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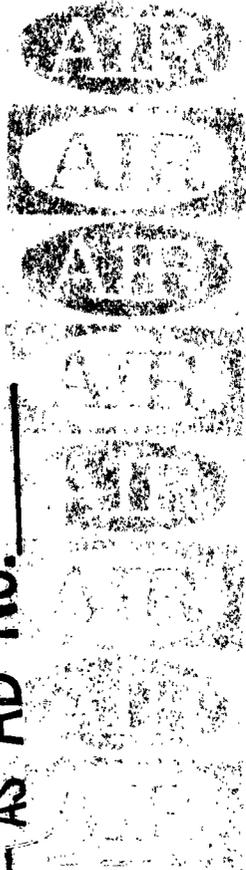
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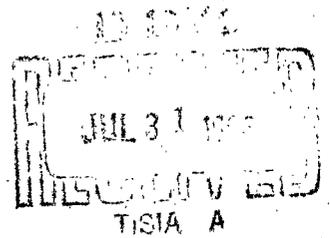
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REQUIREMENTS AND
METHODS FOR
IMPROVING LOCAL
CIVIL DEFENSE TRAINING

July 1963



Engineering Psychology Program
AMERICAN INSTITUTE FOR RESEARCH

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**REQUIREMENTS AND METHODS FOR
IMPROVING LOCAL CIVIL DEFENSE TRAINING**

(Research Report)

Contract No. OCD-OS-62-117

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This report has been reviewed in the Office of Civil Defense and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Office of Civil Defense.

JULY 1963

**AMERICAN INSTITUTE FOR RESEARCH
Pittsburgh, Pennsylvania**

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SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

The research summarized in this report is the result of the application of a "system analysis" approach to the determination of generalizable requirements and methods for improving the effectiveness of civil defense training at the local level. The rationale for, and description of, this approach is presented in a later section entitled "Brief of the Study." In the present section, general conclusions and recommendations are summarized. The data, assumptions, and other considerations underlying these conclusions and recommendations are discussed in subsequent sections of the report. Also supplementing the present section is a set of specific and detailed recommendations incorporated in a final section entitled "Outline of Recommended Local Training Program." The general recommendations and conclusions presented below are not necessarily listed in order of priority. Nor are they listed in order of estimated validity. They are, however, presented as a set of plausible, though necessarily tentative, assumptions or hypotheses worthy of serious, formal research and/or administrative evaluation.

1. A need exists for the development, refinement, and dissemination of a basic civil defense training "concept," or "master plan," i.e., an explicit conceptualization of the training subsystem, its mission, objectives, scope, constraints and other relevant characteristics. A number of aspects should be considered in the development, dissemination, and utilization of an effective training concept. Among these are the following:
 - a. Preparation as a formal Office of Civil Defense (OCD) document, or report, providing a comprehensive and systematic model, or general description, of an effective local training subsystem.
 - b. Selection and organization of incorporated material in such a manner that the resulting document, by its very nature, will largely determine certain local training

decisions--which, in turn, will serve as constraints on subsequent development of detailed local training activities.

- c. Indication of firmness of incorporated information--including differentiation of assumptions into "hard" and "soft" categories, as well as clear differentiation of firm policy decisions from mere working assumptions.
- d. Specification of time reference--e.g., current or projected status.
- e. Up-dating through widespread review and solicitation of suggested improvements.
- f. Integration of new material with any relevant old material, e.g., through careful referencing of earlier material in later supplements and partial revisions.
- g. Encouragement of use as a source document by local training planners, e.g., by maximizing availability of document(s) accessibility of incorporated information, ease with which obsolete material can be deleted and new material added.
- h. Inclusion of such content areas as the following:
 - (1) Relationship to operational objectives--i.e., relating training subsystem to local system mission.
 - (2) Cost analysis--identifying principal cost factors expected to affect development of the training subsystem.
 - (3) Training organization--identifying the levels or echelons of training subsystem, indicating the general responsibilities of each level.
 - (4) Personnel requirements--describing probable needs for administrative and instructional personnel as well as trainees.

- (5) Facilities--indicating probably available, and additionally required, facilities for operation of the training subsystem.
- (6) Training and job aids--describing the manuals, checklists and other aids which (a) are available, (b) are currently planned or under development, or (c) should be locally developed.

It should be noted that preparation of a document of this sort would entail much more than mere development of a simple model local training "annex," or even a civil defense Job Dictionary (with associated training guidance). The potential pay-off in terms of effective guidance for local training planners, however, is considered sufficient justification for such an effort. The initial step might well take the form of a research study which would incorporate (1) an analysis of all relevant civil defense training research studies, and (2) the collection and analysis of necessary field data. The end product of such a study would be a prototype Local Training Guide which could be revised as necessary by appropriate OCD personnel and then distributed to local systems as official guidance material. Subsequent civil defense training research, as well as policy changes, should provide inputs for revisions and supplements to this Local Training Guide. A document of this type would not only provide assistance to local training planners, but would also facilitate the identification of specific problem areas for subsequent intensive training research.

2. As an operating system, local civil defense is conceived as, basically, local government under emergency conditions. The personnel requirements of such a system are of such a nature and complexity as to preclude any major use of civil defense training as an effective substitute for selection and recruiting. In other words, the personnel requirements of such a complex system will be met, if at all, largely by selection and recruiting of key personnel. Training will be important, of course. It can and should supplement selection and recruiting efforts--but it cannot reasonably be considered as an adequate substitute for such efforts.

3. Since much of the requisite "job relevant" knowledge, at least for key civil defense jobs, is of a specific professional, technical or managerial nature, it is neither necessary nor desirable to attempt to develop or evaluate such capabilities in a civil defense training context. Such training and evaluation is best left, in fact must be left, to the appropriate professions or disciplines themselves. If civil defense properly emphasizes selection and recruiting of such key personnel, then there will be no significant training problem except in those remaining knowledge and skill areas which are uniquely civil defense in nature.

4. Knowledge requirements which are unique to the civil defense context can be comprehensively categorized as follows:

- a. General civil defense knowledge.
- b. Local system knowledge.
- c. Specific job responsibility knowledge.

These categories, though quite general, are considered sufficiently distinct for purposes of basic course organization. It is recommended that further breakdown of these basic kinds of "courses" be done first in terms of local civil defense system functions or "services" and secondly in terms of specific jobs or job roles. Examples of such recommended breakdowns are provided in the final section of the present report.

5. Skill requirements which are unique to the civil defense context can be subsumed under the general category of "job proficiency," i.e., the ability to use job-relevant knowledge effectively. Examples of specific recommended breakdowns in terms of system services and jobs are presented in the "Outlines of Recommended Local Training Program" section.

6. Attitude requirements unique to the civil defense context are a bit more difficult to specify. One category which seems to be important is that connoted by the term "esprit de corps." This can, perhaps, be broken down into the following essentials: (a) confidence--in the system and its objectives, methods etc., and (b) commitment--i.e., emotional involvement in, or keen sense of responsibility for, getting one's job done in spite of even overwhelming obstacles. Whatever this attitude or

set of attitudes may be, it is clearly the antithesis of the "summer soldier" syndrome. Experience in military, industrial, and educational contexts suggests that these attitudes can be engendered. Moreover, they can be acquired without sacrificing anything in the way of skill and knowledge acquisition. However, there is also ample evidence to support the notion that such attitudes are rarely developed if training administrators: (a) feel such attitudes are unimportant, or (b) fail to plan specifically for such development.

7. Local civil defense training should emphasize what might be termed a "from-the-top-down" approach. In other words, training priority should be given to the managerial, decision-making portions of the personnel system. A reasonably balanced training program will necessitate certain exceptions, e.g., it would be poor policy to neglect the training of lower echelon personnel in the Warning and Radiological services simply because such individuals are not major decision-makers. In general, however, a "from-the-top-down" training approach is recommended. It should be noted that this emphasis is entirely compatible with the previously expressed view that much of the knowledge required of individuals in key local civil defense jobs is acquired, and should be acquired, in other contexts such as public and professional life. The decision-makers of the local system including the chiefs of the various services, should be highly skilled decision-makers (in their respective specialties or fields) prior to formal enlistment as leaders in the system. Essentially, the training problem consists of providing these individuals with the additional knowledges, skills and attitudes required for effective discharge of their responsibilities within the context of the local civil defense system. Judging from current local training activities and planning, there is an apparent lack of recognition of this problem. Specifically, it would appear that the top echelons of the local system are considered as being in no particular need of training, or as somehow being inaccessible for training purposes. This state of affairs is considered both undesirable and unnecessary. The recommended "from-the-top-down" approach to local training is considered perfectly feasible, provided that training is not narrowly conceived.

8. Local civil defense training should be broadly conceived. To define local training as simply, or largely, the technical instruction of personnel in lower echelons of the system is to impose serious limitations on system capabilities. These limitations could be reduced, or perhaps eliminated, by greatly expanded training programs at the state level. However, this does not appear nearly so promising as does the alternative of enlarging the scope of the local training effort. Specifically, what seems to be required is first of all a recognition of the fact that orientation, briefing, public information and normal job activities can and do produce the same kinds of behavioral changes as those usually attributed to "training and education." Mere recognition of this fact, of course, is insufficient. What is required is a formal integration of such activities within the context of the training subsystem.

9. One concept which should prove useful in developing and implementing local training programs is the distinction between civil defense as a "building system" and civil defense as an "operating system." For example, civil defense jobs and tasks may be more meaningfully described and understood if they are clearly related to emergency versus peacetime conditions. Such distinctions are valuable even for civil defense jobs and activities which are necessary or common to both peacetime and emergency conditions--because of the shortcuts, compromises and constraints which the "operating" or emergency conditions may impose. Training, of course, is a "building system" activity but it must contribute to the development of the personnel capabilities required in both the "building" and "operating" systems. A RADEF Officer, for example, must be trained to perform under emergency conditions as a member of an "operating" civil defense system. This same officer, however, may also need some training to perform under peacetime conditions as a member of a "building" system, e.g., in planning, directing, or otherwise facilitating the growth of the local Radiological Service.

Some of the general conclusions and recommendations presented above are clearly and logically related. All of them are mutually compatible. Undoubtedly, more implications can be drawn from this set of recommendations than are presented in the "Outline of Recommended Local Training Program" section of the present report. The teasing out of such implications is suggested as a logical facet of follow-up evaluative efforts.

BRIEF OF THE STUDY

A. Purpose

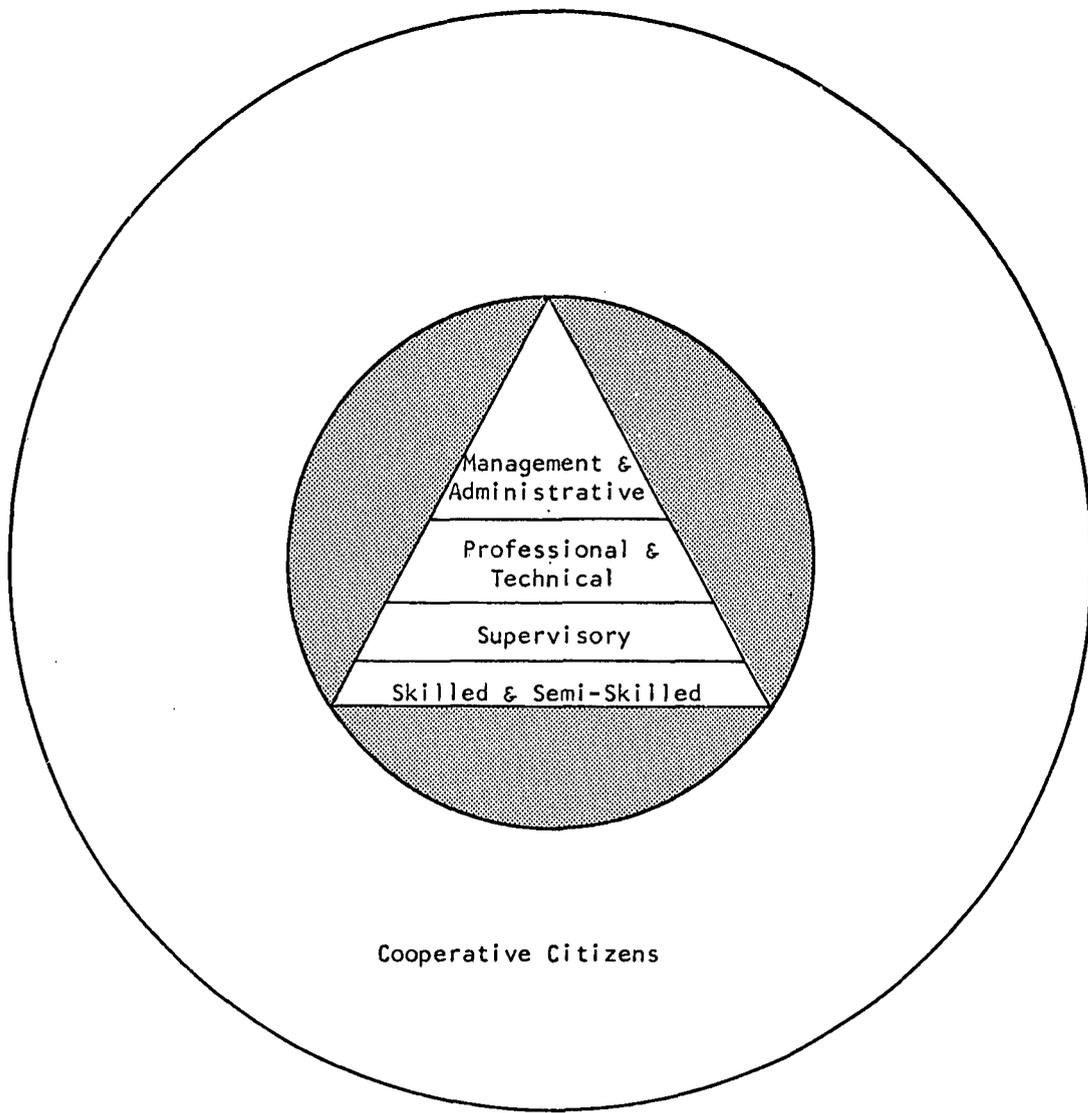
The general purpose of the study was twofold. The first objective was to identify critical training requirements for an effective local civil defense system. A second and related objective was the development of recommendations as to methods by which these training requirements might be effectively met. These objectives reflect the fact that in all levels of civil defense operations there is a basic and continuing need for well-developed training programs.

B. Methodology

1. General approach. Essentially, the approach adopted was that of a general "system analysis." In the context of the present problem, this approach involved: (a) specification of the major elements of the local civil defense system, (b) determination of interactions among these elements, and (c) derivation of training implications for effective system performance. One way in which this approach was structured is illustrated in Figure 1. This figure depicts graphically a very broad conceptualization of the major personnel components of an effective local civil defense system. Additional structure was provided by a general classification of major system elements or variables. This classification is reflected in the question: Who does what, when, how, and why? Figure 2 illustrates this conceptualization.

A description of the general approach used in the present study would not be complete without a discussion of some of the underlying working assumptions, constraints, and points of relative emphasis. Among the more important considerations of this sort are the following:

- a. It was assumed that the nature and complexity of an effective local civil defense system would preclude realistic description or conceptualization in terms of a formal mathematical model. Moreover, a statistical or formal experimental approach was not considered appropriate in view of the purpose and scope of the study.



Cooperative Citizens

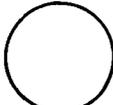
-  — Nucleus or hard-core cadre of trained, responsible individuals
-  — Job hierarchy of cadre
-  — Informed, cooperative local citizenry

Figure 1. Conceptualization of Major Personnel Components of an Effective Local Civil Defense System.

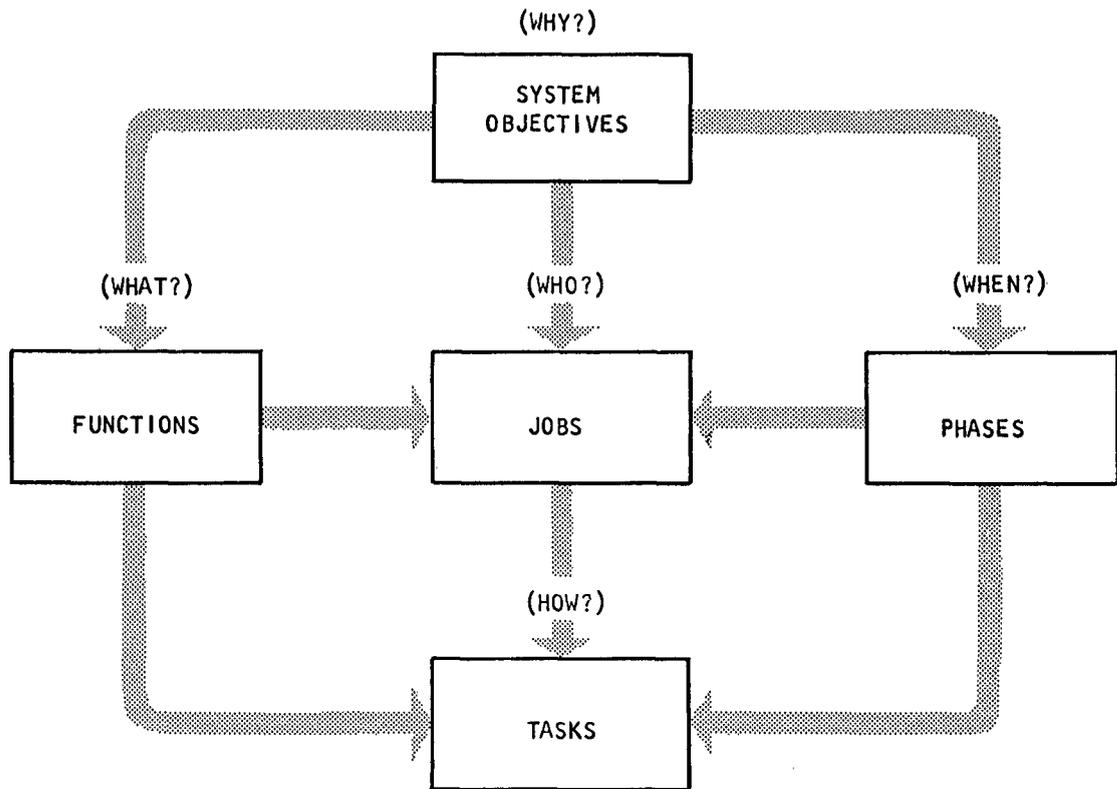


Figure 2. General Classification of Major System Elements

- b. For the most part, the "law of large numbers" was rejected in favor of the principle of selectivity--especially in the process of data extraction from documents and in the collection of interview data.
- c. Insofar as possible, emphasis was placed on the derivation or development of training implications which would be relatively resistant to obsolescence, i.e., training needs which would be likely to remain essential for some time.
- d. Data collection was structured in terms of a generality-specificity dimension. The starting point was a study of existing and projected local systems--with emphasis on the identification and clarification of general system objectives. At the other end of this dimension, consideration was given to a determination of the specific organizational objectives being met or supported by a given job, task, knowledge, or instructional unit.
- e. Emphasis was placed on the specification of training requirements in terms of job-relevant knowledges, skills, and attitudes.

.2. Determination of local Civil Defense training requirements. Although a continuing review of general Civil Defense literature was maintained throughout most of the study, the following operational planning documents were selected for intensive study:

- (1) New York State Civil Defense Commission: Annual Report, 1961.
- (2) Montgomery County, Maryland, Operational Plan (1962)
- (3) City of Livermore, California: "Community Shelter Report," 1962.

