDM regional, and OCDM national levels. c. Aerial surveys will give a general indication of the postattack radiological situation, and reports from fixed and mobile ground monitors will indicate intensities in specific locations. Consolidation of these reports will enable a comprehensive interpretation of the hazard. d. Boundaries of areas containing dangerous intensities of radioactivity will need to be marked, and entry and exposure controlled. e. Monitoring will be required to determine the degree of contamination and the need for decontamination of people, areas, facilities, food, and water. Subsequent monitoring will be necessary to evaluate the effectiveness of the decontamination procedures used. Vacuum cleaning and washing with water or water and

MAIN TOPICS	TEACHING POINTS
E. RADIOLOGICAL DEFENSE—*Continued*	detergent are simple means for removing part of the fallout material from people, their clothing, some foods, pavements, and buildings. More complex methods are required for decontamination of water, earth surfaces around buildings, and foods that cannot be washed. f. Aside from consideration of blast and thermal effects, OCDM recommends that there be no evacuation to escape predicted fallout until monitoring has been completed, and an orderly evacuation can be directed by local governments. People should be advised to remain in existing fallout shelter or home improvised refuge to attain as much shielding as possible from radiation.
F. WARNING	1. The effective use of evacuation, shelter, and radiological defense principles is enhanced by early warning of attack. OCDM maintains warning centers in the Combat Operations Centers of Headquarters, North American Air Defense Command (NORAD), and the three U.S. NORAD Regions. To provide the necessary intelligence, NORAD maintains a detection system that includes ground radar installations, radar picket ships, Texas towers, and radar-equipped aircraft. From this and other available intelligence, NORAD commanders determine the probability or imminence of air attack. This information is made available to the OCDM Attack Warning Officers on duty at the Combat Operations Centers of NORAD, and provides the basis for their dissemination of air raid warnings and supplemental information. 2. Warnings are received from Federal level by 276 Warning Points at State and local level. From there, the warnings are immediately transmitted to approximately 3,500 Secondary Warning Points at local level, and from there to those persons responsible for sounding public signals. Warnings then reach the public through the sounding of devices such as sirens, horns, and whistles. a. Warnings are sent to the local level in the form of voice messages, which allows transmission of the estimated time of attack at various localities and other tactical information. Local officials can use this information in making decisions for mobilization, evacuation, warnings to take cover, or initiation of other tactical operations. b. The Federal Government has recommended uniform public-action warning signals throughout the Nation. The alert signal, a 3- to 5-minute steady blast or tone meaning "attack is probable—take action as directed by local governments." The take cover signal—a 3-minute warbling tone or a series of short blasts meaning "attack is imminent—take cover immediately in the best available shelter." c. Local outdoor warning coverage, through the use of horns, sirens, and other devices, is fairly complete in many cities. Indoor warning coverage is not yet adequate. Research is being conducted to develop a reliable method of sending a warning direct to homes and other buildings.

MAIN TOPICS	TEACHING POINTS
G. CONELRAD	1. CONELRAD (Control of Electromagnetic Radiation) was designed to provide communication with the public in an air raid alert and at the same time meet military requirements of minimizing navigational aid to enemy bombers trying to "home" on standard broadcasting stations. 2. When a CONELRAD alert is declared, all television stations and all AM and FM radio stations leave the air. Then those AM radio stations authorized to do so return to the air on low power, using the on-off method or cluster system of CONELRAD broadcasting. During periods of radio alert, CONELRAD will broadcast preattack information to the public concerning routes, directions, and assembly areas for evacuation; fallout and shelter instructions; and other instructions needed. 3. CONELRAD broadcasting is generally effective within a radius of only 15 to 25 miles. This limitation, plus the restrictions on broadcasting during the immediate preattack and attack periods, make it impossible to reach vast areas of the Nation normally covered by broadcasts—especially rural areas. The Federal Government is exploring means of overcoming this difficulty. Increased use of rural broadcasting stations and prompt lifting of CONELRAD restrictions after an attack are among the methods under consideration for attaining wider dissemination of emergency information in rural sections.

SECTION II.–PRINCIPLES OF PROTECTION AGAINST CONVENTIONAL, CHEMICAL, AND BIOLOGICAL WARFARE

MAIN TOPICS	TEACHING POINTS
A. Introduction	1. Provisions for shelter and evacuation that are effective against nuclear weapons are equally important as protection against the effects of conventional weapons. 2. Protection against chemical and biological weapons requires additional consideration. (See TB–11–25, TB–11–26, and TB–11–28 for basic information on chemical warfare defense.)
B. Chemical Warfare	1. The success of chemical warfare, as for other unconventional types of warfare, depends greatly upon the element of surprise. 2. The early alerting of personnel to chemical warfare attack is the key to successful defense against it. Protection of the respiratory system, the eyes, and the skin is basic. Immediate use of protective masks and impermeable clothing is important. The Federal Government has developed masks that protect the eyes and respiratory tract against all known chemical and biological warfare agents and prevent the inhalation of radioactive and other dusts. The protective masks developed are as follows: *(The instructor should show these items if available.)* a. A canister type or Organizational Mask, CD V–800, for emergency operational use of official personnel. It is available to State and local governments under the Federal Contributions program. b. A protective mask for general use by the public, CD V–805, and an infant protector. Prototypes are available for production when required. 3. Detection and identification of the chemical agent used is necessary for remedial treatment and decontamination. A Chemical Agent Detector Kit, CD V–810, has been developed and is available for this purpose. (See TB–11–29.) 4. Treatment decontamination of personnel must be immediate and thorough. Nerve gases are quickly absorbed through the skin, and a small amount is fatal. Liquid blister gases are also quickly absorbed. Decisions to decontaminate buildings, equipment, and contaminated areas require a careful analysis of the situation. (See TB–11–28 and TB–11–32.) 5. An antidote for nerve gas is the immediate injection of 2 milligrams of atropine salts, a material stockpiled by the Federal Government. The antidote can be self-administered. *(Show the film "Nerve Gas Casualties and Their Treatment," 25 minutes.)*
C. Biological Warfare	1. The principles of protection against biological warfare agents are based upon immunization, protective masks and other air filtering devices, personal cleanliness, alertness to unusual plant or animal diseases, the prompt reporting of unusual sickness, immediate medical treatment, and maintenance of satisfactory sanitation standards. 2. As in the case of chemical warfare, warning, precautions, detection, identification, decontamination, remedial medical treatment, and removal or destruction of contamination sources are important in counteracting biological warfare. (See PA–B–2.)