Several other operational plans were reviewed less intensively. New York State Civil Defense News Letters were also carefully reviewed. Document review was supplemented by interviews with key Civil Defense personnel in Pittsburgh, Pennsylvania; Olney, Maryland; and Albany, New York. In addition to document review, the following steps were undertaken in the process of identifying training requirements:

- (1) Identification of system functions.
- (2) Identification of jobs.
- (3) Task or job activity analysis.
- (4) Skill and knowledge analysis.

a. Identification of system functions. This step was, essentially, an attempt to answer the question "What kinds of things have to be done to make local civil defense successful?" In other words, what are the essential functions of local civil defense as an emergency or "operating" system and as a peacetime or "building" system? Emphasis was placed on the development of a classification scheme which would be comprehensive and which would provide a reasonable differentiation of clearly different broad categories of local civil defense activity. As a guide in data collection, the following set of categories was adopted as a starting point:

- (1) Statutory authority of elected official
- (2) Role of Director
- (3) Administrative functions
- (4) Intelligence
- (5) Plans and operations
- (6) Training
- (7) Resources and requirements
- (8) Financial liaison
- (9) Field administration
- (10) Legal support
- (11) Women's activities
- (12) Communications
- (13) Public information
- (14) Education
- (15) Radiological
- (16) Police
- (17) Fire
- (18) Rescue

- (19) Engineering
- (20) Medical - Health
- (21) Shelter management
- (22) Welfare
- (23) Supply
- (24) Utilities
- (25) Industries

b. Identification of jobs. This step was concerned with identification of essential local Civil Defense jobs. It was felt that these jobs would define, in a very broad sense, the different kinds of people to be trained; or, stated another way, each job would define a type of output required from the educational or training process. It was realized that jobs would not necessarily define the different types of required training because there would be, at least in some areas, varying amounts of overlap in the training required for different Civil Defense jobs. As a starting point, the following list of gross job categories was adopted:

- (1) Management/Administrative
 - (a) Municipal/County Authorities
 - (b) Civil Defense Director
 - (c) Department/Division Heads
- (2) Professional/Technical
 - (a) Legal
 - (b) Medical - Health
 - (c) Engineering
 - (d) Scientific
- (3) Supervisory
 - (a) Intermediate-Level Supervisors
 - (b) First-line Supervisors, Crew-chiefs
- (4) Skilled/Semi-Skilled
 - (a) Firemen
 - (b) Policemen
 - (c) Service/Welfare Personnel

- c. Task or job activity analysis. The purpose of this step was to breakdown each essential job, identified during the previous step, into meaningful attributes -- i.e., meaningful in terms of subsequent skill and knowledge analysis.

As initially conceived, each task description was to have been in the form of a statement of task title along with an indication of task relevance.

- (1) System function(s)
- (2) Job(s)
- (3) Time phases, e.g., pre-attack, warning, trans-attack, etc.
- (4) Contingencies
- (5) Reference sources for descriptive information

However, during the previous step concerned with identification of specific essential jobs, several relevant facts became apparent. First of all, most of the available data indicated that the universe of existing and projected jobs was structured, almost exclusively, in terms of specific system function. Secondly, it was apparent that much of the available job description data was already in a form indicative, or suggestive, of requisite skills and knowledges. In other words, a job was typically described not in terms of highly detailed tasks from which generalizations as to requisite skills and knowledges would subsequently have to be made. Rather, the job would typically be described in general terms more suggestive of conventional skill and knowledge categories than of typical detailed task descriptions.

Moreover, it was apparent that available data on job components or activities also reflected a "function-specific" nature--insofar as training implications were concerned. For example, common job activities of the leaders or chiefs of the various system functions, i.e., "services" were expressed in such

terms as "supervises," "organizes," "plans," "determines," "decides," and the like. Obviously, such activities all require planning, managerial, decision-making kinds of skill and knowledge. However, merely recording such an observation would be of small value for training purposes, though useful perhaps for purposes of selection, recruiting, or appointment. To be of much value for training purposes, i.e., training within the local civil defense context, additional information is needed. Specifically, one needs to know, in the case of a given service chief for example: Whom does he supervise? What does he plan? How much assistance does/will he have? What kind of decisions does he make? The point to be made here is that as soon as one attempts to supply answers to such questions, he has to deal with the specific service or system function.

Disregarding the fact that the available job data, and the data procurable within the scope of the study effort, clearly reflected this function-specific nature, an attempt was made to find logical reasons for organizing the local system on some other basis. No reasonably satisfactory alternative basis could be found. One alternative was to substitute existing "divisions" or "departments" of the local government. This appeared to be more a matter of semantics than a genuine alternative organization. Although just what constitutes an optimum set of services or local system functions is subject to question, the nature and complexity of an effective local system seems to demand organization on a "service" or equivalent functional basis.

Largely, on the basis of such considerations, the decision was made to organize or list task, or job activity, data under each essential job category while, in turn, keeping these job categories subsumed under their respective system functions or services.

- d. Skill and knowledge analysis. The task, or job activity, descriptions developed in the preceding step were reviewed for indications and suggestions as to the skills and knowledges involved. The objective of this step, of course, was the determination of training requirements in terms of these skills and knowledges. To accomplish this, it was first of all necessary to identify those skills and knowledges which could, realistically, be: (1) developed, (2) maintained, and/or (3) improved within the context of a local civil defense training program. It did not appear feasible to attempt the medical training of physicians in such a context--to take an extreme example. Many of the skills and knowledges required of local civil defense personnel would have to be acquired in other, not civil defense, contexts. This fact seemed inescapable.

Having established the feasibility of providing, through civil defense training, some of the skills and knowledges involved in various job activities, the question of the need for doing so had to be met. In other words, what were the possible, and likely, consequences of failure to provide such training? How seriously would job, and hence system, performance be degraded, if at all, by such failure? Once a set of clearly essential, and feasible, skills and knowledges was obtained, it was still necessary to consider the problem of organizing this set for purposes of effective training and training administration. The end product of this step was a statement of training requirements in the form of course recommendations, i.e., course recommendations in the sense of specific and logical skill and knowledge groupings. These recommendations did not include specific sequences or methods by which training should be accomplished and evaluated. These details required consideration of additional sources of information.

3. Development of methods for improved civil defense training. Once a comprehensive set of training requirements was identified, consideration was given to another important, though secondary, aspect of the study; namely, the development of training and evaluation methods and techniques for meeting the specified requirements. This effort necessitated an assessment of existing and potential training techniques as these might relate to the specified requirements. No attempt was made to impose or force any particular instructional technique(s), whether old-fashioned or newfangled, on the recommended courses. The basic criterion was estimated efficiency or, more specifically, estimates of relative training effectiveness per unit of training cost(s). Among the specific factors considered in this effort are the following:

- (1) Logical sequencing of courses and of content within any given course.
- (2) Acceptability to trainee and/or instructional personnel.
- (3) Initial and subsequent costs.
- (4) Relevant techniques for trainee, instructor, and course evaluation.
- (5) Job, training, and testing aids.
- (6) Provision for flexibility through specification of suitable alternatives.

4. Development of an outline of recommended local training. As initially conceived, this final aspect of the study was directed toward preparation of a local training guide or plan. This was not conceived as a document which could be used directly in training by an instructor. Rather, it was seen as a comprehensive and convenient guide to planning for civil defense training which would help local training administrators more economically and effectively accomplish their mission.

This initial conception was revised. Because of the large number of system functions, essential jobs, and skills and knowledges involved, such a detailed guide or plan was considered beyond the scope of the study. It

was felt that the answers provided by the present study, no matter how plausible, should actually be treated as questions requiring additional research and administrative evaluation prior to organization as an operational guide. The complexity of this whole local training problem, not to mention its implications for total system effectiveness, is considered sufficient justification for this view.

Consequently, the final effort of the study was re-oriented toward the development of an outline, rather than a detailed plan, of recommended local training. This outline was intended as a vehicle for illustrating through selected examples, how the implications of the present study might be reflected in the general structure of a local training program. In other words, it was anticipated that such an outline would (1) reflect, in its organization and format, the major conclusions and findings of the study on a general level, and (2) include some sections in which more specific and detailed recommendations and implications would be presented as prototypes or models indicative of the manner in which the general program could be more specifically developed.

C. Findings and Results

1. System functions. A set of twelve local civil defense functions, or services, was considered sufficient for effective local civil defense systems--both "building" and "operating" systems. It was felt that local systems having a larger number of services could probably be reorganized on a more streamlined basis without degrading the effectiveness of either the "building" or the "operating" civil defense systems. A thorough evaluation and realistic standardization of local system functions (both "building" and "operating") is considered a fundamental problem in need of both research and administrative attack.

Aside from the obvious operational implications of a solution to this "system functions" problem, the determination of local training

requirements and training organization, on any reasonably satisfactory basis, requires such clarification. The functions, or services, suggested by the present study are listed below:

1. Administrative/Management
2. Engineering/Public Works
3. Radiological
4. Warning
5. Communications
6. Medical
7. Police
8. Fire/Rescue
9. Manpower
10. Resources Mobilization
11. Welfare
12. Chaplain

It is recommended that the following criterion be given major weight in the process of identifying essential services and their respective priorities: To what extent is the presence of the Service Chief, or his key subordinates, in the Emergency Operating Center, under emergency conditions, necessary? It is not inconceivable that a rigorous application of this criterion would shorten the list presented above.

A brief description of each of the recommended services is presented in the "Outline of Recommended Local Training Program" section of the present report.

2. Jobs. For each of the twelve services presented above, a list of the key jobs or job roles was prepared. In the preparation of these lists, it was assumed that a fairly sizable local system was under consideration. In other words, the list of essential jobs for any given service may require substantial abbreviation in relatively small local systems--perhaps even to the extent of requiring one individual to fill all of the job roles in the service, or to fill the role of more than one Service Chief. The job lists for the different services vary in the extent to which they

include lower echelon personnel. In general, lower echelon personnel were omitted unless they obviously fulfilled some vital role. It is recommended that these lists be checked for the omission of essential job roles, regardless of echelon. Job lists for each of the services are presented, in the form of job hierarchies, in Appendix A.

3. Tasks or job activities. Each of the job roles presented in Appendix A was broken down into component tasks or activities. In most cases, these activities are expressed in general terms indicative, or suggestive, of the skill and knowledge involved. No pretension is made, however, that the activities listed under each job are exhaustive--or even sufficient to adequately define the job, for purposes of detailed training development. Taken as a whole, these lists do provide much more insight into the nature of the job, and the relevant service, than do the mere job titles. This information should prove of value in at least the following ways:

- a. It provides a basis for at least a partial check on the skill and knowledge analysis of the present study.
- b. It provides a basis for comparison with past, current, and subsequent local civil defense system job/task descriptions.
- c. Since, in the present study, detailed training recommendations are not made for every job, the job activity data provide a basis for developing additional training implications.

The task or job activity data was organized not across jobs, but rather, under each job--for reasons pointed out previously in the "Methodology" discussion. Moreover, a distinction is made between "building system" and "operating system" activities. In view of the amount of material involved, these results are presented separately in Appendix B.

4. Skill and knowledge requirements. The results of the skill and knowledge analysis can be described as follows:

- a. Four general types of training courses are recommended:
 - (1) General Civil Defense Orientation
 - (2) Local System Orientation
 - (3) Job Responsibility Training (for both "building" and "operating" civil defense systems)
 - (4) Job Proficiency Training (for both "building" and "operating" civil defense systems)
- b. The first three of the above types of courses represent the general kinds of knowledge which were considered both: (1) essential, and (2) uniquely civil defense in nature, i.e., not ordinarily provided or acquirable in other contexts. The fourth type of course represents the single skill category also considered to be both essential and uniquely civil defense in nature.
- c. Each of the above courses, with the exception of "General Civil Defense Orientation," is considered largely "function-specific," i.e., heavily loaded in terms of content specific to a given system function or service. In other words, although such courses are applicable to each service, the specific knowledges and skills represented are largely unique to each service. This means that, with the exception noted, there exists a requirement for tailoring such general types of courses to each service.
- d. The first three of the recommended courses largely reflect knowledge requirements. The fourth represents primarily a requirement for skill in applying knowledge. Nevertheless, all four courses are considered to some extent relevant to two attitude requirements--some minimum amount of which is considered essential: (1) "confidence"--in the civil defense

system and its objectives, methods etc., and (2) "commitment"-- i.e., emotional involvement in, or keen sense of responsibility for, getting one's job done in spite of even overwhelming difficulties.

- e. These knowledges and skills and; for that matter, attitudes are not considered to be requirements which are equally critical across the various echelons of personnel. Rather, the criticality of these requirements is, with few exceptions, considered as varying directly with echelon level. In other words, if these requirements are not met in a given Service Chief, for example, the consequent or potential degradation of system effectiveness is considered to be much greater than if the deficiency occurs in one of his low-level subordinates.

5. Training methods. A variety of training and evaluation methods were considered feasible and appropriate. Some of these are presented in the form of relatively general statements or descriptions; others are described in more detail. All of these method recommendations are organized and presented within the following "Outline of Recommended Local Training Program" section.

OUTLINE OF RECOMMENDED LOCAL TRAINING PROGRAM

A. Introduction

In the present section, specific recommendations are presented in the form of an outline for a local training program. This outline is based on implications drawn from the results and general conclusions presented in previous sections of the present report. Alternative methods of implementing these findings are undoubtedly feasible. The present outline is an illustration of one plausible way in which such implementation might be initiated. It should be noted that the development of additional training outlines would be aided by the job and job activity material presented in Appendices A and B. Individuals responsible for the development of training programs at the local level will have to tailor such programs to meet the unique requirements of their own local system, i.e., requirements imposed by such factors as: (1) the local governmental structure, (2) the relative readiness of the various civil defense services of the community, and (3) the size and resources of the local building system and the local operating system.

The suggested training courses outlined in the present report are not presented as complete or as "ideal" for any particular local system. They are presented as illustrations or examples of the kinds of training outlines which can be developed, supplemented by incorporation of detailed training syllabi, and implemented at the local level. Local systems which because of limited size, resources, or lack of adequate training personnel (e.g., a competent Training and Public Information Officer) may find themselves unable to develop, supplement, and implement such training programs. In such cases, it would seem appropriate for these "limited" local systems to seek guidance from higher level civil defense systems, e.g., county, state, or regional systems, in determining their training requirements (needs) and in developing training programs to meet these needs. As an example of such guidance, one state has suggested that one of its rural counties, which has only four physicians in the entire county, should not attempt to build a

Medical Service. Rather, it was suggested that this county should contribute its physicians to the Medical Service of an adjacent county which is capable of meeting the civil defense medical requirements of both counties.

One area in which Federal guidance should be particularly helpful to local training planners is that of general training priorities. It is, of course, rather widely recognized that the primary emphasis of the current and projected Federal program is the development of an operating system capability for providing a reasonable measure of protection from potential radiological hazards. What seems to be needed is additional training guidance tailored to an explicit recognition of the distinction between training efforts for the "building" and "operating" systems--and the resulting trade-offs in terms of expected short range and long range operating system payoff. Undoubtedly, additional research will be needed in the development of realistic trade-off functions of this sort. Until such guidance is provided, and to a certain extent even after it is provided, each local system must decide the relative proportions of its "building" and "operating" system training efforts. It should be noted that the courses and outlines presented in this section of the report are appropriate to both "building" and "operating" system training efforts since the relative emphasis can be varied within the suggested context in accordance with decisions made by leaders of a given local system.

In one sense, of course, all civil defense training efforts are directed ultimately, at an "operating" system capability. The distinction is largely one of immediacy, i.e., effort directed at achieving "operating" system capability "immediately" or "later on." A balanced and flexible program would seem to require both kinds of effort. The present study, for lack of sufficient and appropriate data, has little if anything to say about how local training efforts should be proportioned among "building" and "operating" systems. Any implications of this nature which can be drawn either from the material presented or from the material not presented, are purely unintentional. The present study does, however, point up the need for coming to grips with this "relative priorities" problem at both local and Federal civil defense levels--and, by implication, at the state and regional levels also.

Among the major characteristics of the following "outline" are:

1. Local training is organized primarily on a Service or system function basis. In other words, the training program structure roughly parallels the local system structure insofar as major sub-divisions are concerned. The single notable exception is with respect to the recommended "General Civil Defense Orientation" course. This course is considered essential for each Service--but there seems to be no reason why the course should not be organized on an "across-all-Services" basis. In other words, there seem to be no unique Service requirements in this area. In contrast, each of the three remaining recommended courses, i.e., "Local System Orientation," "Job Responsibility Training," and "Job Proficiency Training," all involve a preponderance of requirements unique to each Service.
2. Brief descriptions of each Service are presented in order to define the general nature and scope of activities involved.
3. Within each Service, the following format is used--or, rather, would be used in a fully developed outline:

A. Local System Orientation

1. Primary Job(s): (i.e., most important job or job grouping to be trained)
 - a. Content Outline: (Essential topics to be covered)
 - b. Source Material: (List of valuable sources for use in developing detailed course syllabus or description)
 - c. Methods and Techniques: (Description of training and evaluation methods, including relevant "aids.")
 - d. Administration: (Description of general course administration and supervision of training)

2. Secondary Job(s): Less critical job or job groupings requiring a separate course)

a. Content Outline:

b. Source Material:

c. Methods and Techniques:

d. Administration:

B. Job Responsibility Training (Same format as used above.)

C. Job Proficiency Training (Same format as used above.)

In the present section, selected examples will be developed according to the above format. These examples will constitute only a sample of the Services and the courses recommended. It is anticipated, however, that more comprehensive and detailed training development would be facilitated by use of these examples.

B. General Civil Defense Orientation

This particular recommended course, as previously noted, is considered amenable to organization and presentation in a different form--i.e., one suitable for all of the Services. This general course will, therefore, be discussed before the specific service oriented courses are treated.

Content Outline:

1. Nature and purpose of civil defense

A. General definition, e.g.,

1. ". . .all those activities and measures designed and under taken to minimize the effects upon the civilian population caused or which would be caused by an attack upon the United States. . ." (FCDA Act of 1950)

2. "Our over-all national defense must include capacity to survive an enemy strike as well as to retaliate. Civil defense, based on a sound system of fallout shelter, increases this capability. It is as simple as that."

(Defense Secretary McNamara: In OCD Information Bulletin No. 37, July 20, 1962)

B. Legal basis and authority

C. Organization and responsibility

1. National - Department of Defense, Office of Civil Defense
2. Regional
3. State
4. Local
5. Individual

II. Plans, policies, and objectives

A. General

B. Programs, e.g.,:

1. Shelter
2. Warning

C. Operational plans and concepts

III. Progress and problems

Methods and Techniques

It would appear that methods of presenting this type of course should be tailored for three distinct audiences or job groupings:

1. Top echelons of local system: (including governmental officials, Service Chiefs and major assistants or deputies)

a. Briefings

- (1) By OCD, Regional, or State Civil Defense personnel
- (2) By local civil defense director--in which event, the "course" will be "self-instructional" for him.
- (3) Through written materials which have been: (1) collected, and preferably condensed, i.e., extracted and abstracted, under the direction of the Training and Public Information Officer, and (2) approved by the local Civil Defense Director.

b. Individual review of relevant source material. All of these individuals should be placed on appropriate mailing and/or local system distribution lists--and encouraged, if need be, to carefully review such selected material. This method would be facilitated by such refinements as the following:

- (1) Preparation of relevant OCD and state civil defense material in such a manner as to facilitate appropriate classification and filing as well as up-dating by additions and deletions--e.g., use of relevant category headings similar to Defense Documentation Center (formerly Armed Services Technical Information Agency) system; color coding of sheets; punching for loose leaf filing; referencing of "old" material still considered good when partial revisions or "new" material is distributed.
- (2) Requiring, or strongly recommending, that the individual maintain an up-to-date and complete loose leaf file, or files, of selected key material--as an important job/training aid for anyone who may succeed him in the job, as well as for his own benefit.

- c. Evaluation techniques might be confined to:
 - (1) Self-testing--the Training Service might prepare and distribute self-scoring "quizzes." The use of tests for personnel evaluation, on this select top-echelon group, is considered inappropriate.
 - (2) Course evaluation--this could be done largely in terms of critical suggestions solicited from the individuals involved. More formal evaluation might be obtained from State or higher civil defense levels.
- 2. Lower echelons of local system: (other service personnel, i.e., cadre members--excluding general public)
 - a. Lectures, symposia, conferences
 - (1) By OCD, Regional or State Civil Defense personnel
 - (2) By local Civil Defense Director and/or top echelon personnel
 - b. Orientation/induction kits--i.e., especially prepared, take-home packets of general civil defense information presented to individual at the time of induction to cadre and supplemented as necessary.
 - c. Evaluation techniques:
 - (1) Trainee evaluation--this could be done on an informal, diagnostic, basis by the individual's supervisor.
 - (2) Course evaluation--critical evaluation could be obtained from a number of sources: (a) trainees themselves, (b) top echelon personnel, (c) State or higher civil defense levels. Trainee criticisms should probably be obtained with anonymous-questionnaire technique.

3. General public--all efforts at general civil defense orientation of the public should, of course, be carried out in strict accordance with OCD policy.
 - a. Distribution of literature developed, largely, by OCD and State levels.
 - b. News media releases and programs.
 - c. Speaking engagements/lectures--by top echelon personnel.

Training Administration

Administration of the above general civil defense orientation courses should, to some extent, involve the various Service Chiefs; however, the local Civil Defense Director should be actively involved and the Training and Public Information Officer should be largely responsible for most of the organizing coordinating and scheduling activity.

C. Service-Related Courses

1. Management/Administrative Service: The major concern of this Service is the development of, and maintenance of, an effective local civil defense system. The major responsibility for: (1) planning, (2) decision-making, and (3) coordination of the entire local system must necessarily be borne by this group--under both emergency and non-emergency conditions. In a major emergency, for example, all of the top echelon personnel of this service should be present in the Emergency Operating Center (Control Center). This would include, not only the local Civil Defense Director and executive, legislative, and judicial branches of the local government, but also the Chiefs of the various Services along with key assistants.

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Local System Orientation

1. Primary Job(s): (Local Civil Defense Director, government officials, Chiefs of the various Services)

a. Content Outline:

- I. Nature and Purpose of the Local System
 - A. General definition
 - B. Legal basis and authority
 - C. Organization and responsibility
 1. Local government
 - a. Legislative
 - b. Executive
 - c. Judicial
 2. Local Civil Defense Director
 3. Civil Defense Services
 4. Citizenry
 - II. Plans, policies, and objectives (for both "building" and "operating" systems)
 - A. General
 - B. Specific Service
 - III. Progress and Problems

b. Methods and Techniques:

1. Briefings
 - (a) By OCD, Regional, or State Civil Defense personnel
 - (b) By local Civil Defense Director
2. Planning Conference. This technique means, in effect, that the top echelon of the Management/Administrative Service would largely orient itself to the local system by actually planning, developing, and managing the system. In view of the assumed select nature of the group, this method would seem entirely feasible. To some extent, this sort of orientation seems inevitable unless the Service is to exist only on unread paper. One important advantage of this method is that it requires relatively frequent

face-to-face team work. Hopefully, these individuals will not meet for the first time in the Emergency Operating Center--under emergency conditions. In many respects, these individuals will be, and will be perceived as, peers. Yet, each will be a needed expert whose contributions will be thoughtfully received by capable, though in some respects, less informed, associates. Under these circumstances, the planning conference should prove highly effective.

3. Periodic status reports. The preparation and periodic distribution of written status reports, each individual reporting on those aspects of the total system for which he is largely responsible, would seem to be a desirable supplement to the planning conferences. Quarterly reports are recommended during stages of rapid development. Once an effective system has been developed, semi-annual or even annual reports may be sufficient.
4. Operational Exercises. The above methods are primarily in the nature of OJT (on-the-job training) and, hence, are more amenable to realistic training for the "building" system than for the "operating" system. However, this does not mean that such methods are incapable of providing some "operating" system training. Such methods, however, should be supplemented by means of operational exercises which are designed to provide relatively realistic simulation of the "operating" system. These operational exercises can be used not only to provide orientation training for the "operating" system but also as an effective method for Job Responsibility Training and, especially, Job Proficiency Training.

5. Evaluation Techniques:

- (a) Trainee evaluation--each of these individuals should, for his particular area, assume responsibility for assessing and remedying the knowledge deficiencies of his associates.
- (b) Instructor evaluation. Each expert is also an instructor for his associates--these associates should supply ample critical feedback on each expert's instructional performance.
- (c) Course evaluation. The local Civil Defense Director might form his own assessment and then check it against:
 - (1) an independent assessment by the Chief, Training Service, and
 - (2) the general consensus of this top echelon group. Any serious discrepancy is probably sufficient grounds for remedial action.

c. Training Administration:

In view of the recommended content and methods, general course administration is most appropriately assumed by the local Civil Defense Director.

2. Engineering/Public Works Service: This Service provides the technical base for the entire system. It does this not only in a general technical advisory capacity but also in active operations in such areas as the shelter program, damage control, damage assessment and repair, and management of engineering and public works equipment/facility resources.

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Job Responsibility Training

1. Primary Job(s): (Chief, Engineering and Public Works Service)

a. Content Outline:

- I. Pre-attack Responsibility
 - A. Development/up-dating of Service plan
 - B. Build-up of Service capability
 1. Personnel recruiting, training and administration
 2. Equipment/facility resources management
 - C. Advisory functions
 - D. Participation in system-wide management and administrative planning
- II. Trans-attack Responsibilities
 - A. Presence in EOC (Emergency Operating Center)-- along with essential deputies and assistants
 - B. Availability and accessibility of critical Service records and information sources in the EOC
 - C. Recognition and solution of technical problems
 - D. Supervision of Service personnel--inside, and outside, of Emergency Operating Center
 - E. Technical advisor role
 - F. Damage assessment
- III. Post-attack Responsibilities
 - A. Management of Service personnel
 - B. Management of engineering and public works resources (equipment/facilities) utilization
 - C. Damage assessment and repair
 - D. Technical advisor role

b. Methods and Techniques:

1. Service Chief's Manual. It is recommended that a combination job and training aid be prepared in the form of a manual providing a comprehensive description of the Service Chief's responsibilities. If such material were carefully prepared, it should be entirely satisfactory for self-study-- particularly since this Service Chief is expected to be a highly capable "engineer-scientist-manager" sort of individual. (A type of individual not impossible to find in most sizeable communities.) In most instances, this Chief will not be able to devote full time to civil defense activity except under emergency conditions; he will, and probably should, typically be absorbed in a demanding industrial, academic, or public job. A self-study manual should be a convenient, as well as feasible, training technique. The preparation of such a manual is considered a worthy research and operations problem for OCD.
2. Planning conferences. The above technique should be supplemented by planning conferences with: (1) the local Civil Defense Director, and (2) the top echelons of the Management/ Administrative Service.

- c. Training Administration--should be largely the responsibility of local Civil Defense Director.

Job Proficiency Training

1. Primary Job(s): (Chief, Engineering and Public Works Service)

a. Content Outline:

Same topics as outlined above for "Job Responsibility Training" but treated at more advanced level and with emphasis on job performance, i.e., an application of all job relevant knowledge to the problem of meeting job responsibilities.

b. Methods and Techniques:

1. Service operational plans. Development of such plans involves the application of job relevant knowledge and provides an objective indication of planning proficiency. Such plans should be submitted for critical review by appropriate personnel at higher civil defense levels.
2. Operational exercises. Participation in such exercises would provide valuable "simulator time"--and another indication, via Service operational capabilities, of the Chief's proficiency with respect to Service build-up efforts.
3. "In-basket" problem solving. These problems could be locally developed and evaluated by the Civil Defense Director and the Training and Public Information Officer. Preferably, however, they should include problems developed by experts available at higher civil defense levels.
4. Seminars and symposia. Ideas and concepts could be acquired, presented, and tested by means of such meetings--preferably jointly sponsored by professional and governmental agencies (including, but not necessarily limited to official civil defense agencies) at local, state, and Federal levels.

- c. Training Administration--will require involvement of: (1) local civil defense officials, and (2) training and evaluation personnel from higher civil defense levels.

3. Radiological Service: The major concern of this Service is with the implementation of civil defense measures against radiological hazards.

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Job Responsibility Training

1. Primary Job(s): (Monitors)

a. Content Outline:

I. General Definition of Radiological Service

A. Objective: Defense against radiological hazards

1. Shelter system
2. Detection and measurement of radiological hazards
3. Decontamination

II. Monitoring Mission: To determine the radiological hazards of a given area--for self-preservation, location of sites for recovery operations, the providing of essential "intelligence," etc.

A. Operational Readiness

1. Periodic operational check of instruments
 - a. Record results
 - b. Recommend needed repair, replacements
2. Participate in exercises, drills
3. Prepare sketch of assigned area
4. Prepare area for monitoring purposes

B. In-shelter monitoring

1. Evaluation of protection factor within shelter area
 - a. Dose rates at selected locations
 - b. Personnel dose measurement
 1. Daily exposure dose of shelterees
 - c. Food and water monitoring
2. To determine need for decontamination, remedial evacuation.
3. Data for control center (scheduled reports)

C. Early Unsheltered Monitoring

1. To expand shelter space
2. Survey monitoring
 - a. To obtain supplies
 - b. Early recovery of vital installations
3. Route monitoring for remedial movement

D. Later monitoring for purposes of decontamination rehabilitation and recovery

- a. Area survey
 1. Surface monitoring
 2. Aerial monitoring

III. Monitoring Instruments and Equipment

A. Survey Meters

1. CD V-700

- a. Low range measurement 0-50 mr/hr
 1. Measures gamma dose rates
 2. Detects beta
- b. Uses
 1. Long term clean-up and decontamination operations
 2. Personnel monitoring
 3. Food and water monitoring
- c. Operation
 1. Operational check
 2. Use of controls
 3. Meter reading
 - a. Measured dose rate calculated
 - b. Knowledge of response time

2. CD V-715
 - a. 0-500 r/hr
 1. Measure gamma dose rates
 - b. Uses
 1. General post-attack operations
 2. Group survey
 3. Shelter area monitoring
 4. Interim aerial survey
 - c. Operation
 1. Operational check
 2. Use of controls
 - a. Two controls
3. Meter reading
 - a. Measured dose rate read directly
 - b. Measured dose rate calculated
 - c. Knowledge of response time
4. CD V-717
 - a. Modification of CD V-715
 - b. Provides remote reading capability for fallout monitoring stations

B. Dosimeters

1. CD V-742
 - a. 0-200 r
 - b. Uses
 1. Measures accumulated doses of gamma radiation to personnel
 - c. Operation
 1. Initial check
 - a. Leakage check
 - b. "Soak-in" change after long term storage
 2. Scale and hairline reading
 - d. Use of dosimeter to calculate dose rates if survey meters are not available

- 2. CD V-750
 - a. Dosimeter charger
 - b. Uses
 - 1. Charge dosimeters
 - 2. Zero and read dosimeters

- B. Care and calibration of instruments
 - 1. Installation and maintenance of batteries
 - 2. Scheduled calibration
 - a. By trained personnel
 - 3. Care of instruments
 - a. Protection from contamination
 - b. Monitoring of instrument
 - 1. Use of CD V-700
 - c. Decontamination of instrument if necessary

- C. Other instruments (no longer standard but may be available)
 - 1. Superseded by CD V-715
 - a. CD V-710 gamma
 - b. CD V-720 beta/gamma
 - 2. Superseded by CD V-715
 - a. CD V-730
 - b. CD V-740

IV. Monitoring Procedures and Techniques

- A. Shelter and Fallout Station Monitors
 - 1. Shelter area monitoring
 - a. CD V-715
 - b. Readings at selected locations (3 ft. from ground)
 - c. Record on floor plan or sketch of area

2. Personnel dose measurement
 - a. CD V-742
 - b. Position at various locations
 - c. Radiation exposure record
 1. Individual doses
 2. Accumulated doses
 3. Other exposures
 3. Personnel monitoring
 - a. CD V-700
 - b. Select reception location and determine its background radiation level periodically
 - c. Monitor each occupant (hold probe 2 inches from body)
 - d. Decontaminate if necessary
 - e. Monitor again
 4. Food and Water monitoring
 - a. CD V-700
 - b. Determine background radiation
 - c. Monitor food or water
 - d. Decontaminate or store and recheck
- B. Fallout Station Monitors
1. Unsheltered dose rate measurements
 - a. CD V-715 (and CD V-717 when available)
 - b. Calculate protection factor of station
 1. Outside dose rate divided by inside dose rate
 2. Recalculate protection factor at scheduled intervals (e.g., every 24 hours during early post-attack) when possible
 - c. Record and report dose rates

2. Unsheltered dose measurements
 - a. CD V-742
 - b. Measure unsheltered dose rate
 - c. Position instrument at inside location
1/10 to 1/20 of unsheltered dose rate
 - d. Determine protection factor
 - e. Read instrument daily, record data
3. Area monitoring
 - a. CD V-715, (CD V-700 if dose rates are
below 50 mr/hr)
 - b. Wear CD V-742
 - c. For greater areas, use vehicle
 - d. Take readings
 1. From moving vehicle, keep instrument
on seat
 2. Several feet from vehicle
 - e. Record dose rate, time, location, and
whether taken in vehicle
 - f. If required, post contamination markers
indicating time, date, dose rate
 - g. Check exposure time from pocket dosimeter
 - h. Decontaminate if necessary on return to
station
 - i. Report survey, record exposure
4. Aerial monitoring (assistance of Civil Air
Patrol)
 - a. CD V-715 or CD V-781 aerial survey meters
 - b. Definite patterns over specific areas with
scheduled readings depending on area
 - c. Altitude, location, and time of reading
will be recorded
 - d. Dose rates can be estimated at various
heights from graphs of attenuation factor/
height from ground curve.

V. Protective Measures

A. Individual protection

1. Decontamination of clothing
 - a. Storage if too contaminated
2. Decontamination of exposed portions of body
3. When outside shelter, appropriate protection measure taken
4. Control of exposure
 1. Maintenance of personal radiation exposure records

B. Other

1. Equipment, vehicle protective measures
2. Shelter area protective measures

b. Methods and Techniques

1. Lectures. This would be primarily a lecture course with discussion encouraged. Visual aids such as charts, tables, films, film strips are recommended.
2. Laboratory sessions. Demonstration of equipment and practice in operation of equipment could be taught in lab sessions.
3. Exercises and drills. Proper use of equipment, recording of data would be reinforced through exercises and drills.
4. Evaluation
 - a. Objective tests: Multiple choice, fill-in, true and false. A self-scoring technique is suggested
 - b. Course evaluation: Responses to questionnaire on course content and coverage.

c. Training Administration: Radiological monitor instructor

Job Responsibility Training

1. Primary Job(s): (Plotters)

a. Content Outline:

I. General Definition of Radiological Service

A. Objective Defense against radiological hazards

1. Shelter system
2. Detection and hazards
3. Decontamination

II. Plotting mission: To record incoming radiological data on maps or in tabular form; this information will be utilized to determine the safety of areas. --(to determine serious of threat, duration of shelter confinement, location of sites of recovery operations etc.)

III. Plotting Information

A. Types of data

1. Sheltered dose rates in control center log
 - a. When equal or exceeding 1r/hr record to nearest whole r/hr.
 - b. Variation
2. "UF" data
 - a. Recorded in log
 - b. Lastest available data to be plotted
3. "F"
 - a. Plot "F" and time of occurance
 1. Flash reports to be plotted every three hours during first twelve hours
 2. Flash reports to be plotted every six hours, from 12-24 hours after the arrival of significant fallout

3. Thereafter, a daily plot should be made.

4. Unsheltered accumulated dose rates

1. Record of daily scheduled report

5. Plotting of dose rate analysis

1. Freehand sketching

a. Location of 100, 10, and 1 hour dose rate contours across local area

6. Plotting to forecast dose rates

1. Graph: observed dose rate against time.

B. Specific knowledges

1. Knowledges of local location designation system and coding instructions

2. Contour plotting

3. Familiarity with sample logs, etc.

4. Familiarity with local area

b. Methods and Techniques

1. Lecture, discussion, plotting exercises.

Maps, charts and tables will be utilized for plotting techniques. Primary emphasis will be placed on the laboratory section of the course in which students will perform plotting activities. Plotting data will be obtained from handouts, text and lecture.

2. Evaluation.

(a) Plotting and recording technique will be evaluated in exercises and drills

(b) Brief self-scoring quizzes will be administered

(c) Student self-evaluation of chart or map plotting will be done by comparison of work with master chart or map. Also criticism by peers.

(d) Course evaluation could be secured through responses to questionnaires completed by the students and submitted anonymously.

d. Training Administration. Plotting Chief will conduct the course with any appropriate additional lectures by other specialists.

4. Warning Service: The fundamental objective of this Service is to receive and disseminate the attack warning signal as rapidly and effectively as possible via the communication network(s) of the system. Pre-attack effort includes coordination with the Communications Service and the Training and Public Information Officer.

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5. Communication Service: The basic function is to maximize the availability, and effective utilization, of all types of communication facilities including: (1) landline, (2) telegraph, (3) commercial radio, (4) amateur radio, (5) police radio, and (6) courier/messenger Services.

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6. Medical Service: Three broad areas of medical facility are of concern: (1) the Major Zone Hospital Center, (2) the Improvised Emergency Hospital, and (3) the Emergency Treatment Center. The mission of the system includes the organization, physical set-up, location and operation of such facilities in terms of staffing, training, and equipping.

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7. Police Service: The Police Service is concerned with maintaining law and order and protecting life and property through regular and auxiliary Police personnel. The mission includes monitoring, communication, and other assistance to the local civil defense system.

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8. Fire/Rescue Service: This Service is concerned with the organization and training of local Fire and auxiliary personnel for purposes of effective utilization in civil defense emergencies. In addition to fire fighting, other kinds of assistance may be required, e.g., rescue, monitoring, and decontamination.

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9. Manpower Service: The mission of this Service is to develop plans and procedures for effective mobilization of the community's human resources-- to meet emergency conditions such as might be posed by recovery from nuclear attack.

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10. Resource Mobilization Service: There are four areas of concern of this Service: supply, food distribution, transportation and plant protection. These areas are organized into four sections, each having its own administrative staff. These staffs are coordinated via the Resource Mobilization Service.

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Local System Orientation

1. Primary Job(s): (Chief, Supply Section; Chief, Food Distribution Section; Chief, Plant Protection Section; Chief, Transportation Section; Assistant Chief, Motor Transport; Assistant Chief, Rail; Assistant Chief, Water; Assistant Chief, Air; and Deputy Chiefs of complex Plant Protection systems.)

a. Content Outline:

1. Primary Objectives of the Resource Mobilization Service

A. The mobilization of community resources for the civil defense system

1. Inventories local resources through wholesalers, retailers, distributors, producers of food, general supplies, transportation equipment and facilities, etc.

2. Other

- B. Continuity of the industrial community
 - 1. Establishes lines of succession, decentralization of key personnel, flexibility in assumption of job roles, etc.

II. Section Objectives

- A. Supply section
 - 1. Mobilization of supply services in local area (e.g., Inventory of supplies, stockpiling in shelters, procurement, requisition, distribution and allocation of supplies, etc.)
- B. Transportation section
 - 1. Mobilization of transportation facilities in local area (e.g., Inventory of car, plane, truck, train, boat and other vehicles)
- C. Food distribution section
 - 1. Mobilization of food resources and distribution and stockpiling of food in local area (e.g., Evaluates facilities for storage, inventories of foodstuffs, etc.)
- D. Plant protection section
 - 1. Preservation of plant facilities and personnel to insure continuity of industry (e.g., Prepares for plant security)

III. Establishment of Priorities as it Applies to Resource Mobilization Service

- A. During planning period
- B. During emergency period
- C. During post-attack period
- D. During recovery period

- IV. Orientation to and Information about Shelter System
 - A. Location
 - B. Structural aspects
 - C. Potential shelter populations (i.e., number, kinds of shelters, etc.)
- V. General Radiological Information as it Relates to Resource Mobilization Service
 - A. General detection techniques
 - 1. Damage assessment
 - B. Basic decontamination techniques
- VI. Communications Information
 - A. Kinds of communication available
 - B. Priorities during:
 - 1. Emergency
 - 2. Post-attack
 - 3. Recovery

b. Methods and Techniques:

1. Lecture-duscussion. This will be primarily a presentation of specific types of information with general discussion involving participation of the entire group. "Handouts," films, maps, charts, pamphlets will be used. (Techniques for sections I, III, IV, V, VI.)
2. Seminars. General group-instructor discussion sessions with emphasis on "brainstorming." Participation of professional, management and scientific will be encouraged. (Technique for sections II, III)
3. Individual presentations. Individual members of the student group will present specific job knowledges in his area to the entire group for information, discussion and evaluation.

4. Briefings. General briefings will be given by the CBR training representatives and experts in the various areas.

5. Trainee evaluation.

(a) Peer group criticism and recommendations will be the general mode of evaluation

(b) The training instructor will present situational problems for examining the applicability of the course content to be followed by group discussion and evaluation.

d. Training Administration: The Deputy Chief, Resource Mobilization Service. The RADEF Officer or his representative will conduct specific sections of the course. Experts in various areas will be encouraged to participate in the training course.