SECTION III.–PRINCIPLES OF INDIVIDUAL AND FAMILY PROTECTION

MAIN TOPICS	TEACHING POINTS
A. Introduction	1. Individuals and families are responsible for sustaining themselves in an emergency and for contributing to the general survival effort. 2. Individuals and families are responsible for applying and carrying out these principles on the job and in the home. It is especially important that government personnel set the example for their communities in such actions. 3. The principles of protection from the effects of enemy attack are also effective against the effects of natural disasters. (See Lesson Plan No. 5.)
B. Self-Protection	1. The individual can do much to protect himself, his family, and his neighbors in case of emergencies. His first duty is to familiarize himself with the dangers of nuclear, conventional, chemical, and biological warfare and then take the following minimum actions: a. Learn the warning signals of his community and obey them. b. Learn his community plan for emergency action and comply with it. c. Learn protective measures against radioactive fallout and other effects of nuclear weapons, as well as against chemical and biological warfare agents. d. Take American National Red Cross courses in first aid and/or care of the sick and injured at home. e. Learn and practice emergency home preparedness. f. Keep his automobile ready for emergency use and prepare an evacuation kit for it with food and water, first aid kit, battery or car radio, and blankets. g. Prepare a family fallout shelter, and maintain a 2-week supply of food and water, a first aid kit, and a battery radio. (See MP–15 and L–2–12.) h. Mark all radio dials for the CONELRAD frequencies (640 and 1240). i. Learn and practice fire prevention techniques.
C. Family Protection	1. Each family member should know his or her emergency duties, and the family should work as a team in case of emergencies. 2. A family action program is recommended for preparedness to meet any and all emergencies. (See H–11–1 and MP–2–1.) a. Survey the home for safety hazards, and eliminate them. b. Acquaint all members with the community emergency plan and make home plans to comply with it. c. Prepare a home fallout shelter, and maintain a 2-week supply of food and water, a first aid kit, battery radio, blankets, fire extinguisher, hose, axe, ladder, shovel, saw, and rope. d. Keep the family automobile ready for emergency use, and prepare an evacuation kit for it containing such items as food, water, first aid supplies, blankets, and battery-operated radio. e. Acquaint all members with warning signals for evacuation or shelter, and with evacuation procedures.

MAIN TOPICS	TEACHING POINTS
C. FAMILY PROTECTION—*Continued*	f. See that various family members are trained in American National Red Cross courses for first aid and home nursing. g. Drill the family in carrying out emergency duties concerning warning signals, shelter, evacuation, fire fighting and prevention, first aid, home nursing, and rescue. 3. Individuals and families should learn what they can do to help their local government perform its emergency functions, and volunteer their skills and family resources.
D. SUMMARY	*(The Instructor should close the session by reviewing points to remember and by asking pertinent questions that will stimulate discussion.)*
Points To Remember	1. The principles of protection against the effects of nuclear weapons are based upon coordinated plans for evacuation, shelter, radiological defense, and early warning. 2. The principles of protection against the effects of conventional weapons and against nuclear weapons are essentially the same. (A major exception is radiological defense.) 3. Protective measures against the effects of chemical and biological agents include prompt detection and identification, the use of protective masks, decontamination procedures, and immediate remedial treatment. 4. Individuals and families are responsible for sustaining themselves as well as contributing to the general survival and recovery effort.
Sample Discussion Questions	1. Which principles of protection do you consider applicable in your community? 2. What plans and procedures are currently in effect in your community for coping with enemy attack? 3. What emergency preparations have you taken or do you contemplate taking on your job and in your home?

LESSON PLAN NO. 5

COURSE: Basic Civil Defense—OCDM No. 3.2

LESSON TITLE: Civil Defense in Natural Disasters TIME: 1 hour

TRAINING MATERIALS:

Blackboard, chalk, and eraser.
Easel for presentation of chart.
Chart:
Figure 8.—Responsibilities in Natural Disaster.

REFERENCES:

Executive Order No. 10427, Jan. 16, 1953. (Disaster relief authority conferred on FCDA (OCDM).)
Executive Order No. 10737, Oct. 29, 1957. (Change of procedure as stated in Executive Order No. 10427.)
Public Law 875, 81st Congress, the "Federal Disaster Act."
Public Law 107, 82nd Congress. (Emergency housing amendment to PL 875.)
Public Law 134, 83rd Congress. (Surplus property amendment to PL 875.)

OBJECTIVES:

To develop an understanding of:
1. Federal assistance available to State and local governments in natural disasters.
2. State and local responsibility and capability for dealing with natural disasters.

MAIN TOPICS	TEACHING POINTS
A. Review of Preceding Instruction	1. We considered the principles of protection against nuclear warfare. 2. We discussed the principles of protection against conventional, chemical, and biological warfare. 3. We explained the principles of individual and family protection.
B. Introduction	1. In time of natural disaster, local civil defense organizations provide valuable services in saving lives and property. 2. There is a trend toward integrating local civil defense and natural disaster planning and organization. a. Natural disasters provide opportunities for testing civil defense plans and procedures. b. Natural disasters provide realism and incentive for volunteers to participate in civil defense.
C. Authority	1. Public Law 875, 2nd session, 81st Congress, Sept. 30, 1950, provides for a continuing and orderly means of assistance by the Federal Government to States and local governments in major disasters.

MAIN TOPICS	TEACHING POINTS
C. AUTHORITY—*Continued*	a. Assistance is provided to: (1) Alleviate suffering and damage. (2) Repair essential public facilities. (3) Foster development of such State and local organizations and plans to cope with major disasters as may be necessary. b. The law also provides that the President shall determine whether a disaster is a "Major Disaster." c. Upon declaring a "Major Disaster," the President may immediately make the personnel, services, material, and equipment of every Federal agency as well as Federal financial assistance available to the State governments concerned. d. After declaration of a major disaster, all Federal agencies are directed by Public Law 875 to cooperate with each other, with State and local governments, relief agencies, and the American National Red Cross in providing disaster assistance. e. The President has delegated authority to OCDM to coordinate the activities of Federal agencies in providing assistance in disasters that are or threaten to be major disasters, and to direct any Federal agency to utilize its available personnel, equipment, supplies, facilities, and other resources. 2. Public Law 107, 82nd Congress, amends Public Law 875 by: a. Permitting extraordinary credit facilities for home mortgage loans. b. Authorizing temporary housing or other emergency shelter facilities for families affected by major disasters. 3. Public Law 134, 83rd Congress, liberalizes the provisions in Public Law 875 governing donation or loan of Federal surplus property to States for use in major disasters. 4. Executive Order 10427 confers authority upon OCDM to direct and coordinate Federal assistance in major natural disasters. a. Section 2 of Executive Order 10427 directs OCDM to coordinate prior development of Federal agency plans and preparations in anticipation of their responsibilities in event of a major disaster. 5. Executive Order 10737 supplements and amends Executive Order 10427 concerning the administration of Federal disaster relief by providing that: a. The Governors of States affected by a major disaster submit requests for Federal assistance through the appropriate OCDM Regional Director. b. Requests from States for disaster assistance be accompanied by an assurance of expenditure of a reasonable amount of the funds of the State, local governments within the State, or other agencies for alleviating damage resulting from such disaster—together with detailed information concerning the disaster situation and of funds and other resources available or needed. c. The Director of OCDM forward each disaster assistance request from a Governor to the President, together with the Director's recommendation for Presidential action in declaring a disaster to be "major" and in making Federal funds available for assistance.

MAIN TOPICS	TEACHING POINTS
C. AUTHORITY—*Continued*	d. Reimbursement of any Federal agency by the Director of OCDM for authorized expenditures be from funds allocated by the President for assistance of a specific State, and the Director is authorized to prescribe rules and regulations relative to such reimbursement—subject to the concurrence of the Director of the Bureau of the Budget.
D. TYPES OF FEDERAL ASSISTANCE AVAILABLE	1. Federal agencies are authorized, when directed by the President, to provide assistance in major disasters as follows: a. Utilize, or lend, with or without compensation therefor, to States and local governments, equipment, supplies, facilities, personnel, and other resources, other than the extension of credit. b. Distribute through the American National Red Cross, or otherwise, medicine, food, and other consumable supplies. c. Donate or lend equipment and supplies, surplus to the needs of the Federal Government, to States for use or distribution by them in major disasters, including the restoration of public facilities damaged or destroyed by such disaster, and essential rehabilitation of individuals in need as the result of major disaster. d. Perform, on public or private lands, protective and other work essential for the preservation of life and property. e. Make contributions to States and local governments for the purposes stated in "d," above. 2. The Federal Communications Commission and the United States Weather Bureau have developed a plan for emergency weather warnings. The objectives of the plan are to provide for: a. Transmission of an emergency weather warning by all Standard, FM, and TV broadcast stations when the United States Weather Bureau determines that a weather condition exists that is of immediate danger to life and property. b. The optional transmission of CONELRAD Attention Signals preceding the Emergency Weather Warning.
E. STEP BY STEP PROCEDURE FOR FEDERAL ASSISTANCE	1. Upon the threat of, or actual occurrence of, a natural disaster, the city, county, and State take the initial steps necessary to save life and property—each greater entity assisting the smaller with resources available. 2. The OCDM Region is informed, its staff is alerted, and its disaster operation plan goes into effect. 3. As the local, county, and State governments successively exhaust their resources, the Governor *may* ask certain Federal agencies (through OCDM's Regional Director) to assist. Prior to a declaration of a major disaster, this assistance is provided by Federal agencies operating under their own statutory authority and using their own emergency funds. The OCDM Regional Director is charged with the responsibility of coordinating these efforts to avoid duplication and to assure maximum use of resources.

MAIN TOPICS	TEACHING POINTS
E. STEP BY STEP PROCEDURE FOR FEDERAL ASSISTANCE—*Continued*	4. If damage still threatens or continues, the Governor may request (through the OCDM Regional Director) a Declaration by the President of a "Major Disaster." Public Law 875 defines a major disaster as: "any flood, drought, fire, hurricane, earthquake, storm, or other catastrophe in any part of the United States which, in the determination of the President, is or threatens to be of sufficient severity and magnitude to warrant disaster assistance by the Federal Government to supplement the efforts and available resources of States and local governments in alleviating the damage, hardship, or suffering caused thereby, and respecting which the Governor of any State (or the Board of Commissioners of the District of Columbia) in which such catastrophe may occur or threaten certifies the need for disaster assistance under this Act, and shall give assurance of expenditure of a reasonable amount of the funds of the government of such State, local governments therein, or other agencies, for the same or similar purposes with respect to such catastrophe . . ." 5. If a "Major Disaster" is declared, the entire resources of all the Federal agencies are at the command of the OCDM Regional Director. If financial assistance is also approved, the President may allocate to the OCDM Director such funds as are necessary, with a specific amount to be designated later, or if sufficient information is available, he may immediately designate a specific sum for direct aid to the State. This sum will include funds for reimbursement of other Federal agencies for work performed in the disaster area.
F. AREAS OF FEDERAL AGENCY ASSISTANCE IN "MAJOR DISASTER"	1. Upon declaration of a "Major Disaster," OCDM may direct Federal agencies to provide assistance as follows: a. Protective work, such as constructing emergency dikes and levees or extensions of existing ones; demolishing hazardous structures; shoring of walls; providing essential emergency services (e. g., electricity, water supplies); providing necessary health measures (e. g., spraying and vaccinating). b. Clearing debris and wreckage. This will usually be done on public property but may be done on private property if there is a threat to life and health. c. Emergency repairs or temporary replacement of essential public facilities (e. g., bridges, roads, culverts, drainage ditches, waterworks, sewerage systems, schools, and public buildings). d. Temporary housing, if the American National Red Cross and State and local authorities cannot find lodging for disaster victims.
G. STATE AND LOCAL RESPONSIBILITY	1. Most States have laws concerning the acceptance and use of Federal assistance in natural disasters. (*The instructor should present the laws, plans, and policies of his State and community for dealing with disaster problems.*) 2. Most State and local governments have had experience in dealing with natural disaster problems. (*The instructor should discuss the nature and extent of State and local preparations to meet disaster conditions, and explain in detail what the local civil defense organization could do.*)