11. Welfare Service: Shelter coordination will be a major concern of the Welfare Service. This Service is also concerned with providing emergency care, on a relatively large scale, in the form of such basic necessities as food, clothing, and lodging. In addition, the Welfare Service is concerned with such problems as locating and re-uniting family members who have become separated or lost during an emergency.

• • •

12. Chaplain Service: The mission of the Chaplain Service is, basically to develop and carry out plans and procedures for: (1) enlisting the cooperation and aid of local religious leaders in support of the Community civil defense effort, and (2) preparing these leaders for the responsibility with which they may be faced during emergency and recovery operations.

• • •

(Note: A listing of the source materials which have been used in the development of the sample training courses may be found in Appendix C.)

References

- American Institute for Research. Manual of civil defense information. Pittsburgh: Author, 1960.
- American Medical Association. Guide to developing an industrial disaster medical service. Chicago: Author, 1961.
- American Society of Industrial Security. Industrial security, July 1962, 6, (3).
- Archibald, G. R., & Sherman, H., Jr. "Shelters--why? What kind? For whom?" From Civil engineering, June 1962.
- The Baltimore area operational survival plan. June 1, 1958.
- Berry, L. E. How to prepare a plan for survival. In Business management, January 1962, pp 36-42.
- Canada Department of Agriculture. Fallout on the farm. Ottawa: Roger Duhamel, F.R.S.C., April 1961.
- City of Livermore California City Council. Community shelter report. Livermore, California: California Disaster Office, April 1962.
- Committee on Government Operations. New civil defense program. Ninth report. Washington: Government Printing Office, September 21, 1961.
- Couch, V. L. What companies are doing to survive nuclear attack. Business management, January 1962, pp 36-42.
- Covert, L. W. Blast and fallout protection for an industrial plant. Philadelphia: Rohm & Haas Company, December 1962. (Reprint)
- Department of Agriculture. Family food stockpile for survival. Washington: Government Printing Office, 1961.
- Department of the Army. Design and review of structures for protection from fallout gamma radiation. Fort Belvoir, Virginia: Author, 1 October 1961. (Revision)
- Department of Business Development (of the State of Minnesota). Code of ethics for the builders and suppliers of family and group fallout shelter industry. St. Paul: Author, 4 October 1961.
- Department of Defense, Office of Public Affairs. News Releases.
- Department of Health, Education, and Welfare. Emergency lodging. Washington: Government Printing Office, October 1961.

- Department of Health, Education, and Welfare. Emergency social services. Washington: Government Printing Office, July 1961.
- Department of Health, Education, and Welfare. Emergency welfare service - Guidelines and structure. Washington: Government Printing Office, January 1961.
- Department of Health, Education, and Welfare. Emergency welfare registration and inquiry. Washington: Government Printing Office, January 1962.
- Department of Health, Education, and Welfare. Prototype general hospital-- fallout protected. Washington: Division of Hospital and Medical Facilities, July 1961.
- Devaney, J. F. Operations in fallout. Battle Creek: Office of Civil Defense Mobilization, June 1961.
- Driscoll, A. R., Jr. Damage control, home office shelter, and specialized equipment. Symposium on Defense Planning arranged by John Hancock Mutual Life Insurance Company: Boston, Massachusetts, November 10, 1961.
- Executive Office of the President. Documents on reorganization of civil defense. Battle Creek: Office of Civil Defense Mobilization, July 20, 1961.
- Final report on the Sonoma County pilot project on local area survival. Santa Rosa, California; February 25, 1961.
- Gautney & Jones Consulting Engineers. Fallout shelter communications study. Washington: Author, December 1962.
- Glaser, R. (Ed.) Training research and education. Pittsburgh: University of Pittsburgh Press, 1962.
- Glasstone, S. (Ed.) The effects of nuclear weapons. Washington: U. S. Atomic Energy Commission, April, 1962.
- Joint Committee on Atomic Energy. Radiation protection criteria and standards: Their basis and use. Washington: Government Printing Office, 1961.
- Journal of American society of training directors, September 1961, 15.
- Lamars, W. M. Disaster protection handbook for school administrators. Washington: The American Association of School Administrators, June 19, 1959.
- McAuliffe, A. C. "How local officials can promote fallout shelters." In County government, November 1961. (Official publication of New York State County Officers Association)
- McElwee, J. G. Management looks at civil defense. Symposium on Defense Planning arranged by John Hancock Mutual Life Insurance Company at Boston, Massachusetts, November 10, 1961.

Montgomery County, Maryland operational survival plan, 1962.

Mushlin, H. Medical preparedness in civilian defense. Symposium on Defense Planning arranged by John Hancock Mutual Life Insurance Company at Boston, Massachusetts, November 10, 1961.

New Mexico Department of Education. A comparative study of the educational environment and the educational outcomes in an underground school, a windowless school, and a conventional school. Santa Fe, New Mexico: Author, 1962.

New York state civil defense news letter. (Published once a week by the New York State Civil Defense Commission.)

Nuclear attack and industrial survival. New York: McGraw-Hill, 1962.

Office of Civil Defense. Civil defense principles concerning external whole body emergency gamma radiation exposure, applicable to the general public.

Office of Civil Defense. Civil defense program guide. The national program as it pertains to local and state civil defense. Battle Creek: Author, February 6, 1962.

Office of Civil Defense. Community planning for shelter occupancy. Battle Creek: Author, Clearance draft dated March 15, 1962.

Office of Civil Defense. Description care and handling of supplies for public fallout shelters. Washington: Author, 1962.

Office of Civil Defense. Emergency rescue training. Washington: Government Printing Office, October 1956.

Office of Civil Defense. Federal civil defense guide, Part E, Chapter 5, Appendix 2, Plans and Organization.

Office of Civil Defense. Federal guidance for state and local civil defense. Washington: Author, October 1, 1962.

Office of Civil Defense. Frequency allocation plan for the radio amateur civil emergency service (RACES).

Office of Civil Defense. Handbook for radiological monitors.

Office of Civil Defense. National fallout shelter survey, marking and stocking program. Washington: Government Printing Office, February 15, 1962.

- Office of Civil Defense. Radiological defense planning and operational guide.
- Office of Civil and Defense Mobilization. Advisory Bulletin, No. 122.
- Office of Civil Defense Mobilization. Conelrad. Washington: Government Printing Office, 1961.
- Office of Civil Defense Mobilization. Fallout shelter surveys: Guide for architects and engineers. Battle Creek: Author, May 1960.
- Office of Civil Defense Mobilization. Information Bulletin. (Especially Nos. 10, 22, 27, 33, 36, 60, 11G-2, TB 11-8, PG-6 and associated kit.)
- Office of Civil Defense Mobilization. The NEAR system indoor attack warning. Battle Creek: Author, March 1961.
- Ostrowski, W. L. Description of the American Chemical Society's CBR fallout shelter. Washington: American Chemical Society, 20 March 1962.
- Paxton, J. W. "Nuclear attack and responsibilities of the county officers." In County Government, April 1962.
- Pittman, S. L. Text of speech made before the Military Operations, Subcommittee on the Committee on Government Operations, House of Representatives in Washington. In Information Bulletin, 23 March 1962, No. 21.
- Public Health Service. Fallout protection for hospitals. Washington: Department of Health, Education and Welfare, February 1962.
- Rigdon, W. E. County Government, June 1962.
- As we see it. Editorial from Rochester Times-Union, July 31, 1962.
- State of Mississippi survival operations plan and order. Jackson target area. January 1, 1958.
- State of New York Civil Defense Commission. The year of awakening. Annual report 1961. Albany, New York: Author, 1962.
- State of New York Department of Labor. New York state dictionary of civil defense occupations, titles, and codes. Part II. Job descriptions. Albany, New York: Author, March 1949.
- State of Wisconsin in civil defense. Madison target area. Operational survival plan. June, 1959.
- Strope, W. E. Outline - Guide for shelter managers. Washington: Office of Civil Defense, July 1962.

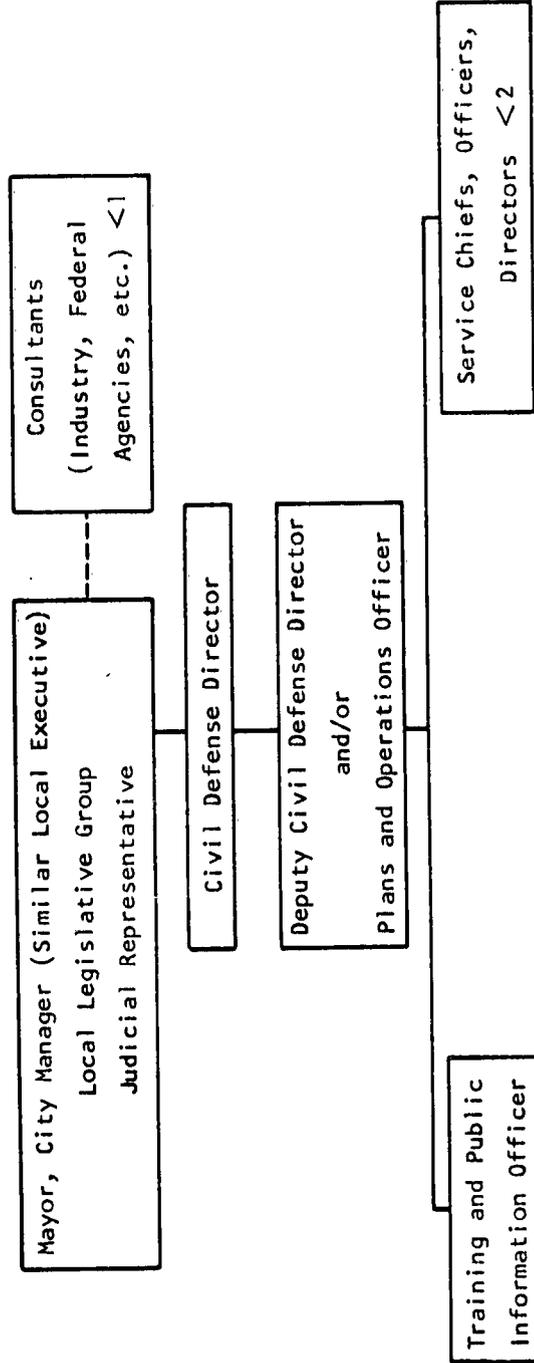
- Strope, W. E., Porteous, L. G., & Greig, A. L. Specifications and costs of a standardized series of fallout shelters. San Francisco: Naval Radiological Defense Laboratory, 6 October 1959.
- The CBR Defense Service. Equivalent residual dose calculation. Albany, New York: State of New York Civil Defense Commission, 1961.
- The CBR Defense Service. Fixed station monitoring. Albany, New York: State of New York Civil Defense Commission, 1961.
- The CBR Defense Service. Graphical method for determining fallout decay exponent and total accumulated. Albany, New York: State of New York Civil Defense Commission, 1961.
- The CBR Defense Service. Location designator system. Albany, New York: State of New York Civil Defense Commission, 1961.
- Tressler, D. K. What foods should be stockpiled in shelters? Battle Creek: Office of Civil Defense Mobilization.
- United States Civil Defense Amateur Radio Alliance. Standard operating procedure and training manual for stations in the radio amateur civil emergency service.
- Western Electric Company. Manual of industrial defense planning. New York: Industrial Defense Planning Organization, 1961.

APPENDIX A

Tentative Job Hierarchies for Services

(Note: The material presented in this appendix is illustrative and should not be considered as either exhaustive or definitive. Additions, deletions, and other modifications may be desirable or necessary because of local variations in such factors as: (1) governmental structure, (2) community size, and (3) community resources. For example, the Medical Service described in this appendix may be appropriate for a rather large metropolitan area but entirely beyond the needs and capabilities of small communities or even, in some rural areas, entire counties.)

Table I
 Tentative Job Hierarchy for Administrative/Management Service



<1 If these individuals have operational assignments.

<2 I.e., Engineering/Public Works, Radiological, Warning, Communications, Medical, Police, Fire/Rescue, Manpower, Resource Mobilization, Welfare, Chaplain.

Table II
 Tentative Job Hierarchy for Engineering and Public Works Service

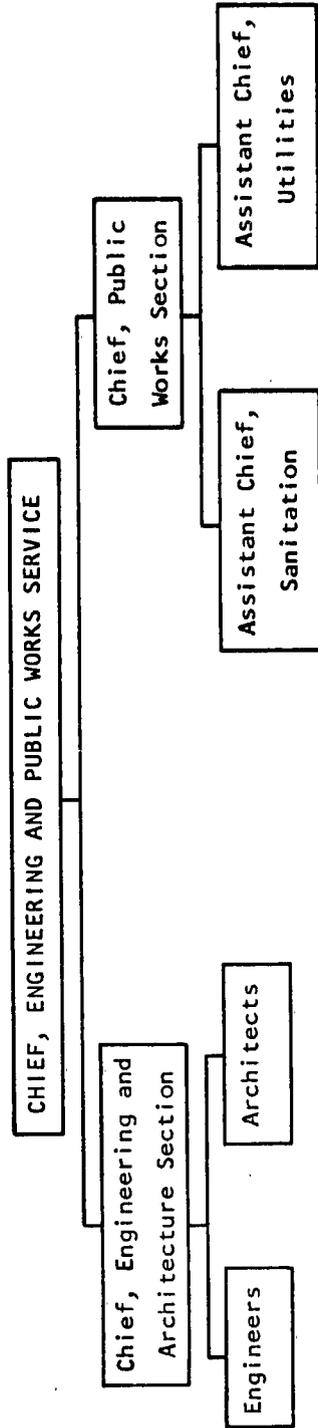
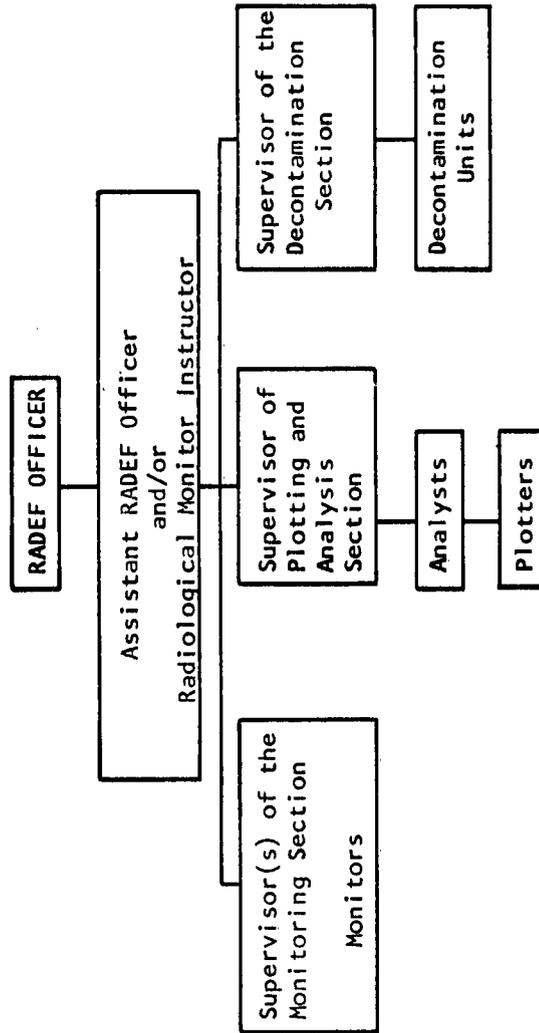


Table III
Tentative Job Hierarchy for Radiological Service



Note: Estimated Size of Urban Radiological Service:

<u>Population</u>	<u>No. of Monitoring Stations</u>	<u>No. of Monitors</u>	<u>No. of Analysts</u>	<u>No. of Plotters</u>
500-1,000	3	12	1	1
1,000-2,500	4	16	1 - 4	1
2,500-50,000	4 + $\frac{\text{population}}{4,000}$	16+		
Over 50,000	12 + $\frac{\text{population}}{10,000}$	48+	4 - 6	2 - 3

Table IV
Tentative Job Hierarchy for Warning Service

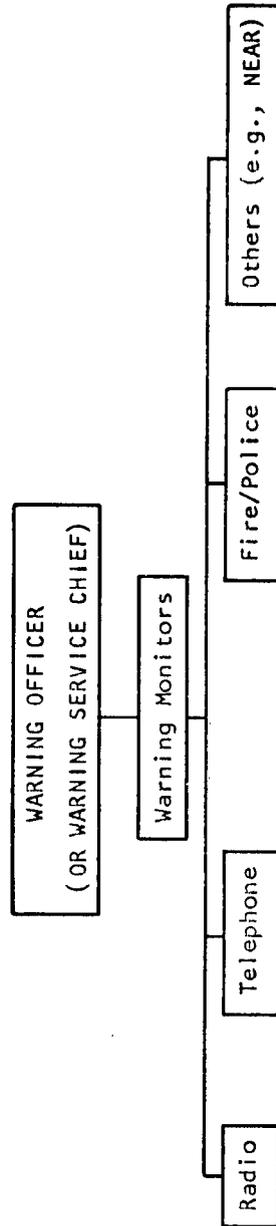
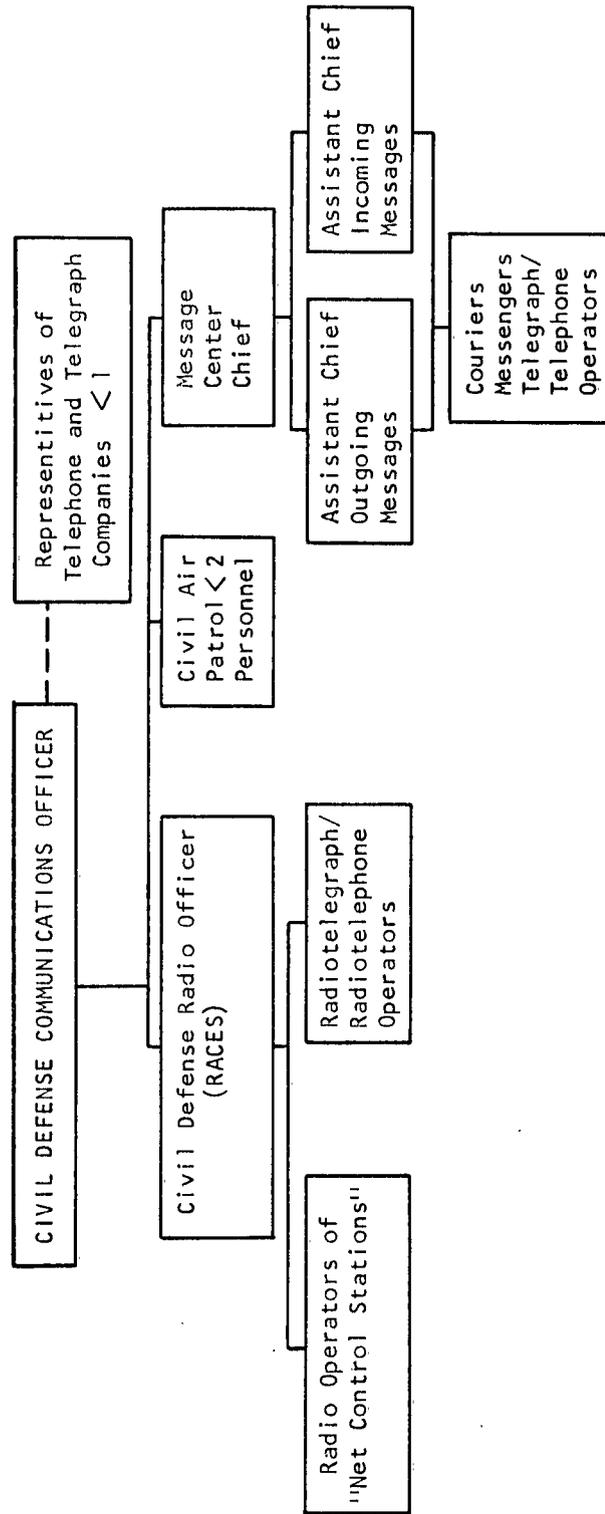