MAIN TOPICS	TEACHING POINTS
H. Responsibility of the American National Red Cross	1. **A traditional activity of the American National Red Cross has been to help individuals in need as a result of disaster.** (*Hand out Fig. 8,* which shows the responsibilities of government—Federal, State, and local—and the American National Red Cross in natural disasters.) **The traditional role of the American National Red Cross is not altered by the assistance available through OCDM.** 2. As shown in figure 8, government—Federal, State, and local—is responsible for: a. Protection of persons and property. b. Provision of usual community services. c. Restoration of public property. 3. Also as shown in figure 8, the primary responsibility of the American National Red Cross is to provide assistance to disaster-affected individuals and families.
I. Summary	(*Brief enumeration of the points listed above under main topics D through H should help fix them in the minds of the students.*)
Points to Remember	1. At every level, government is properly charged with the protection and welfare of the citizenry. To meet the problems of natural disaster, or recover from enemy attack, government at all levels must be prepared to do its share. 2. The role of the Federal Government in natural disasters is to assist State and local governments. 3. At the request of a Governor, through the OCDM Regional Director, the President may declare a "Major Disaster," and make the services of all Federal agencies and financial assistance available.
Sample Discussion Questions	1. What Federal assistance is available in natural disaster? 2. Who determines when a disaster is a *Major Disaster*? 3. Who must request that decision? 4. What are the State and local responsibilities? 5. How well is your community prepared to meet the problems of a possible disaster? 6. How could the local capability be increased most effectively? 7. What can we do to increase the local capability?

Responsibilities of Government agencies			Responsibilities of the American National Red Cross	
Protection of persons and property	Provision of usual community services	Restoration of public property	Assistance to disaster-affected individuals and families	Supporting services
Warning Evacuation Rescue Maintenance law and order Fire precautions and protection Designation of hazardous buildings Public health and sanitation Care of dead Traffic control	Welfare and health Public institutions Public transportation Public communication Removal of debris—public property Salvage of unclaimed property Inspection of buildings	Public buildings Sewerage systems Water systems Streets, highways, and bridges Other public projects	Food Clothing Shelter Medical and nursing aid Family services (includes information, welfare inquiries, and rehabilitation)	Survey Communications Transportation Supply Warning, rescue, and evacuation (to assist governmental authority)

Figure 8.—Responsibilities of government—Federal, State, and local—and the American National Red Cross in natural disasters

LESSON PLAN NO. 6

COURSE: Basic Civil Defense—OCDM No. 3.2

LESSON TITLE: Emergency Functions of Individuals TIME: 1 hour

TRAINING MATERIALS:

Blackboard, chalk, and eraser.

REFERENCES:

National Plan for Civil Defense and Defense Mobilization, The.

OBJECTIVE:

To indicate the extent of individual responsibility in emergencies.

MAIN TOPICS	TEACHING POINTS
A. Review of Preceding Instruction	1. We considered the Federal assistance available to State and local governments in major disasters. 2. We considered the relationship of Federal, State, and local governments in providing assistance in major disasters.
B. Introduction	1. Every citizen is responsible for improving his own capability for survival in peacetime and wartime emergencies. It is his responsibility to: a. Make all feasible preparations to take care of himself. b. Know his role in the emergency action plan of his local government. 2. Each family unit is responsible for making all feasible preparations for solving its own emergency problems and for assisting others in need.
C. Emergency Supplies and Equipment	1. Each person and family must be prepared to meet individual survival requirements for two weeks after an attack without depending upon outside help. Essential survival items include emergency food and water, first aid materials, other personal items required to sustain life, and a battery-operated radio. 2. Emergency supplies must be conserved to avoid waste or too rapid consumption.
D. Food and Water	1. Individuals and families must stock sufficient food and water to take care of their personal needs for at least two weeks. a. Food should be dried or canned—types that do not require cooking. b. Stored drinking water should be changed regularly—at least every three months. 2. Everyone must discipline himself in the consumption of food and water; particularly if radioactive fallout prohibits the free movement of individuals and disrupts the distribution of food and water.