Table V
Tentative Job Hierarchy for Communications Service

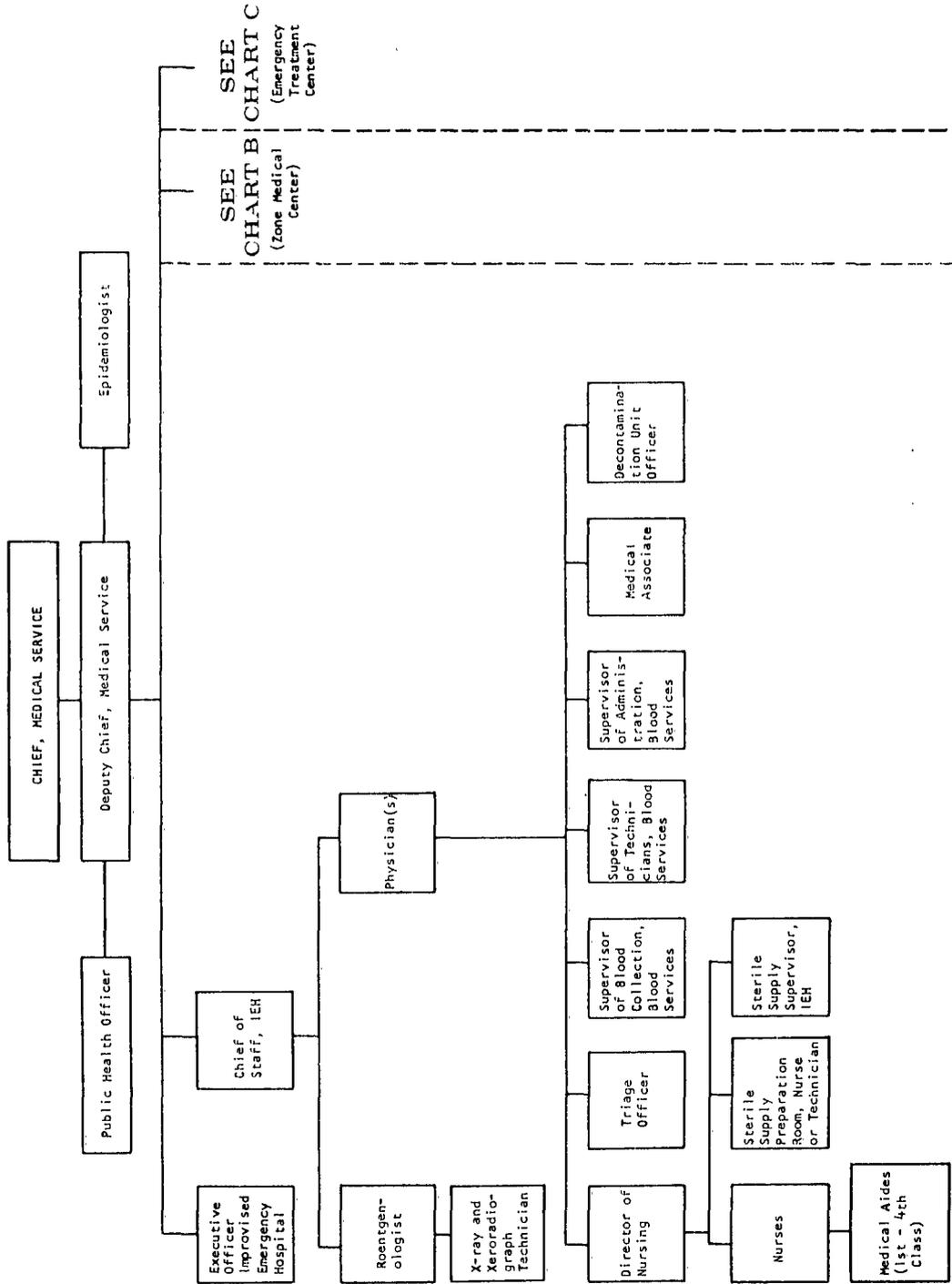


< 1 May have either advisory or operating roles.

< 2 By pre-arrangement, CAP personnel available to all operating services as needed: aerial monitoring, fire control, rescue operations.

CHART A

Table
Tentative Job Hierarchy for Medical Service



SEE
CHART B
(Zone Medical
Center)

SEE
CHART C
(Emergency
Treatment
Center)

CHART B

Table
Tentative Job Hierarchy for Medical Service

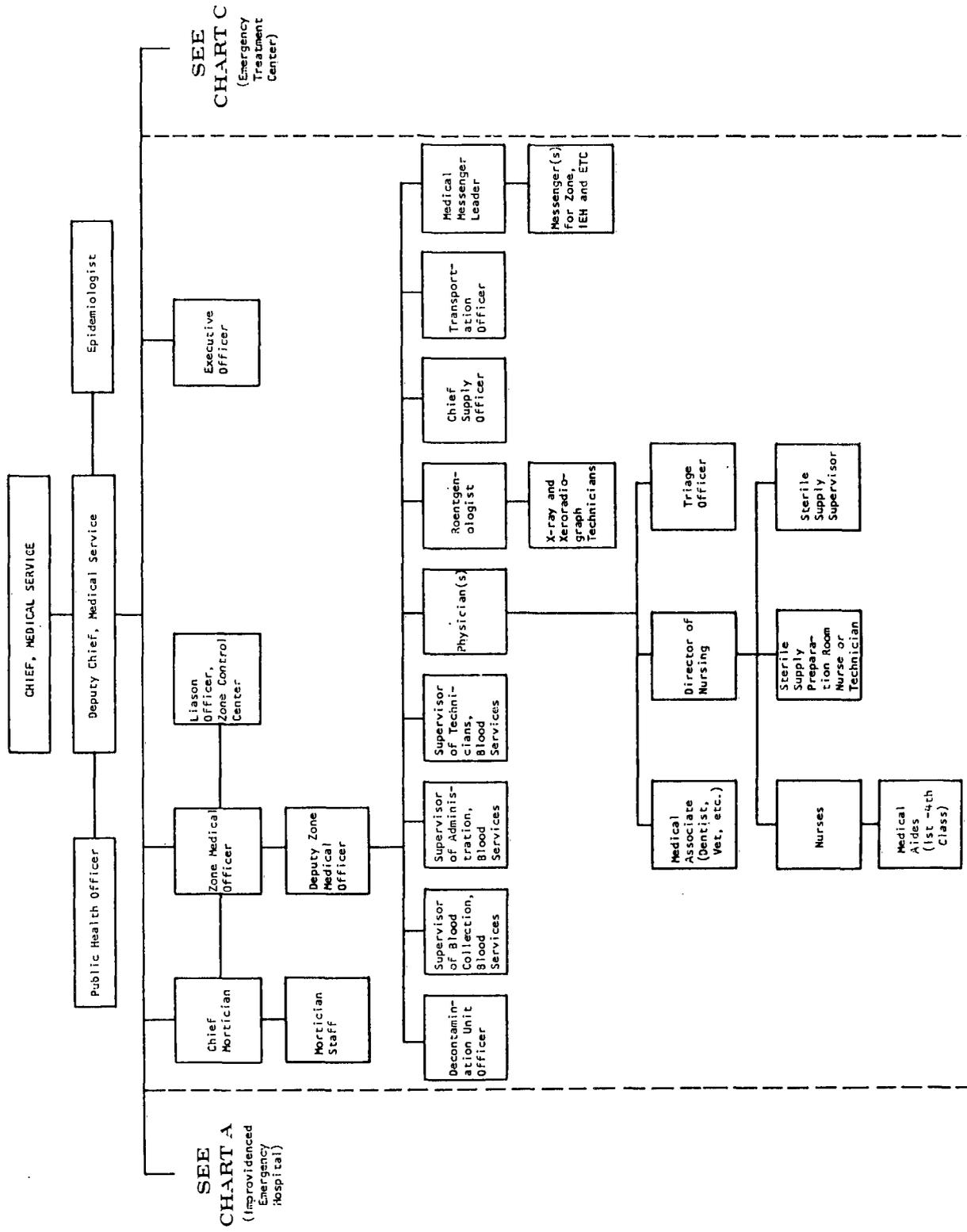


CHART C

Table
Tentative Job Hierarchy for Medical Service

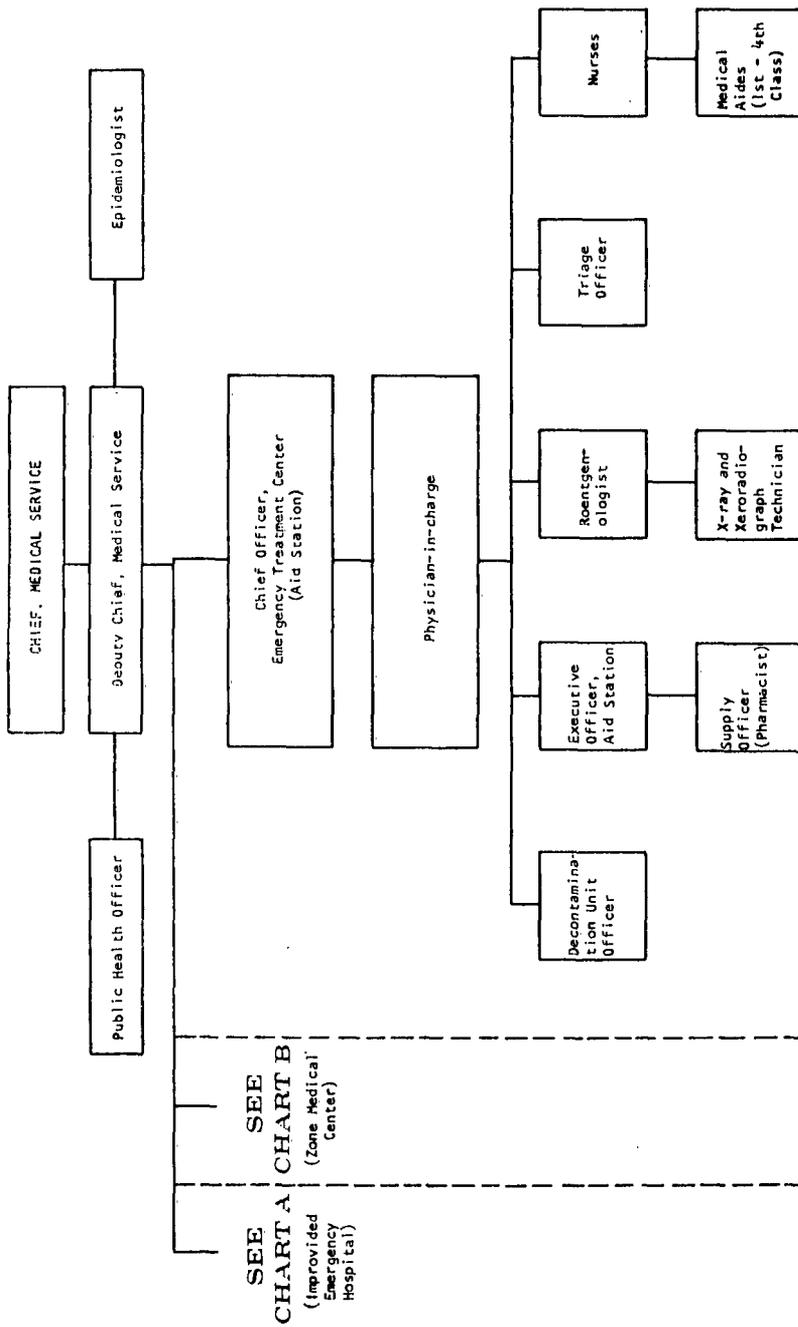


Table VII
Tentative Job Hierarchy for Police Service

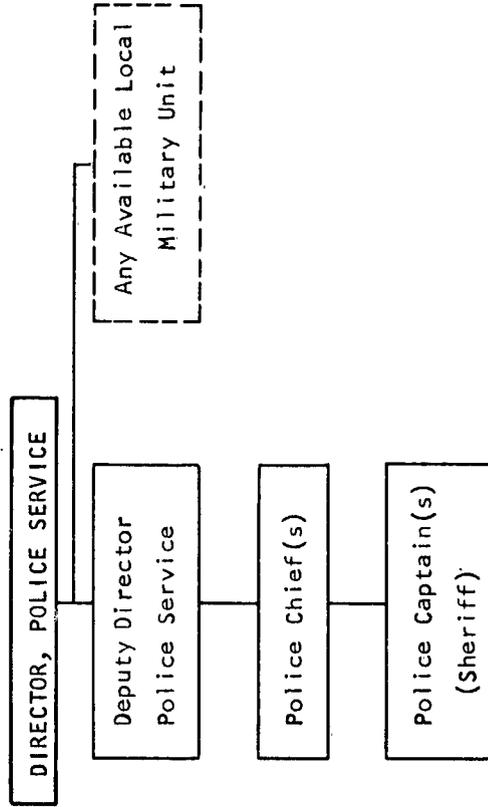


Table VIII
Tentative Job Hierarchy for Fire/Rescue Service

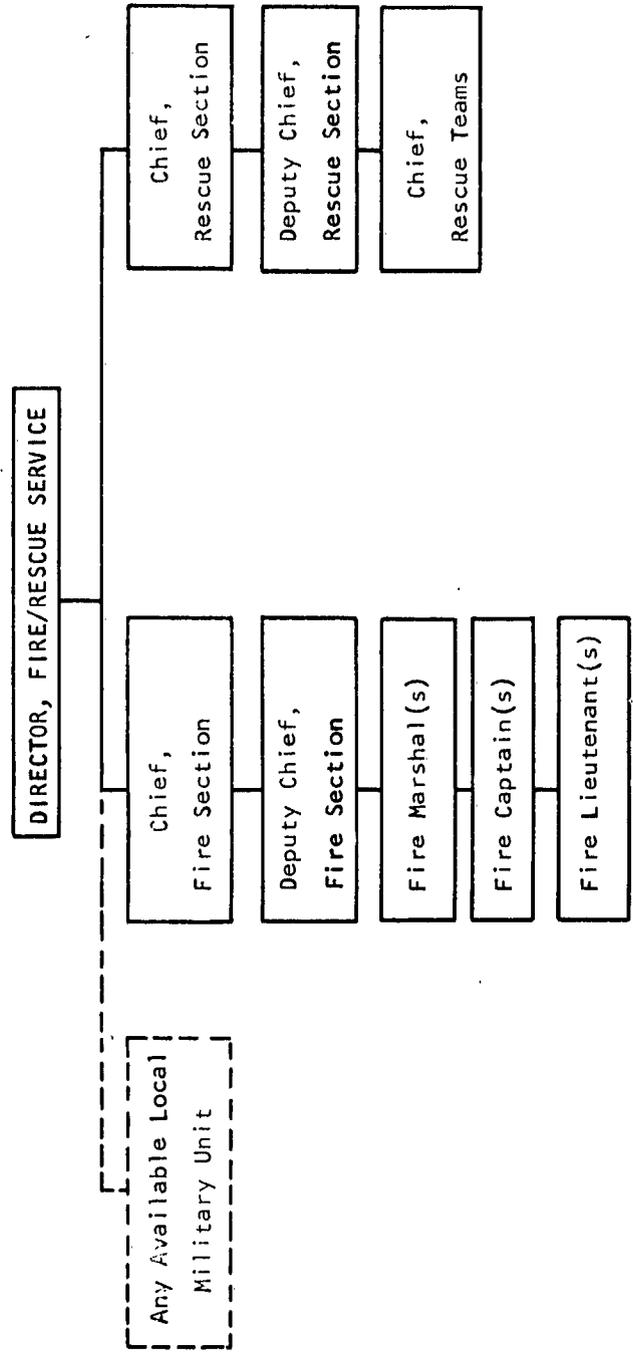


Table VIII
 Tentative Job Hierarchy for Fire/Rescue Service

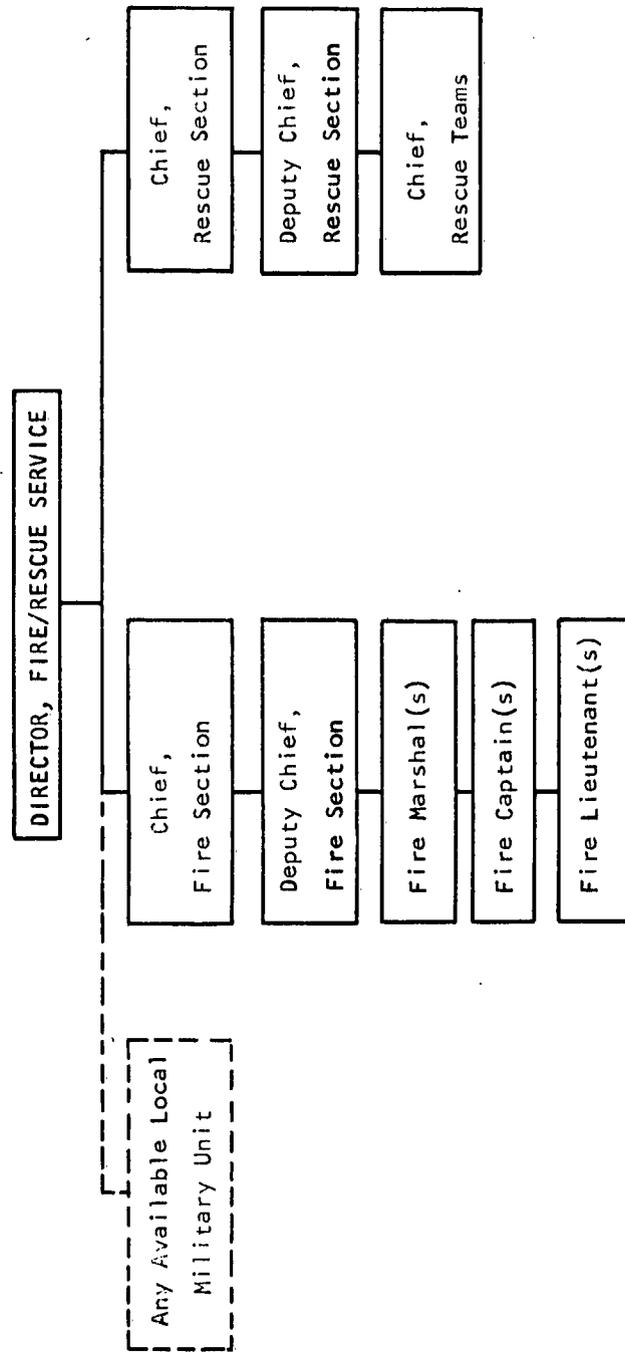


Table IX
 Tentative Job Hierarchy for Manpower Service

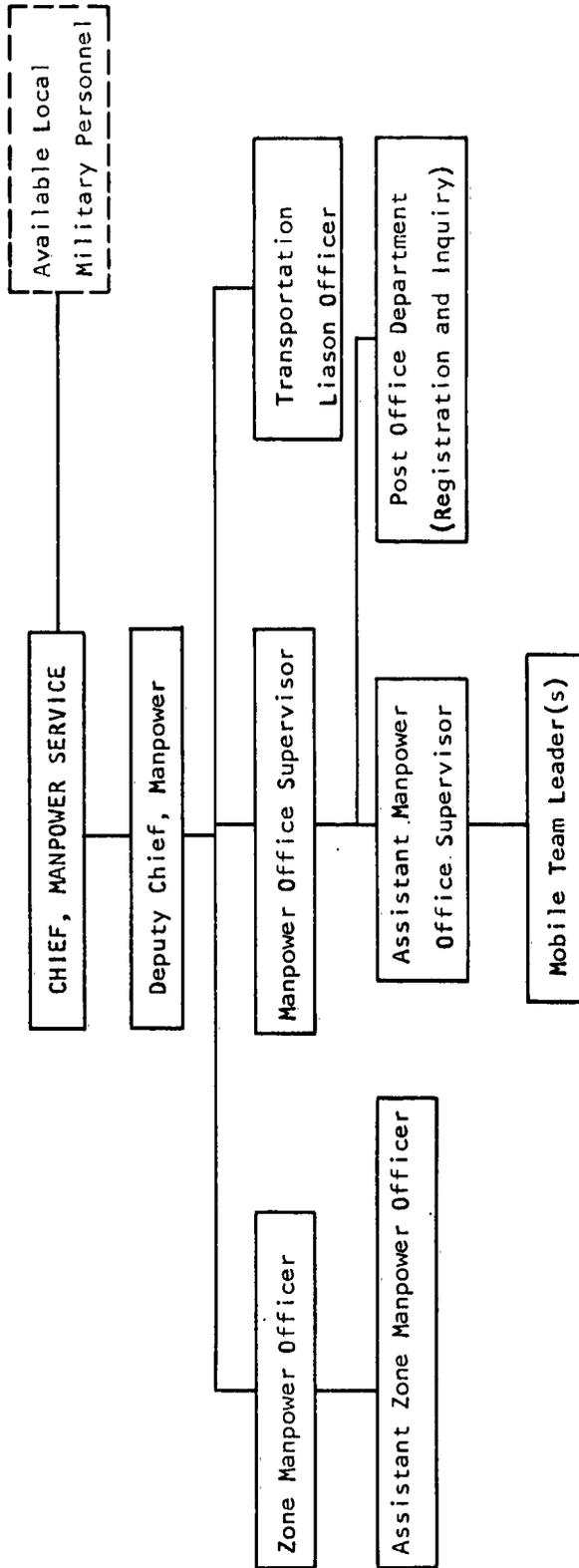


Table X-A
Tentative Job Hierarchy for Resource Mobilization Service

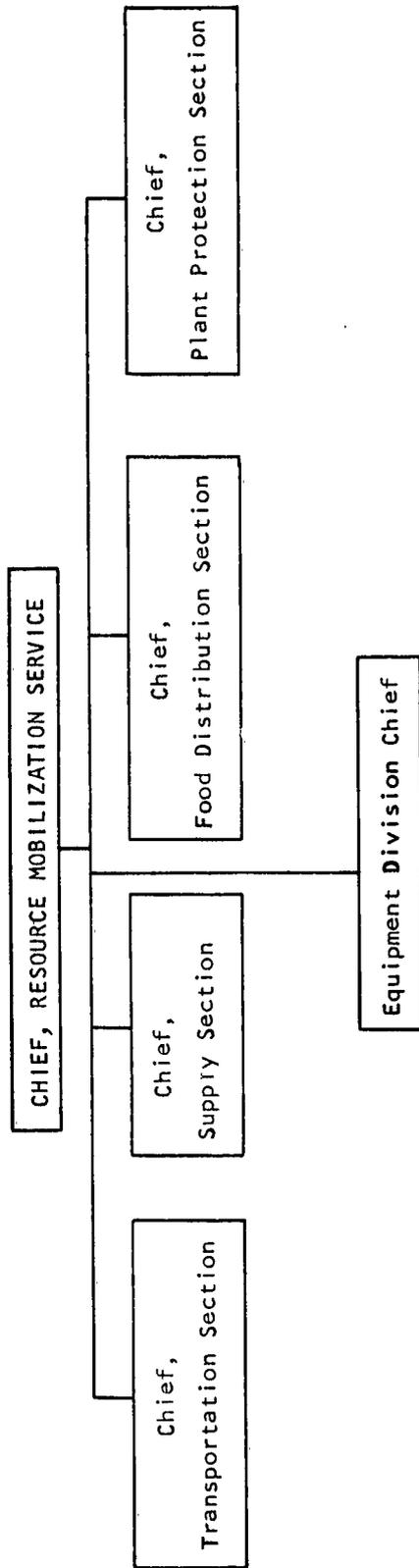


Table X-B
 Tentative Job Hierarchy for Transportation Section of the
 Resource Mobilization Service