MAIN TOPICS	TEACHING POINTS
E. Medical Care	1. Responsibility for medical care is expected to begin with the individual and the family. At least one member of every family should be trained in first aid and home nursing. 2. Individuals trained in first aid, and care of the sick and injured at home, after fulfilling their own family needs, should report to their local government for assignment to first aid stations or other emergency medical care units.
F. Sanitation	1. Shelter areas should be equipped with a covered garbage can, a can with a tight-fitting lid for disposal of human wastes, and a receptacle that can be used as a toilet. 2. Household disinfectant should be added to garbage and waste containers periodically to control odors and bacterial growth. 3. Newspapers and grocery bags are useful for sanitary purposes.
G. Fire Protection	1. Individuals and families cannot expect organized assistance in fighting fires immediately after enemy attack. They must rely upon their own efforts for fighting fires in their own homes. 2. Fire hazards around the home should be eliminated and fire extinguishers should be procured. Preparatory measures such as these will help the individual meet the threat of fire in peacetime—or following nuclear attack.
H. Rescue	1. Individuals and families are responsible for knowing the principles of light rescue work that may be needed in escaping from private structures and shelters. 2. Shelters should be equipped with simple rescue tools, such as a shovel and crowbar.
I. Debris Clearance	1. Individuals and families are responsible for light debris clearance around their homes or shelter areas. 2. Except for their own premises, householders are not responsible for independent action in debris clearance.
J. Emergency Welfare	1. Individuals and families decrease the public welfare load by making emergency preparations to provide for their own survival needs during the first two weeks following enemy attack.
K. Maintenance of Order and Control	1. Each individual is responsible for respecting the law and cooperating with recognized law enforcement officers in every possible way.
L. Manpower	1. Persons not adversely affected by emergency conditions, or who are sufficiently recovered from them, should report their availability to their local government.
M. Radiological, Chemical, and Biological Warfare Defense	1. Individuals and families are responsible for learning protective techniques against the casualty-producing effects of radiological, chemical, and biological warfare. 2. They are responsible for making home preparations that will provide maximum protection, and for cooperating with local government in following instructions and procedures applicable to their safety.

MAIN TOPICS	TEACHING POINTS
N. SUMMARY	*(The information presented in this Lesson Plan involves action on the part of every individual present. A group discussion should be conducted in which examples are cited on how individuals and families can prepare themselves to fulfill the emergency functions for which they are responsible.)*
Points to Remember	1. Individuals and families must prepare to rely upon their own resources for at least two weeks after enemy attack. 2. Self-reliance in emergencies can be achieved only through adequate preattack preparations. 3. Self-reliance in emergencies serves three purposes: a. It increases the probability of individual and family survival. b. It relieves the emergency burden of local government. c. It leaves more human resources in condition to sustain the Nation.
Sample Discussion Questions	1. What important emergency functions must individuals and families perform for themselves after enemy attack? 2. Which individual emergency functions require training for effective performance? 3. What supplies and equipment are important for individuals and families to keep on hand for emergencies?

LESSON PLAN NO. 7

COURSE: Basic Civil Defense—OCDM No. 3.2

LESSON TITLE: Emergency Functions of Governments TIME: 2 hours

TRAINING MATERIALS:

Blackboard, chalk, and eraser.

REFERENCES:

Annual Report for Fiscal Year 1957, FCDA (OCDM), Chapter 2.
Annual Report for Fiscal Year 1958, FCDA (OCDM), Chapter 3.
National Plan for Civil Defense and Defense Mobilization, The.
Public Law 920, 81st Congress, *Federal Civil Defense Act of 1950,* as amended.

OBJECTIVES:

1. To identify the important functions for which Federal, State, and local governments are responsible in emergencies.
2. To show the relationships of all levels of government in performing emergency functions.

MAIN TOPICS	TEACHING POINTS
A. Review of Preceding Instruction	1. We discussed and explained the emergency functions of individuals and families. 2. We indicated the extent of individual responsibilities in emergencies. 3. We emphasized the importance of self-reliance in emergencies.
B. Introduction	1. Emergency functions beyond the scope of individual capabilities are the responsibility of governments. 2. The capability to perform these functions already exists in governments to an appreciable degree, but it must be greatly increased to cope with major and widespread emergencies. This capability must be developed by: a. The full assumption of emergency functions, by existing government personnel and agencies, of responsibilities in the fields most closely related to their normal duties. b. Governmental preparations to provide, in an emergency, services not normally provided by government, (e. g., extensive radiological monitoring and reporting). c. Augmenting government personnel with sufficient auxiliaries to provide the manpower needed for emergency operations. 3. To insure the ability of governments to operate effectively, plans must be made for the **continuity of government.** Four specific objectives are: a. The establishment of automatic lines of succession in depth for executive, legislative, and judicial officials through the necessary legal and administrative changes.

MAIN TOPICS	TEACHING POINTS
B. INTRODUCTION—*Continued*	b. The preservation of the records needed to protect the rights and interests of individuals, to conduct effective emergency operations, and to protect the interests and obligations of governments. c. The establishment of governmental **emergency operation locations** which have the protective features, supplies, and equipment needed for the effective control of emergency functions. These facilities are needed for officials of all three branches of governments and are commonly called **control centers.** d. The full use of all personnel, facilities, and equipment of governments for emergency operations. This involves the determination of the emergency functions of government and their assignment to regular government units. All government resources should then be assigned to the units responsible for emergency functions. Volunteer groups and individuals will be needed as auxiliaries to the regular government forces.
C. EMERGENCY AUTHORITY	1. Under the *Federal Civil Defense Act of 1950* (See Title III of Public Law 920, 81st Congress, as amended), the Federal Government has broad powers for action applicable only during civil defense emergencies. Federal responsibility for emergency functions are based upon that statute. Federal responsibilities in emergencies caused by natural disasters are covered in Lesson Plan No. 5. 2. Authority for State and local emergency functions is based upon State and local laws and policies. *(The instructor should present the State and local legal status concerning emergency responsibilities of government in his community.)*
D. EMERGENCY SUPPLIES AND EQUIPMENT	1. The Federal Government will assist the States, their political subdivisions, and individuals in obtaining emergency supplies and equipment as soon as possible after enemy attack. According to current plans, Federal stockpiles and other resources will be considered available for allocation to States on the basis of need after the **fourth week** following attack. 2. States and their political subdivisions should plan to exist on consumer items and essential equipment available within their respective jurisdictions for a minimum of **four weeks.** 3. Governments at all levels are responsible for determining requirements for emergency supplies and equipment; for obtaining the needed items, storing them, and distributing them. a. Emergency supplies include specialized equipment (e. g., radiological monitoring instruments), medical supplies, food, clothing, fuel, and other essentials for survival.
E. EMERGENCY WELFARE	1. The Federal Government will make available emergency welfare capabilities to augment State and local resources as soon as possible when such capabilities are not required for emergency activities of the Federal Government. An appropriate portion of Federal welfare resources will be committed only for reestablishment of a minimum level of regular community capability for the surviving population.

MAIN TOPICS	TEACHING POINTS
E. EMERGENCY WELFARE—*Continued*	a. Responsibilities for performing these functions were delegated by the former FCDA to appropriate Federal departments and agencies whose normal functions are closely related to them. (See ch. 2, FCDA *Annual Report for Fiscal Year 1957.*) Because of changes necessitated by the merger of FCDA and ODM to form OCDM, these delegations are currently being revised. 2. The Federal Government is also responsible for providing emergency instructions and assistance to State and local governments for: a. The protection of water supplies and use of emergency water resources. b. The management, allocation, and control of water resources such as those on Federal property and those of interstate or interregional nature. 3. Appropriate Federal agencies and the American National Red Cross will assist State and local governments in providing mass care and other welfare services. Federal agencies will work through normal State channels in carrying out their delegated emergency responsibilities, and will supplement State and local capabilities. 4. OCDM Regional Directors will allocate Federal welfare resources to State and local welfare agencies, coordinate welfare needs of their respective Regions, and obtain resources from Federal stockpiles when regional supplies are exhausted. 5. State governments are responsible for assisting their political subdivisions through existing welfare agencies—and by directing, supporting, coordinating, and controlling the welfare resources under their jurisdictions. The States are also responsible for entering into preattack agreements for the use of Federal stockpiles, and for negotiating preattack interstate compacts for mutual aid. 6. State and local governments are responsible for the acquisition, control, and distribution of food stocks in public and private possession within their jurisdiction, in accordance with their laws. 7. Local governments are responsible for providing mass care (e. g., food, clothing, and housing) for those in need after enemy attack; registering, identifying, and locating homeless and displaced persons—and reuniting families; and assisting in rehabilitating family life through all feasible means, including financial help. a. Under the direction of responsible local welfare officials, important resources for carrying out these responsibilities are the local Red Cross chapters and other welfare agencies, wholesale food and clothing establishments, and hotels and restaurants. b. Persons who have counseling and welfare experience should be encouraged to volunteer their help in carrying out community welfare responsibilities in emergency.
F. HEALTH AND MEDICAL CARE	1. The Federal Government is responsible for stockpiling essential or critical health supplies and equipment for the medical care of sick and injured persons and health protection of uninjured survivors. These are to be made available to State and local governments as soon as possible after enemy attack. 2. During emergencies, the Federal Government will process requests for assistance through its Regional Offices.

MAIN TOPICS	TEACHING POINTS
F. HEALTH AND MEDICAL CARE—*Continued*	3. The Federal Government assists the States and their political subdivisions, through matching funds, in building up medical stockpiles of such items as first aid supplies, blood equipment, sanitation supplies, and 200-bed emergency hospitals.
	4. The Department of Health, Education, and Welfare (DHEW), under authority delegated by FCDA (OCDM), is responsible for Federal activities concerning casualty care; protection against communicable diseases and biological and chemical warfare; and other public health hazards. DHEW will assign Public Health Service regular and reserve professional personnel to areas of greatest need, and will direct Federal activities for the emergency restoration of community facilities essential to health.
	5. The Department of Agriculture, under authority delegated by FCDA (OCDM), directs Federal activities concerning biological and chemical warfare against crops and animals.
	6. State governments are responsible for analyzing medical manpower and material needs; committing State stockpiles of medical supplies to replenish local supplies; and requesting needed support from Federal Regional Offices. Field offices of appropriate Federal agencies—and nongovernmental medical organizations, such as the American Medical Association, the American Hospital Association, and the American National Red Cross—will assist the States in providing medical care.
	7. Local governments are responsible for providing the following emergency health and medical care services: First aid, casualty evacuation, hospitalization, medical and nursing care, dental care, mental health care, sanitation, maternal and child health care, industrial health care, communicable disease control, laboratory services, the recording of vital statistics, and care of the dead.
	8. Local governments are also responsible for monitoring radioactive fallout contamination of their own facilities; detecting and identifying biological and chemical warfare agents—and protecting against these agents in water and food supplies; planning and maintaining medical supply inventories; and developing and maintaining an emergency blood program.
	9. Personnel suitable for performing the functions listed in preceding sections 7 and 8—under the direction of local health officials—include: Professional medical, nursing, and hospital personnel; laboratory technicians; first aid workers, nurses' aides, and persons trained in home nursing; hospital orderlies, ambulance personnel, litter bearers, and supply handlers; science teachers and students, radio and television repairmen, and electronics technicians.
	10. Local officials will evaluate their medical care situation and notify State officials of excess resources, or request additional resources if local resources are exhausted.

MAIN TOPICS	TEACHING POINTS
G. Radiological Defense	1. The Federal Government is responsible for the operation of a national radiological defense system. *(See Lesson Plan No. 4 for coverage of radiological defense as a principle of protection against the effects of nuclear weapons, and see ch. 3 of the "FCDA Annual Report for Fiscal Year 1958" for information on the radiological defense program being carried out by the Federal Government.)* 2. The Federal Government is responsible for providing technical assistance to the States for radiological defense, and for collecting, analyzing, and transmitting radiological defense information during emergencies. The Federal Government is also responsible for assisting in the radiological defense of various Federal agencies; establishing a national capability for monitoring radioactive fallout; establishing need for a reasonably nonvulnerable communications plan for radiological defense; plotting and analyzing radioactive fallout conditions affecting major survival operations; and inventorying radiological resources available for radiological defense. 3. State governments are responsible for operating statewide radiological defense systems. Operational planning requirements include: a. Delegation of responsibilities to the various State agencies that can be useful in radiological defense operations. b. Development of a capability by State government for both ground (surface) and aerial monitoring of radioactive fallout; and a capability for provision of monitoring assistance to local governments upon request. c. Establishment of a State radiological defense plotting office for coordination and dissemination of radiological defense information. This information will be useful to local governments in deciding on whether or not to evacuate; and if evacuation is ordered, in setting the direction and flow of traffic; and in determining radiologically safe evacuation areas. d. Development of a statewide communications capability for transmittal of radiological defense information among local governments, and between State government and local government. 4. Local governments are responsible for warning the public of radiological hazards, and subsequently for keeping the people informed concerning the hazards. a. The radiological situation is a factor that local governments must consider in deciding whether to evacuate certain areas. b. Local governments are responsible for decontamination of radioactivity within their areas of jurisdiction. State government assistance is called for only when the defense resources of local government are inadequate to cope with the problem. c. Local governments are responsible for coordinating their radiological defense systems with those of the Federal and State governments. d. Operational planning requirements for local radiological defense systems include: Assignment of responsibilities, provision of communications, development of monitoring and warning procedures, and training of personnel.