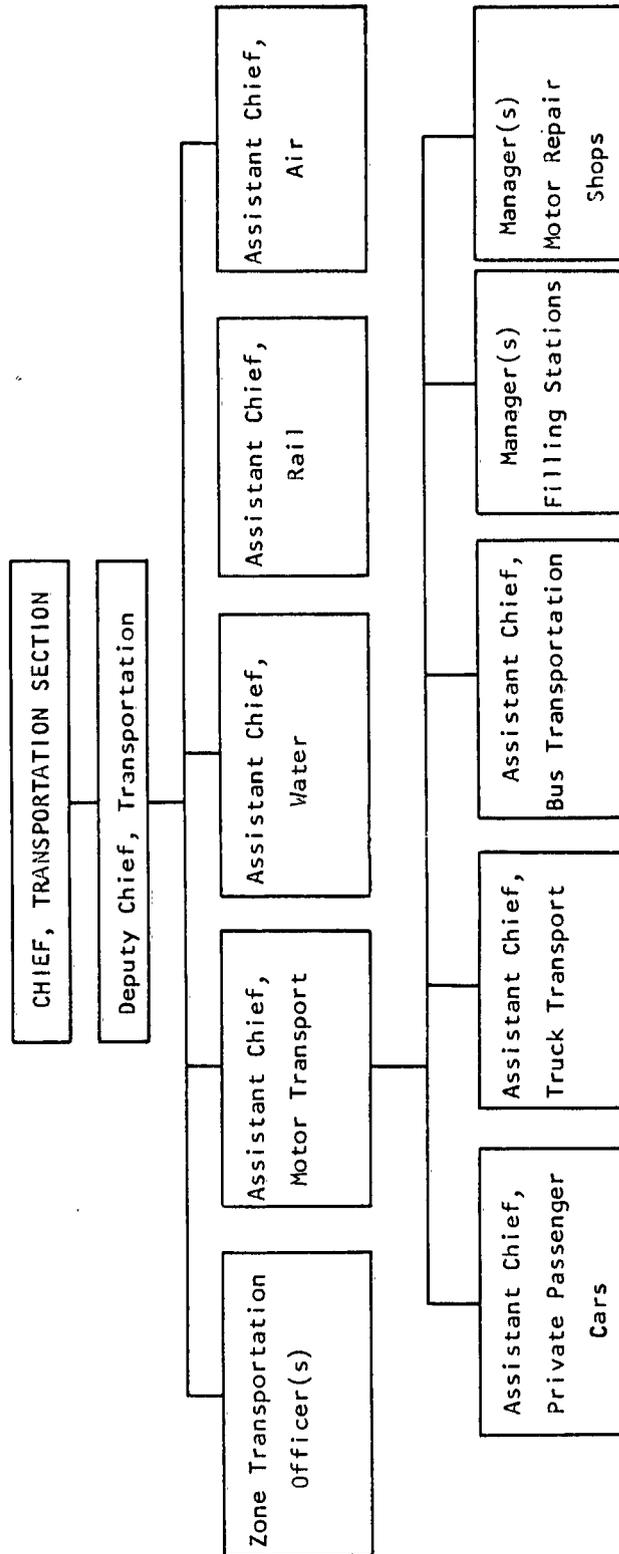


Table X-C
 Tentative Job Hierarchy for Supply Section of the Resource Mobilization Service

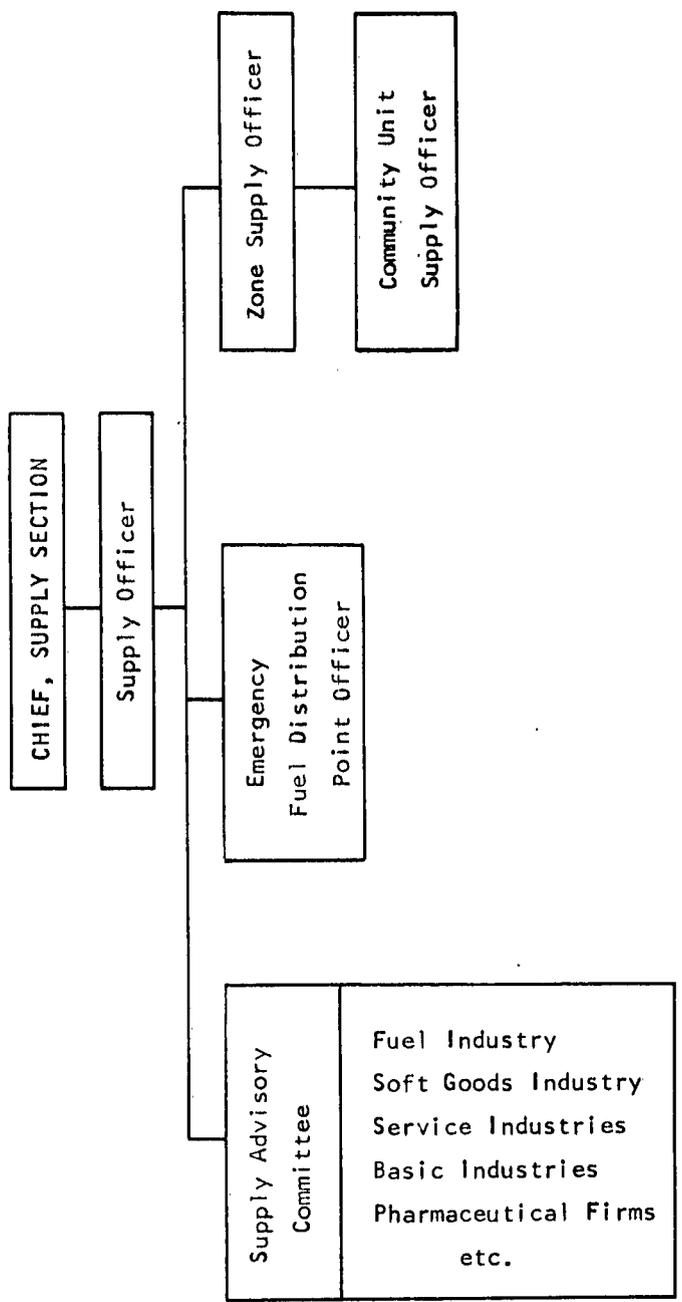


Table X-D
 Tentative Job Hierarchy for the Food Distribution Section of the Resource Mobilization Service

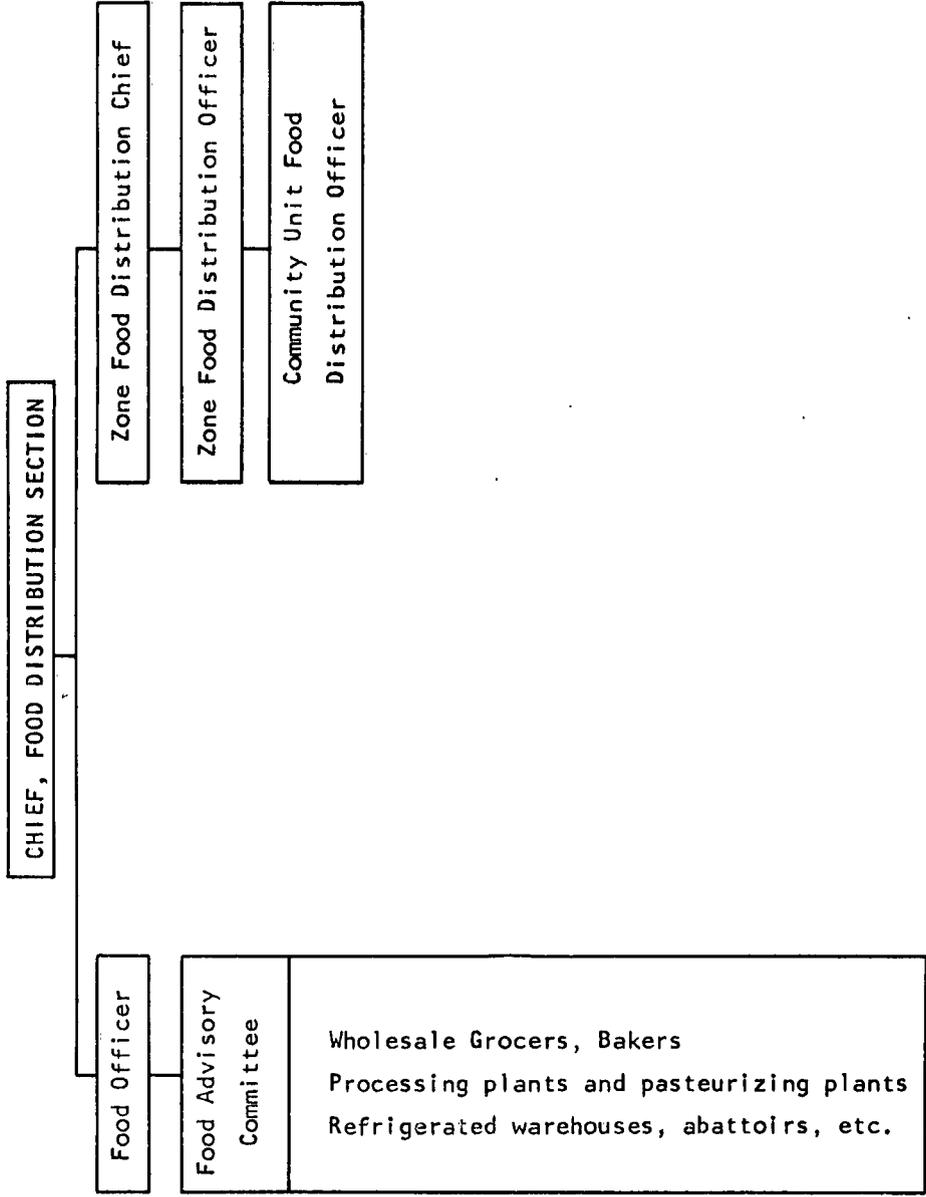


Table X-E
 Tentative Job Hierarchy for Plant Protection Section
 of the Resource Mobilization Service

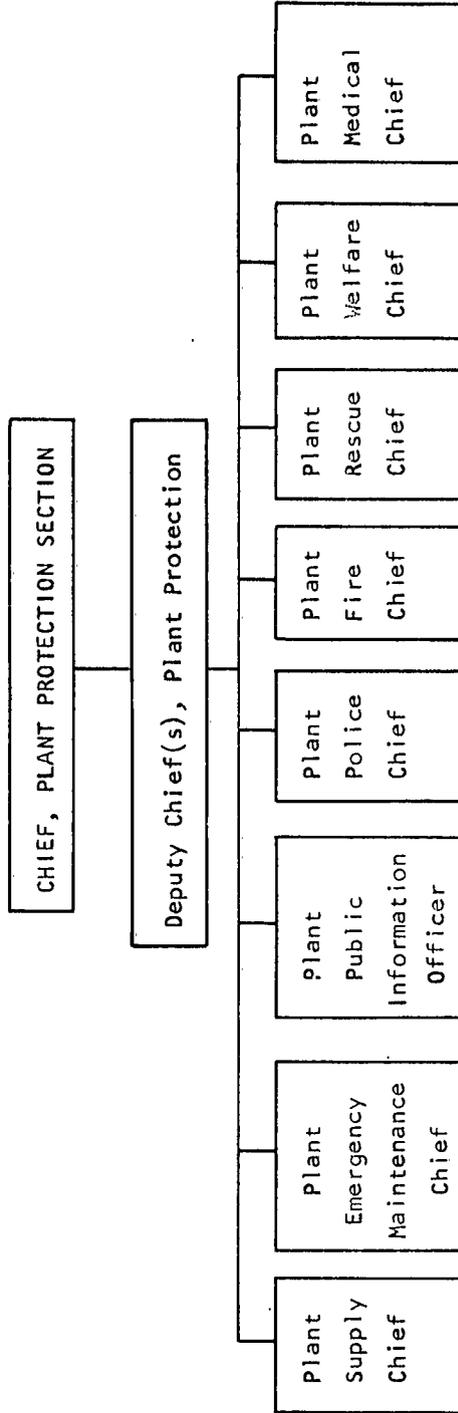
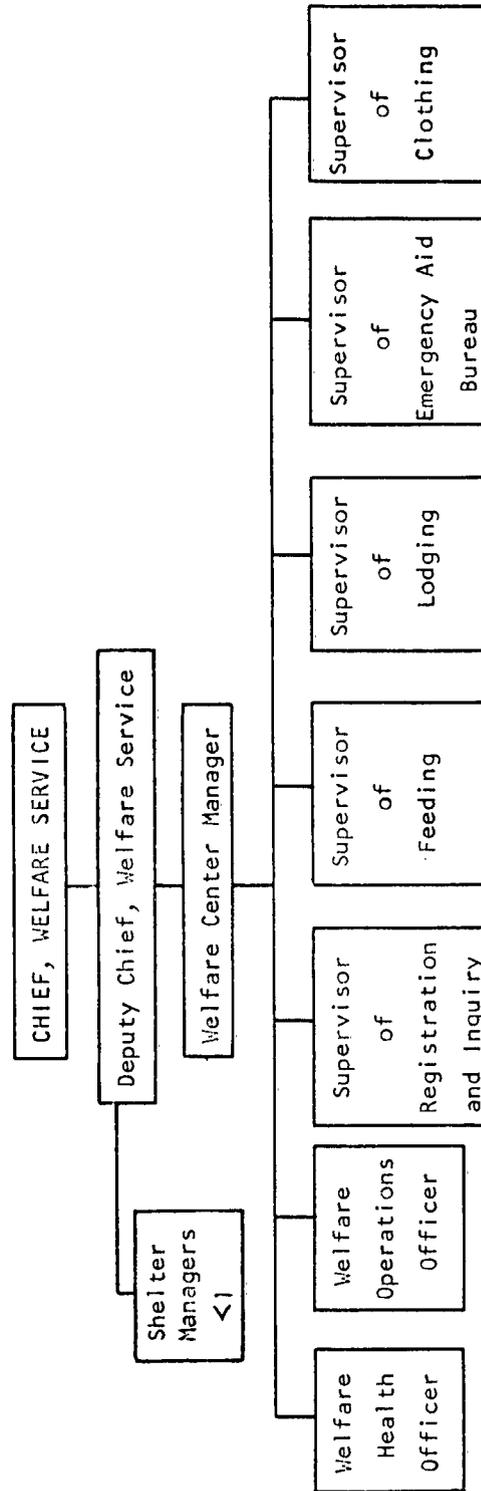
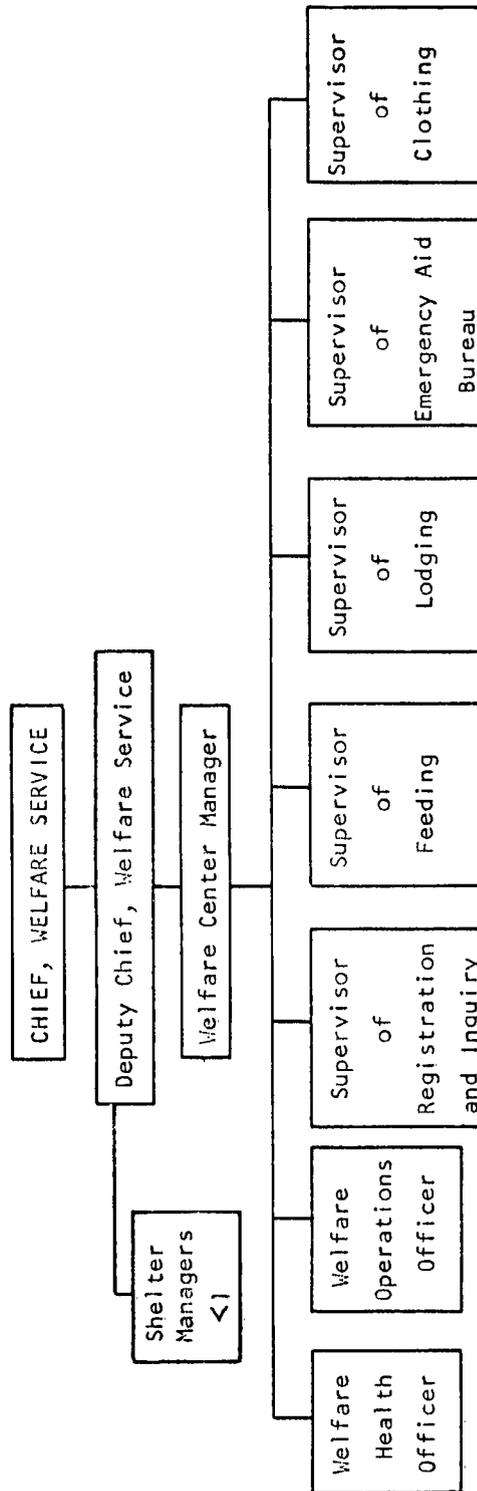


Table xi
 Tentative Job Hierarchy for the Welfare Service



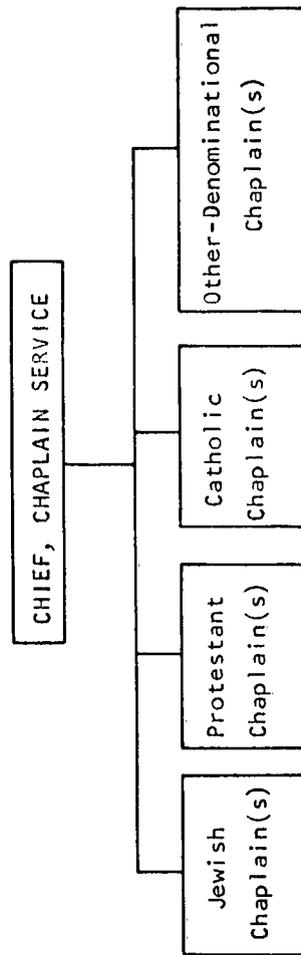
1 < IF assigned to Welfare Service

Table xi
 Tentative Job Hierarchy for the Welfare Service



1 < If assigned to Welfare Service

Table XII
Tentative Job Hierarchy for Chaplain Service



APPENDIX B

Job Activities

(Note: The material presented in Appendix B is illustrative; the job activities listed are obviously not exhaustive or even definitive. Variations in such things as individuals skills and knowledges or size of the cadre in a service will be factors which will affect job activities.)