MAIN TOPICS	TEACHING POINTS
G. RADIOLOGICAL DEFENSE—*Continued*	e. Suitable volunteer personnel to train for radiological monitoring and reporting include science teachers, television and radio technicians and repairmen, laboratory technicians, and electricians.
H. FIRE PROTECTION	1. Trained personnel and equipment of the Federal Government, when not immediately required for other Federal assignments, will be assigned to assist State and local governments in fighting fires. Priority will be given to fighting conflagrations that jeopardize essential communication and transportation facilities, and other resources and property essential to national survival and rehabilitation. Under authority delegated by FCDA (OCDM), the Department of Agriculture is in charge of Federal activities concerning the prevention and control of fires caused by enemy attack in rural areas. 2. State governments are responsible for encouraging and coordinating mutual support pacts between and among their political subdivisions, and for negotiating such pacts with neighboring States for fire fighting. 3. In the postattack period, fire fighting will be almost entirely a local effort. Through the local fire departments, local governments are responsible for training individuals in fire prevention and protection; for recruiting, training, and equipping auxiliary firemen to meet emergency needs; negotiating mutual aid fire fighting agreements with neighboring communities; cooperating with State officials in developing operational studies, and carrying out tests and drills. a. In peacetime, firemen normally perform additional functions such as rescue and first aid. In the postattack period, firemen may have to perform these and other emergency functions. b. Fire-fighting teams will have to do radiological monitoring for their own protection during emergency operations.
I. RESCUE	1. The Federal Government will support State and local postattack rescue activities by providing Federal equipment and personnel when they are available and not immediately required for other Federal emergency assignment. 2. State governments are responsible for augmenting local rescue resources if the latter are inadequate. 3. Local governments, directing trained rescue teams or other skilled personnel under their jurisdictions, are primarily responsible for rescuing persons trapped as a result of enemy attack. a. Rescue teams will have to do radiological monitoring for their own protection during emergency operations. b. Rescue teams should be thoroughly trained, and equipped with special tools and vehicles. c. Rescue personnel preferably should have experience in shoring, rigging, and building construction; should have special physical strength and stamina; and be willing to work as a team under emergency conditions.

MAIN TOPICS	TEACHING POINTS
J. Debris Clearance	1. The Federal Government, in exceptional emergency cases, will clear debris from nationally significant transportation and communications facilities by using forces available to it. Federal activities concerning emergency debris clearance have been delegated by FCDA (OCDM) to the Department of Commerce. 2. State and local governments will clear debris involving communication and transportation facilities essential to the immediate preservation of life and property.
K. Maintenance of Government, Law and Order	1. The Federal Government will assume and exercise, upon the request of a State government or in event a State government is unable to act, all necessary government functions during an emergency in areas where it is determined that government organizations have been rendered incapable of performing vital functions. a. The Secretary of Defense, upon request, will provide emergency military aid to civil authorities to assist in the maintenance of law and order to the extent that such commitments will not interfere with the conduct of primary military missions. 2. State governments are responsible for the equitable use of State law enforcement services within their political subdivisions; the emergency use of local police outside their local jurisdictions in accordance with statutory laws or proclamation of the Governor; and the augmenting of local police with additional forces if local authorities estimate that their resources are inadequate. The State government is also responsible for requesting Federal police support only if State and local police are inadequate to cope with the situation. 3. Local governments are primarily responsible for maintenance of law and order through their normal police staffs, augmented by sufficient auxiliary police. Police personnel should be thoroughly familiar with the local survival plan and the command echelons of Federal, State, and neighboring political subdivisions. a. Important police functions are: Direction of traffic; expediting the movement of emergency equipment and personnel; maintaining or restoring order; guarding public property and vital supplies and equipment; giving first aid; reconnoitering for unexploded ordnance and other hazards; establishing and enforcing safety measures; guarding prisoners; and performing radiological monitoring required for the protection of police and auxiliary police in emergency operations. b. Auxiliary police should be recruited, selected, and trained by the regular police staff.
L. Emergency Restoration of Public Facilities and Utilities	1. The Federal Government will: a. Identify those resources, including industrial facilities, utilities, and services essential to the maintenance and operation of the national economy. b. Allocate such resources where necessary. c. Resolve conflicts so that the most essential national requirements will be met.