Job Activities: Administration/Management Service

MAYOR, CITY MANAGER (Similar Local Executive)

General Responsibility: Acts in an advisory capacity to Civil Defense Director and/or civil defense organization; gives official support to civil defense activities through legislative action.

Building Activities:

- Delegates authority to Civil Defense Director
- Determines governmental line of succession
- Coordinates with legislative and judicial branches of government regarding civil defense activities
- Participates in drills, exercises

Operating Activities:

- Acts as final authority in emergency situation
- Institutes economic stabilization measures: e.g., rationing

Responsible for: Civil Defense Organization

LOCAL LEGISLATIVE GROUP

General Responsibility: Act in advisory capacity to Civil Defense Director and/or civil defense organization.

Building Activities:

- Provide legislative basis for civil defense measures
- Provide official support to civil defense structure
- Appropriate funds for civil defense use

Operating Activities:

- Appropriate funds for civil defense use

JUDICIAL REPRESENTATIVE

General Responsibility: Acts in advisory capacity to Civil Defense Director.

Operating Activities:

- Responsible for emergency judicial decisions

CIVIL DEFENSE DIRECTOR

General Responsibility: Coordinates all the various services of civil defense organizations.

Building Activities:

- Directs the development of effective programs for each service
- Incorporates all the service plans into an over-all plan
- Plans for drills, exercises
- Recruits, appoints civil defense personnel chiefs
- Delegates authority to chiefs of services, etc.

Operating Activities:

- Directs mobilization of local facilities and resources in emergency situation

Reports to: Mayor

Responsible for: Civil Defense Personnel

PLANS AND OPERATIONS OFFICER AND/OR DEPUTY CIVIL DEFENSE DIRECTOR

General Responsibility: Responsible for the development of an effective plan of civil defense operations.

Building Activities:

- Confers with state and Federal groups to plan civil defense operations for each phase of the emergency and recovery periods
- Develops a plan for the physical zoning of the locality to serve as a basis for civil defense organization
- Assists Civil Defense Director in duties as directed
- Assists in preparation of plans for the effective and efficient use of the Control Center

Operating Activities:

- Assists Civil Defense Director in duties as directed
- Acts in lieu of Civil Defense Director in his absence

TRAINING AND PUBLIC INFORMATION OFFICER

General Responsibility: Develops an effective plan to disseminate information to the general public regarding shelters and other pertinent information; directs over-all training program and training materials.

Building Activities:

- Determines priorities of information to be released
- Coordinates with Service Chiefs regarding dissemination of public information and training materials
- Supervises and coordinates training programs in the various services

Reports to: Plans and Operations Officer

Responsible for: Training and Public Information personnel

Job Activities: Engineering and Public Works Service

CHIEF, ENGINEERING AND PUBLIC WORKS SERVICE

General Responsibility: Coordinates activities of Public Works and Engineering Sections of the service.

Building Activities:

- Acts in advisory capacity in shelter construction activities at local level
- Collates and makes available to other operating personnel general data, maps and charts of power facilities, sanitary facilities, and engineering works
- Recruits and arranges training of Engineering and Public Works Service personnel

Operating Activities:

- Directs repair of facilities, structures and general reconstruction
- Confers with RADEF Officer
- Directs local damage assessment activities

Reports to: Civil Defense Director

Responsible for: Engineering and Public Works personnel

CHIEF, ENGINEERING AND ARCHITECTURE SECTION

General Responsibility: Develops plans for an emergency repair and recovery program.

Building Activities:

- Inspects shelter facilities
- Participates in shelter surveys

Operating Activities:

- Directs the reconstruction program including repair of streets, roads, bridges, reconstruction of buildings, repair of water and sanitary systems, etc.

- Coordinates with RADEF Service In damage assessment

Reports to: Chief, Engineering and Public Works Service

Responsible for: Engineers and Architects

ENGINEERS

General Responsibility: Advises on shelter design and procedures for reconstruction, repair of structures, facilities.

Building Activities:

- Inspects and surveys shelters

Operating Activities:

- Advises on procedures for reconstruction and/or adaptation

Reports to: Chief, Engineering and Architecture

ARCHITECTS

General Responsibility: Advises shelter design and procedures for reconstruction, repair of structures, facilities.

Operating Activities:

- Advises on procedures for fire control, prevention
- Advises on procedures for reconstruction and/or adaptation

Reports to: Chief, Engineering and Architecture

CHIEF, PUBLIC WORKS SECTION

General Responsibility: Responsible for development of a plan for effective emergency repair and reconstruction of Public Works System including sanitary, power and utility systems.

Building Activities:

- Recruits personnel and arranges their training as required
- Maintains up-to-date maps and charts of existing works
- Coordinates with Radiological and Medical Services

Operating Activities:

- Coordinates with Radiological and Medical Services
- Directs recovery and repair operations of Public Works Installation

Reports to: Chief, Engineering and Public Works

Responsible for: Assistant Chief, Sanitation
Assistant Chief, Utilities

ASSISTANT CHIEF, SANITATION

General Responsibility: Assists in developing plan for the emergency use, repair and reconstruction of the sanitation system.

Building Activities:

- Keeps an up-to-date file of charts and maps of the sewage disposal system
- Coordinates with Assistant Chief, Power regarding water system
- Confers with Radiological and Medical Services

Operating Activities:

- Confers with Radiological and Medical Services
- Directs personnel in emergency maintenance, repair and operations of sanitation system
- Determines priorities for personnel, equipment

Reports to: Chief, Public Works Section

Responsible for: Sanitation Staff

ASSISTANT CHIEF, UTILITIES

General Responsibility: Devises an effective plan for emergency use of the utility system, its recovery and repair.

Building Activities:

- Keeps an up-to-date file of maps and charts of all local utilities

Operating Activities:

- Directs personnel in emergency maintenance, repair, and operation of utility facilities
- Determines priorities of personnel, equipment
- Coordinates activities of gas and electric company employees during emergency situation
- Coordinates with Plant Protection Section of Resource Mobilization Service

Reports to: Chief, Public Works

Responsible for: Utility Staff

Job Activities: Radiological Service

RADEF OFFICER

General Responsibility: Develop a plan which will provide adequate monitoring, reporting, analyzing, predictive and decontamination capabilities in the local RADEF system.

Building Activities:

- Recruitment and appointment of personnel
- Responsible for initial training for personnel in monitoring, recording, analyzing and decontaminating activities
- Responsible for refresher or subsequent training for personnel
- Responsible for program of drills and exercises
- Coordinates with other operating services regarding the dissemination of essential RADEF information
- Assists other operating service (Fire, Police) in training their personnel in essential RADEF activities
- Coordinates with Public Information Officer in dissemination of Radiological information
- Establishment of line of succession in administration of RADEF Service
- Development of a plan for a network of monitoring and reporting stations (some of which will be in group shelters)
- Development of surface mobile and aerial monitoring capability
- Requisitioning and distribution of supplies, instruments, and equipment
- Maintenance, calibration of instruments
- Establishment of "demonstration" monitoring, recording stations
- Development of plans for the establishment of an analysis and evaluation section of the control center

Operating Activities:

- Verification of operational readiness of total RADEF system, with prime focus on control center activities
- Alerting of all RADEF personnel

- Review of available personnel and adjustment of personnel as necessary
- Establishment of schedule of periodic reports from fixed monitors
- Direction and coordination of RADEF field operations
- Direction of operational check of instruments
- Preparation of initial fallout warnings issued by Civil Defense Director
- Technical guidance to Civil Defense Director based on UF (Fallout Wind Vector data)
- Coordination with state RADEF Officer
- Direction of aerial and surface mobile monitoring operation when it becomes appropriate to do so
- Communication with neighboring communities on monitoring information
- Technical guidance to Civil Defense Director on basis of calculated ERD's for remedial evacuations during emergency, emergency reactivation operations, remedial post-attack evacuation and re-occupation.
- Directs maintenance of cumulative dose rate records of all personnel performing emergency operations
- Provides technical direction to decontamination of buildings, areas equipment
- Provides technical guidance for controlling exposure of labor force
- If appropriate coordinates with USDA Officer in planning for remedial and recovery agricultural operation
- Preparation of occasional warnings to general public regarding contamination of food and water, in cooperation with Public Health Officer

Reports to: Civil Defense Director

Responsible for: RADEF personnel

ASSISTANT RADEF OFFICER

General Responsibility: Assist RADEF Officer as directed.

Building Activities:

- Directs initial training of RADEF personnel in the areas of monitoring, recording, analysis and decontamination

- Institutes drills and exercises as directed by RADEF Officer
- Directs refresher and/or subsequent training of personnel

Operating Activities:

- Assume duties of RADEF Officer in his absence
- Assists RADEF Officer

Reports to: RADEF Officer

Responsible for: Personnel of RADEF Service

SUPERVISOR OF MONITORING SECTION

General Responsibility: Direct supervision of monitors in official monitoring stations; assists in coordinating all activities related to the securing of monitored data.

Building Activities:

- Assists in training--initial, refresher and/or in-service
- Conducts drills, exercises as directed

Operating Activities:

- Alerts monitors when necessary
- Checks operational readiness of monitoring stations and directs personnel adjustment as required
- Supervises monitors in official monitoring stations
- Assists in monitoring activities as needed
- Assists in establishing schedule of monitoring reports

Reports to: RADEF Officer

Responsible for: Monitors

MONITORS

General Responsibility: The measurement or detection of gamma and/or beta fallout radiation to provide data concerning levels of radiation within and close to shelters; survey monitoring to obtain supplies; and monitoring for purposes of remedial evacuations, decontamination and recovery.

Building Activities:

- Participation in drills, exercises

Operating Activities (In-Shelter Monitoring):

- Personnel monitoring
- Food and water monitoring
- Area survey (outside shelter to increase area available to shelterees and provide information to control center; within shelter to provide information regarding remedial movements).

Operating Activities (Mobile or Unsheltered Monitoring):

- Personnel monitoring
- Food and water monitoring
- Area survey (surface and aerial to furnish information to control center for use in recovery and decontamination operations)
- Preparation of flash reports for control center
- Preparation of dose rate reports
- Maintenance of radiological reporting log
- Maintenance of instruments

Reports to: Supervisor of Monitoring Section

SUPERVISOR OF ANALYSIS AND PLOTTING SECTION

General Responsibility: Coordination and supervision of activities concerned with analysis and plotting of incoming radiological data.

Building Activities:

- Assists in the training--initial, refresher, in-service--of plotters and analysts
- Conducts drills, exercises

Operating Activities:

- Alerts analysts and plotters when necessary
- Checks operational readiness of his staff and makes personnel adjustments as necessary

- Supervises activities of plotters and analysts
- Assists in analytic or plotting activities as necessary
- Directs coordination of flow of monitoring data to plotters and analysts

Reports to: RADEF Officer

Responsible for: Analysts and Plotters

DECONTAMINATION UNIT

General Responsibility: Performance of decontamination and radiological recovery methods in and around control center and official monitoring stations.

Building Activities:

- Participation in drills, exercises

Operating Activities:

- Performance of radiological recovery procedures
 - Wet methods
 - Dry methods
 - Land reclamation
 - Cold weather operations
 - Personnel decontamination
 - Food and water decontamination

Reports to: Supervisor of Decontamination Section

ANALYST

General Responsibility: Analysis of monitored radiological information and evaluation of decay patterns.

Building Activities:

- Participation in drills, exercises
- Computation of ERD for varying conditions which might occur in local area, for planning purposes

Operating Activities (Control Center):

- Continuing analysis and evaluation of data
- Estimation of radiation decay rates
- Estimation of ERD of personnel
- Estimation of future dose rates
- Estimation of feasibility of decontamination of areas, buildings, and equipment
- Encoding of analyses for reporting to other governmental levels
- May assume responsibilities of Supervisor of Plotting and Analysis Section, if necessary

Reports to: Supervisor of Analysis and Plotting Section

PLOTTERS

General Responsibility: Recording of incoming radiological data

Building Activities:

- Participation in drills, exercises

Operating Activities:

- Plotting of dose rates from selected monitoring reports
- Recording of incoming data in tabular form
- Plotting of "F" from flash reports

Reports to: Supervisor of Analysis and Plotting Section

SUPERVISOR OF DECONTAMINATION SECTION

General Responsibility: Coordination and supervision of Decontamination activities.

Building Activities:

- Directs training of RADEF Decontamination Unit personnel
- Cooperates in training personnel from other Services in decontamination techniques
- Conducts drills, exercises
- Coordinates with Public Information Officer in disseminating decontamination information

Operating Activities:

- Direct supervision of decontamination units of RADEF Service
- Cooperates with other operating services (Fire, Police, etc.) to coordinate total decontamination efforts
- Gives technical guidance to total decontamination program

Reports to: RADEF Officer

Responsible for: Personnel of Decontamination Section

Job Activities: Warning Service

WARNING OFFICE OR WARNING SERVICE CHIEF

General Responsibility: Prepared for an effective implementation of the Warning System on the local level.

Building Activities:

- Recruits and trains personnel
- Directs periodic general exercises
- Coordinates with Training and Public Information Officer
- Inspects facilities and equipment
- Coordinates with Civil Defense Communications Officer

Operating Activities:

- Maintains control and regulates the use of Warning System
- Determines priorities of Warning Communications

Reports to: Civil Defense Director

Responsible for: Warning personnel

WARNING MONITOR

General Responsibility: Responsible for effective and rapid dissemination of warning signal.

Building Activities:

- Maintains facilities and equipment
- Participates in drills and exercises

Operating Activities:

- Disseminates warning through following media: radio, telephone, fire/police communications, equipment, NEAR, etc.

Reports to: Warning Officer

Job Activities: Communications Service

CIVIL DEFENSE COMMUNICATIONS OFFICER

General Responsibility: Responsible for the effective control and use of civil defense communications and the establishment of an effective communications network of control stations (RACES).

Building Activities:

- Plans for diversification of facilities and operation points
- Directs preparation of communications operations plan for Message Center
- Inspects and evaluates existing equipment and facilities and makes recommendations for changes
- Coordinates with the Police and Fire/Rescue Services, Public Information Officer, and RADEF Officer
- Directs training of communications personnel as required
- Directs RACES accrediting program

Operating Activities:

- Evaluates information to be transmitted
- Determines priorities of information and personnel
- Regulates communication activities in Control Center
- Coordinates with the Police and Fire/Rescue Services, Public Information Officer, and RADEF Officer

Reports to: Civil Defense Director

Responsible for: Communications Service personnel

CHIEF, RADIO OFFICER(S) (RACES)

General Responsibility: Responsible for effective operations of RACES network.

Building Activities:

- Directs training program of operators

- Recommends operators to be accredited as RACES operators
- Responsible for monitoring of all station transmission under his supervision to assure proper usage

Operating Activities:

- Evaluates condition of equipment and supplies; plans for readjustment of responsibilities as required
- May determine priorities of information under direction of Chief, Communications Service
- Responsible for monitoring of all station transmissions under his supervision to assure proper usage

Reports to: Communications Officer

Responsible for: Radio Operators (RACES) and other RACES personnel

RADIO OPERATOR(S) (RACES)

General Responsibility: Transmit radio communications as directed.

Building Activities:

- Meet certification requirements
- Periodically evaluate equipment and arrange for adjustment and repairs
- Participates in drills, practices following the SOP

Operating Activities:

- Keep log of messages transmitted
- Transmit messages according to SOP

Reports to: Civil Defense Radio Officer (RACES)

RADIOTELEGRAPH/RADIOTELEPHONE OPERATORS

General Responsibility: Transmit messages via radiotelegraph as directed.

Building Activities:

- Meet certification requirements
- Participate in drills and exercises following the SOP
- Keep equipment in operational readiness

Operating Activities:

- Keep log of messages transmitted
- Transmit messages according to SOP

MESSAGE CENTER CHIEF

General Responsibility: Directs, supervises and organizes message service in the Message Center.

Building Activities:

- Responsible for an effective plan for receiving and dispersing of messages
- Recruits, trains, assigns personnel
- Plans for readjustment and/or continuity of message personnel

Operating Activities:

- Evaluates and determines priorities of messages and personnel

Reports to: Civil Defense Communications Officer

Responsible for: Message Center personnel

ASSISTANT CHIEF, MESSAGE--OUTGOING

General Responsibility: Directs transmission of outgoing messages.

Operating Activities:

- Determines priorities of messages and personnel
- Reviews messages for mechanical accuracy
- Directs the logging and recording of messages
- Supervises personnel in the Message Center

Reports to: Message Center Chief

Responsible for: Outgoing-Message Center personnel

ASSISTANT CHIEF, MESSAGE CENTER--INCOMING

General Responsibility: Directs activities for receiving messages.

Operating Activities:

Supervises and determines priorities of personnel

COURIERS, MESSENGERS; TELEPHONE/TELEGRAPH OPERATORS

General Responsibility: Maintenance of Civil Defense communications, as directed.

Building Activities:

- Participation in drills, exercises

Operating Activities:

- Transmission of messages
- Reporting of equipment failure

Reports to: Assistant Chiefs, Outgoing and Incoming

Job Activities: Medical Service

CHIEF, MEDICAL SERVICE

General Responsibility: Responsible for the preparation of an over-all Medical Service plan and supervising the implementation of this plan.

Building Activities:

- Makes decisions as to the number and kind of personnel to be appointed at each installation
- Coordinates, confers with and directs three divisions: Zone Medical, Emergency Treatment and Improvised Emergency Hospital
- Recruits personnel and directs total training program of Medical Service
- Performs site surveys
- Confers with Radiological Service and other operating services
- Prepares automatic line of succession
- Maintains operational readiness of medical system

Operating Activities:

- Executes decisions as to the number and kind of personnel to be appointed at each installation
- Coordinates, confers with and directs three divisions: Zone Medical, Emergency Treatment and Improvised Emergency Hospital
- Confers with Radiological Service and other operating services

Reports to: Civil Defense Director

Responsible for: Emergency Treatment Center, Zone Medical and Improvised Emergency Hospital Personnel

DEPUTY CHIEF, MEDICAL SERVICE

General Responsibility: Assists Chief, Medical Service in performance of his duties and assumes his position in his absence. (See Chief, Medical Service for details.)

Reports to: Chief, Medical Service

PUBLIC HEALTH OFFICER

General Responsibility: Evaluates local medical, pharmaceutical, nursing and sanitary facilities as they pertain to public health.

Building Activities:

- Prepares map of available facilities
- Advises Chief, Medical Service
- Arranges for stockpiling of medical supplies
- Coordinates with Assistant Chief of Sanitation, Engineering and Public Works Service
- Confers with Epidemiologist

Operating Activities:

- Advises Chief, Medical Service on public health measures
- Coordinates with Assistant Chief of Sanitation, Engineering and Public Works Service
- Confers with Epidemiologist

Reports to: Chief, Medical Service

EPIDEMIOLOGIST

General Responsibility: Prepares effective plan for prevention and/or control of epidemics.

Building Activities:

- Confers with Public Health Officer

Operating Activities:

- Advises physicians and medical staff regarding necessary activities to prevent, control epidemics
- Makes inspections to evaluate and recommend necessary controls
- Confers with Public Health Officer

Reports to: Chief, Medical Service

CHIEF OF STAFF, IMPROVISED EMERGENCY HOSPITAL (IEH)

General Responsibility: Responsible for development of an effective plan for emergency hospitalization of sick and injured.

Building Activities:

- Recruits and assigns personnel in IEH
- Evaluates facilities and supplies and determines needs
- Coordinates with Radiological Service and other operating services

Operating Activities:

- Determines priorities of personnel and patients
- Evaluates facilities and supplies and determines needs
- Directs nursing and non-nursing services
- Coordinates with Radiological Service and other operating services

Reports to: Chief, Medical Service

Responsible for: IEH Medical Staff personnel

EXECUTIVE OFFICER, IEH

General Responsibility: Assists in plan for preparation of a building for emergency use and implements plan. Coordinates with Chief of Staff, IEH.