MAIN TOPICS	TEACHING POINTS
L. EMERGENCY RESTORATION—*Continued*	d. Exercise priorities and allocation and requisitioning authority to expedite and direct the flow of such resources to meet national requirements. e. Take necessary actions (such as ordering interconnection of utility systems) to assure maximum effectiveness in use of interstate resources. f. In areas where the Federal Government has equipment and trained manpower that would be useful in restoration of public facilities and utilities, make such resources available if they are not needed for duties of equal or greater essentiality. 2. To the extent possible and as required by the situation, State governments will assist local governments in the repair and restoration of public facilities essential to statewide emergency activities and allocate available utility service within the State where conflicts arise between localities in use of the service. The State will modify its regulations on utility operations to the extent necessary to facilitate restoration of service within the State and in other States. 3. Local officials will identify those public facilities (such as radio stations, roads, and airports) and utilities (such as water, electric power, sewerage systems, and gas) essential to the continued life of the community. They will direct, through appropriate departments of local governments, repair and restoration of vital public facilities and utilities and the order in which essential needs for local service should be met. 4. If locally available materials or manpower are inadequate for such needs, mutual-assistance arrangements with other local governments will be invoked. Utility systems will make known mutual assistance arrangements to the government entities concerned. Such arrangements will be invoked to furnish service for essential needs. Requests for Federal assistance will be made through the State unless other arrangements approved by the State exist.
M. EMERGENCY COMMUNICATIONS	1. *(See Lesson Plan No. 4 for the importance of adequate communications in providing attack warning and emergency information to governments and the public.)* The Federal Government is responsible for a National Communications System, consisting of teletype and telephone landlines, and radio backup, for operational civil defense communications with its Regional Offices and the States. Federal agencies are responsible for establishing (preattack) headquarters control centers with communications maintained at all times. 2. State governments are responsible for maintaining communications systems for direction of emergency operations. The responsibility includes establishment of emergency control centers and government relocation sites equipped to communicate with the State political subdivisions and the Federal Government. The Radio Amateur Civil Emergency Services (RACES) will provide communications for regional, State, and local use to augment normal communications or substitute for them. 3. Local governments are responsible for maintaining communications systems for conducting emergency operations from their control centers or relocation sites.

MAIN TOPICS	TEACHING POINTS
M. EMERGENCY COMMUNICATIONS—*Continued*	a. Local communications resources include such various forms as teletype, telegraph, telephone, radio, and messenger service. b. In addition to members of RACES, personnel suited for communications service are licensed radio operators and technical personnel experienced in radio, television, telephone, and telegraph work.
N. EMERGENCY TRANSPORTATION	1. The Federal Government will control transportation resources required for the execution of national military and civil defense and defense mobilization measures. Use of these resources will be coordinated with the State and local governments and with the transportation industry. 2. OCDM will allocate Federal agencies' emergency transportation for their civil defense and defense mobilization needs. Field establishments of Federal agencies will request transportation resources for civil defense and defense mobilization purposes through the appropriate OCDM Regional Office. 3. Transportation resources not required for Federal emergency use will be available for use of the State. 4. Each State will control and direct the use of local transportation resources within its jurisdiction required for local emergency operations, except those required for emergency Federal purposes, in coordination with the transportation industries. 5. States will request additional transportation resources through the appropriate OCDM Regional Office. 6. Local governments will control and direct the use of local public and private transportation resources needed for emergency purposes, except those required for State or Federal use. 7. Local governments will request additional transportation resources from their respective States as required. a. Important emergency functions of local transportation personnel are transporting persons, equipment, and supplies during evacuation operations; providing transportation for emergency operations; and coordinating all local transportation facilities mobilized for emergency use. b. Some of the more important transportation resources for emergency use are railroads, bus lines, street railways, trucking and cartage companies, steamship lines, and airlines. c. Personnel essential to emergency transportation are those skilled in operating normal transportation systems and vehicles and those skilled in maintenance and repair of transportation equipment.
O. EMERGENCY MANPOWER	1. The Federal Government is responsible for coordinating manpower resources with the State governments. National planning and Federal direction concerning emergency use of manpower are responsibilities delegated by FCDA (OCDM) to the Department of Labor. Its Employment Service will assist and advise the State governments in meeting emergency manpower requirements.

MAIN TOPICS	TEACHING POINTS
O. EMERGENCY MANPOWER—*Continued*	2. State governments are responsible for working out emergency staffing patterns. In the postattack period, State governments are responsible for balancing manpower requirements against manpower availability. 3. Local governments are primarily responsible for identifying and satisfying manpower requirements—especially in the early postattack period. Local governments are responsible for the development of emergency staffing patterns. If the local manpower supply is inadequate during an emergency, the local government can request additional personnel through the State government. a. A local government's resource for manpower management is the peacetime staff of its personnel office, augmented by competent auxiliaries. b. Important manpower sources are personnel already in government service, auxiliary personnel from industry and labor trained for specific emergency functions, and volunteers recruited for special tasks.
P. OPERATIONAL INTELLIGENCE IN EMERGENCIES	1. Nonmilitary operational intelligence is concerned with the results of enemy attack and the probable course of developments that affects the civil population. It is an important staff function at governments of all levels by which reported information is evaluated and interpreted for its true significance. a. The elements of the information sought should be determined during the preattack period and confined to that which the director for emergency operations must have to direct operations successfully. b. The information collection plan should be developed as part of the operational plan and should designate collection responsibilities to various units responsible for emergency action. c. In the postattack period the specified information items and others considered of value are collected, evaluated, and distributed in intelligence summaries and briefings for guidance of operational personnel. 2. The intelligence officer is a staff adviser to the director of emergency operations, and should report directly to, and be supervised by, him. 3. True estimates of the emergency situation should be made by operational units and submitted to the intelligence officer and his staff for development of comprehensive intelligence reports.
Q. SUMMARY	*(The instructor should summarize important points and answer questions necessary to the successful completion of the session and the course.)*
Points to Remember	1. Emergency functions of governments at all levels are based on legal authority of the constituted governments, Federal, State, and local, now in existence. 2. Continuity of government is essential to the effective performance of emergency functions by Federal, State, and local government—and to the survival of the Nation.

MAIN TOPICS	TEACHING POINTS
Points to Remember—*Continued*	3. From its normal, peacetime structure, Government at all levels can provide leadership and direction, and to a great extent the personnel and facilities needed, for emergency operations. In emergencies of wide effect, the efforts and resources of government must be augmented, under government direction, by trained auxiliaries and the resources of private organizations and industry. 4. All emergency functions require the support of government, the citizenry, industry, civic organizations, and professional organizations. a. Each function requires a specific staffing pattern. b. Each function requires certain supplies and equipment.
Sample Discussion Questions	1. Which emergency functions could be carried out adequately in your community at present? 2. What action is necessary to establish adequate emergency capabilities? 3. How can the capabilities for carrying out emergency functions be established in a community?

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