Operating Activities:

- Responsible for requisitioning of supplies
- Directs activities of non-medical personnel
- Responsible for efficiency of the system communications, record keeping and general maintenance

Reports to: Chief, Medical Service

Responsible for: Non-medical personnel

PHYSICIAN(S), IEH

General Responsibility: Renders professional care, diagnoses, prescribes, administer drugs, initiates intravenous therapy, performs operations, etc.

Operating Activities:

- Directs medical personnel
- Determines priorities regarding patients, personnel, supplies
- Performs general administrative activities

Reports to: Chief of Staff, IEH

Responsible for: Medical Associate(s), Triage Officer, Director of Nursing, Medical Messengers and Supervisor of Blood Collection, Supervisor of Technicians, Supervisor of Administration of the Blood Services

ROENTGENOLOGIST, IEH

General Responsibility: Evaluates X-rays and Xeroradiograph results.

Building Activities:

- Recruits, trains, assigns technicians

Operating Activities:

- Determines needs of patients for treatment
- Controls and regulates number of treatments
- Determines priorities regarding patients

Reports to: Chief of Staff, IEH

Responsible for: X-ray and Xeroradiograph Technician(s)

X-RAY AND XERORADIOGRAPH TECHNICIAN(S), IEH

Operating Activities:

- Operation of X-ray and Xeroradiography equipment

Reports to: Roentgenologist

DECONTAMINATION UNIT OFFICER, IEH

General Responsibility: Responsible for decontamination of patients, personnel and interior of building or institution in which they are located.

Operating Activities:

- Responsible for maintenance of decontamination supplies and equipment
- Makes requests for additional materials as needed
- Keeps records of persons and areas which have been decontaminated

Reports to: Physician, IEH

Responsible for: Decontamination Unit

DIRECTOR OF NURSING, IEH

General Responsibility: Directs, and organizes nursing personnel.

Building Activities:

- Trains personnel

Operating Activities:

- Assigns nursing personnel
- Directs activities of sterile supply room

Reports to: Physician, IEH

Responsible for: Nursing Personnel, Sterile Supply Preparation Room
Nurse or Technician, IEH, Sterile Supply Supervisor, IEH
and Sterile Supply Room Personnel, IEH

TRIAGE OFFICER(S), IEH

General Responsibility: Classifies patients as to kind and need, determines priorities of patients, and routes them to proper location and facility.

Operating Activities:

- Renders emergency professional care

Reports to: Physician, IEH

SUPERVISOR OF BLOOD COLLECTION, BLOOD SERVICES, IEH

General Responsibility: Responsible for maintaining efficiency of blood collection operation.

Building Activities:

- Trains and assigns personnel

Operating Activities:

- May personally assist in blood collection activities

Reports to: Physician, IEH

Responsible for: Blood Collection Staff

SUPERVISOR OF TECHNICIANS, BLOOD SERVICES, IEH

General Responsibility: Directs and supervises blood service technicians.

Building Activities:

- Supervises training and assigns personnel

Operating Activities:

- Assists medical personnel

Reports to: Physician, IEH

Responsible for: Blood Technicians

SUPERVISOR OF ADMINISTRATION, BLOOD SERVICES, IEH

General Responsibility: Coordinates, directs, supervises office staff and laboratory aides of Blood Service.

Building Activities:

- Trains personnel

Operating Activities:

- Responsible for storage and transportation of blood

Reports to: Physician, IEH

Responsible for: Blood Services Office Staff and Laboratory Aides

MEDICAL ASSOCIATE (VETERINARIAN, PODIATRIST, DENTIST, ETC.)

General Responsibility: Assists physician in the performance of his duties and may assume his role in his absence.

Operating Activities:

- Performs specialized professional services
- May diagnose and prescribe medicines and treatment

Reports to: Physician, IEH

Responsible for: Medical Aides

NURSES, IEH

General Responsibility: Assists physician and under direction may assume some of his duties; performs general nursing responsibilities.

Operating Activities:

- May administer anesthetics and initiate intravenous therapy
- Makes requests for supplies and personnel

Reports to: Director of Nursing, IEH

Responsible for: Medical Aides

STERILE SUPPLY PREPARATION ROOM, NURSES OR TECHNICIANS, IEH

General Responsibility: Responsible for maintenance of supplies and preparation room as regards sterilization and proper classification of instruments and equipment.

Reports to: Director of Nursing, IEH

STERILE SUPPLY SUPERVISOR, IEH

General Responsibility: Responsible for maintenance of sterile supply room and equipment.

Operating Activities:

- Assigns and supervises sterile supply personnel

- Directs placement of supplies and equipment, and personnel

Reports to: Director of Nursing, IEH

Responsible for: Sterile Supply Personnel

MEDICAL AIDES (1st - 4th Class), IEH

General Responsibility: Responsible for assisting medical personnel (i.e., physicians, medical associates, nurses, etc.).

Operating Activities:

- Assists in sterilization of instruments and equipment
- Prepares and maintains records and charts
- Routes wounded
- Assists with supplies

Reports to: Physician, Medical Associate, Nurse, Executive Officer

ZONE MEDICAL OFFICER

General Responsibility: Coordinates and supervises, medical activities in the zone.

Building Activities:

- Responsible for assisting in preparation of an effective Medical Plan for the Zone
- Supervises training of Zone Medical personnel

Operating Activities:

- Determines needs and priorities of personnel and supplies

Reports to: Chief, Medical Service

Responsible for: Zone Medical personnel

DEPUTY ZONE MEDICAL OFFICER

General Responsibility: Assists Zone Medical Officer in performance of his duties and substitutes for him in event of his absence.

Reports to: Chief, Medical Service and Zone Medical Officer

EXECUTIVE OFFICER, ZONE MEDICAL CENTER

General Responsibility: Responsible for efficiency of Zone Medical systems communications, record keeping, and general maintenance of Zone Medical Center.

Building Activities:

- Assists in preparation of hospital shelter

Reports to: Chief, Medical Service

Responsible for: Non-Medical personnel

CHIEF MORTICIAN, ZONE MEDICAL CENTER

General Responsibility: Directs and supervises mortuary staff.

Building Activities:

- Coordinates with Chaplain and Welfare (record division) Service

Operating Activities:

- Responsible for embalming and preparing bodies for burial

Reports to: Zone Medical Officer

Responsible for: Mortuary Staff

MORTICIAN STAFF, ZONE MEDICAL CENTER

General Responsibility: Embalming and preparing bodies for burial.

Reports to: Chief Mortician

LIASON OFFICER, ZONE CONTROL CENTER, ZONE MEDICAL CENTER

General Responsibility: Communicates with other operating services.

Building Activities:

- Advises of new information, changes in policy, etc.

Operating Activities:

- Advises of new information, changes in policy, etc.

Reports to: Zone Medical Officer

DECONTAMINATION UNIT OFFICER, ZONE MEDICAL CENTER

(See Decontamination Unit Officer, IEH, for details.)

SUPERVISOR OF BLOOD COLLECTION, BLOOD SERVICE, ZONE MEDICAL CENTER

(See Supervisor of Blood Collection, Blood Service, IEH, for details.)

SUPERVISOR OF ADMINISTRATIVE BLOOD SERVICES, ZONE MEDICAL CENTER

(See Supervisor of Administrative Blood Service, IEH, for details.)

SUPERVISOR OF TECHNICANS, BLOOD SERVICES, ZONE MEDICAL CENTER

(See Supervisor of Technicians, Blood Services, IEH, for details.)

ROENTGENOLOGIST, ZONE MEDICAL CENTER

(See Roentgenologist, IEH, for details.)

X-RAY AND XERORADIOGRAPH TECHNICIANS, ZONE MEDICAL CENTER

(See X-ray and Xeroradiograph Technicians, IEH, for details.)

CHIEF SUPPLY OFFICER, ZONE MEDICAL CENTER

General Responsibility: Requisition and distribution of supplies for Zone Medical Center.

Building Activities:

- Evaluation and inspection of existing supplies, and supply storage, and maintenance
- Confers with Zone Medical Staff concerning supply requirements

Operating Activities:

- Evaluation and inspection of existing supplies, and supply storage, and maintenance

- Keeps an up-to-date inventory of supplies
- Supervises and directs personnel in supply staff
- Confers with Zone Medical Staff concerning supply requirements

Reports to: Zone Medical Officer

Responsible for: Supply Staff

TRANSPORTATION OFFICER, ZONE MEDICAL CENTER

General Responsibility: Supplies transportation needs for Zone Medical, IEH, and Emergency Treatment Center personnel and patients.

Building Activities:

- Trains drivers
- Maintains equipment
- Obtains vehicle clearance from Civil Defense Director

Operating Activities:

- Transports supplies to and from various medical installations
- Maintains equipment
- Obtains vehicle clearance from Civil Defense Director

Reports to: Zone Medical Officer

Responsible for: Transportation personnel

MEDICAL MESSENGER LEADER, ZONE MEDICAL CENTER

General Responsibility: Coordinates messenger service for Zone Medical Emergency Treatment Centers and Improvised Emergency Hospital division.

Operating Activities:

- Directs, supervises medical messengers
- Determines priorities of information/personnel
- Responsible for the transmitting and receiving of all messages

Reports to: Zone Medical Officer

Responsible for: Medical Messenger(s), Improvised Emergency Hospital, Zone Control Center, Emergency Treatment Center

MESSENGER(S) ZONE MEDICAL CENTER

General Responsibility: Responsible for transmitting messages between various medical installations.

Reports to: Medical Messenger Leader

PHYSICIAN(S), ZONE MEDICAL CENTER

(See Physician(s), IEH for details.)

MEDICAL ASSOCIATE(S), ZONE MEDICAL CENTER

(See Medical Associate(s), IEH for details.)

TRIAGE OFFICER(S), ZONE MEDICAL CENTER

(See Triage Officer(s), IEH for details.)

DIRECTOR OF NURSING, ZONE MEDICAL CENTER

(See Director of Nursing, IEH for details.)

STERILE SUPPLY PREPARATION ROOM, NURSE OR TECHNICIAN, ZONE MEDICAL CENTER

(See Sterile Supply Preparation Room, Nurse or Technician, IEH for details.)

STERILE SUPPLY SUPERVISOR, ZONE MEDICAL CENTER

(See Sterile Supply Supervisor, IEH for details.)

NURSES, ZONE MEDICAL CENTER

(See Nurses, IEH for details.)

MEDICAL AIDES (1st - 4th Class), ZONE MEDICAL CENTER

(See Medical Aides, IEH for details.)

CHIEF OFFICER, EMERGENCY TREATMENT CENTER (AID STATION)

General Responsibility: Responsible for over-all efficiency of Emergency Treatment Center.

Building Activities:

- Assists in preparation of the Emergency Treatment Center section of an over-all Medical Plan

Operating Activities:

- Directs, supervises, organizes Medical personnel in ETC
- Determines priorities of patient/personnel needs
- Supervises triage activities

Reports to: Chief, Medical Service

Responsible for: Physician(s)-in-charge and related personnel

PHYSICIAN(S)-IN-CHARGE, EMERGENCY TREATMENT CENTER

General Responsibility: Renders professional care, diagnoses, prescribes, and administering drugs.

Operating Activities:

- Coordinates, directs, and supervises nurses and similar personnel
- Determines priorities of patients, personnel, and supplies

Reports to: Chief Officer, Emergency Treatment Center

Responsible for: Nursing Staff

DECONTAMINATION UNIT OFFICER, EMERGENCY TREATMENT CENTER

(See Decontamination Officer, IEH for details.)

TRIAGE OFFICER, EMERGENCY TREATMENT CENTER

(See Triage Officer, IEH for details.)

NURSES, EMERGENCY TREATMENT CENTER

(See Nurses, IEH for details.)

EXECUTIVE OFFICER, EMERGENCY TREATMENT CENTER

General Responsibility: Responsible for efficiency of communications system, and the maintenance of the building, equipment, power supply, etc. of the Emergency Treatment Center.

Building Activities:

- Implements plans for setting up of Emergency Treatment Center

Operating Activities:

- Directs supply and non-medical staff
- Determines priorities of supplies and personnel

Reports to: Physician-in-charge

Responsible for: Supply Officer

SUPPLY OFFICER (PHARMACIST), EMERGENCY TREATMENT CENTER

General Responsibility: Orders and distributes supplies for Aid Stations.

Building Activities:

- Inventories pharmaceutical supplies and keeps appropriate records

Operating Activities:

- Inventories pharmaceutical supplies and keeps appropriate records
- Supervises pharmacists staff

Reports to: Executive Officer, Emergency Treatment Center

Responsible for: Pharmacist's Staff, Medical Aides (Supply only)

MEDICAL AIDES (1st - 4th Class), EMERGENCY TREATMENT CENTER

(See Medical Aides (1st - 4th Class), IEH, for details.)

Reports to: Physician-in-charge, Supply Officer, Executive Officer, Nurses

ROENTGENOLOGIST, EMERGENCY TREATMENT CENTER

(See Roentgenologist, IEH for details.)

X-RAY AND XERORADIOGRAPH TECHNICIANS, EMERGENCY TREATMENT CENTER

(See X-Ray and Xeroradiograph Technicians, IEH for details.)

Job Activities: Police Service

DIRECTOR, POLICE SERVICE

General Responsibility: Directs, supervises, coordinates all personnel connected with the Police Service.

Building Activities:

- Develops effective plan for use of police during and after emergency situations
- Directs training for special disaster techniques
- Directs training for special social control techniques
- Coordinates with Fire/Rescue Service

Operating Activities:

- Responsible for protection of life and property
- Coordinates with Fire/Rescue Service

Reports to: Civil Defense Director

Responsible for: Personnel of Police Service

DEPUTY DIRECTOR, POLICE SERVICE

General Responsibility: Assists Director, Police Service as directed.

Operating Activities:

- Acts in lieu of Director, Police Service in his absence

Reports to: Director, Police Service

Responsible for: Personnel of Police Service

POLICE CHIEF(S)

General Responsibility: Safeguarding of life and property.

Building Activities:

- Requisitions, inspects, distributes supplies, equipment
- Supervises program of drills and exercises

Operating Activities:

- Supervises, directs activities of police captains
- Directs traffic control program
- Requisitions, inspects, distributes supplies, equipment
- Directs social control training program
- Directs decontamination activities by police personnel
- Directs monitoring activities by police personnel

Reports to: Deputy Director Police Service

Responsible for: Police personnel

POLICE CAPTAIN(S), SHERIFF

General Responsibility: Supervision of police personnel

Building Activities:

- Trains personnel
- Safeguards life and property
- Responsible for maintenance of equipment

Operating Activities:

- Performs first aid
- Safeguards life and property
- Traffic control
- Performs or directs decontamination activities
- Responsible for maintenance of equipment
- Performs or directs monitoring activities

Reports to: Police Chief

Responsible for: Police personnel

Job Activities: Fire/Rescue Service

DIRECTOR, FIRE/RESCUE SERVICE

General Responsibility: Coordinates activities of Fire/Rescue Service.

Building Activities:

- Develops effective plan for the Fire/Rescue Service
- Arranges and directs training
- Cooperates with Director, Police Service
- Arranges for continuity of administration of the Fire/Rescue Service

Operating Activities:

- Cooperates with Director, Police Service

Reports to: Civil Defense Director

Responsible for: Chiefs, Fire and Rescue Sections

CHIEF, FIRE SECTION

General Responsibility: Directs and supervises personnel in Fire section of Fire/Rescue Service.

Building Activities:

- Helps to develop effective plan for fire section
- Performs inspections of personnel
- Directs training drills, exercises
- Directs inspection and maintenance of equipment
- Coordinates with Chief, Rescue section
- Responsible for requisition and distribution of equipment

Operating Activities:

- Performs inspections of personnel
- Directs inspection and maintenance of equipment
- Protection of life and property
- Responsible for requisition and distribution of equipment

Reports to: Chief, Fire/Rescue Service

Responsible for: Fire Service personnel

DEPUTY CHIEF, FIRE SECTION

General Responsibility: Assists Chief, Fire Section in the performance of his duties and in event of his absence assumes his role.

Reports to: Chief, Fire Section

FIRE MARSHAL(S)

General Responsibility: Administers activities of fire fighting unit.

Building Activities:

- Directs program of drills, exercises
- Trains personnel

Operating Activities:

- Cooperates with rescue teams
- Administers first aid
- Directs decontamination activities

Reports to: Chief, Fire Section

Responsible for: Fire Captain(s)

FIRE CAPTAIN(S)

General Responsibility: Directs fire fighting activities.

Building Activities:

- Trains personnel
- Supervises drills and exercises

Operating Activities:

- Performs first aid
- Supervises personnel
- Maintains equipment

- Maintains discipline
- Performs decontamination activities

Reports to: Fire Marshal

Responsible for: Fire Lieutenant(s)

FIRE LIEUTENANT(S)

General Responsibility: Fire fighting activities

Building Activities:

- Participates in drills and exercises

Operating Activities:

- Administers first aid, etc.
- Maintains discipline
- Performs decontamination activities

Reports to: Fire Captain

Responsible for: Fire Unit personnel

CHIEF, RESCUE SECTION

General Responsibility: Plans, organizes, administers activities of Rescue section.

Building Activities:

- Helps to develop effective rescue plan
- Recruits personnel and arranges training
- Coordinates with Director, Fire Section
- Directs and arranges training
- Requisitions and distributes equipment
- Coordinates with Radiological and Engineering and Public Works Services
- Directs program of drills and exercises

Operating Activities:

- Coordinates with Director, Fire Section
- Coordinates with Radiological and Engineering and Public Works Services

Reports to: Director, Fire/Rescue Service

Responsible for: Rescue Service personnel

DEPUTY CHIEF, RESCUE SECTION

General Responsibility: Assists Chief, Rescue Section in the performance of his duties and in event of his absence assumes his role. (See Chief, Rescue Section for details.)

CHIEF(S), RESCUE TEAM

General Responsibility: Supervises activities of rescue team.

Building Activities:

- Trains personnel
- Directs drills and exercises
- Recruits and selects personnel

Operating Activities:

- Performs decontamination activities in coordination with Radiological Service

Reports to: Chief, Rescue Service

Responsible for: Rescue Team personnel

Job Activities: Manpower Service

CHIEF, MANPOWER SERVICE

General Responsibility: Organizes, plans, directs mobilization of area manpower resources.

Building Activities:

- Recruits, assigns, trains personnel on Manpower staff
- Coordinates with other operating services
- Responsible for keeping inventory of human resources up-to-date
- Determines priorities of assignment
- Plans for continuity in administrative activities of Manpower Service

Operating Activities:

- Coordinates with other operating services
- Determines priorities of assignment

Reports to: Civil Defense Director

Responsible for: Manpower Service personnel

DEPUTY CHIEF, MANPOWER SERVICE

General Responsibility: Assists Chief, Manpower Service

Operating Activities:

- Acts in lieu of Chief, when he is absent

Reports to: Chief, Manpower Service

Responsible for: Manpower Service personnel

ZONE MANPOWER OFFICER

General Responsibility: Mobilization and utilization of manpower resources in the zone.

Operating Activities:

- Determines priorities for assignment of personnel
- Coordinates with Manpower Office Supervisor
- Coordinates with Post Office Department (Registration and Inquiry)

Reports to: Chief, Manpower Service

Responsible for: Zone Manpower personnel

ASSISTANT ZONE MANPOWER OFFICER

General Responsibility: Assists Zone Manpower Officer,

Operating Activities:

- Acts in lieu of Manpower Officer, in his absence

Reports to: Zone Manpower Officer

Responsible for: Zone Manpower personnel

MANPOWER OFFICE SUPERVISOR

General Responsibility: Responsible for registration, classification of personnel.

Building Activities:

- Trains, assigns office
- Responsible for records, reports
- Responsible for requisition and distribution of supplies, literature, training materials

Operating Activities:

- Coordinates with Post Office Department
- Responsible for records, reports
- Coordinates with Zone Manpower Officer

Reports to: Chief, Manpower Service

Responsible for: Mobile Team Leader(s)

ASSISTANT MANPOWER OFFICE SUPERVISOR

General Responsibility: Assists Manpower Office Supervisor.

Operating Activities:

- Assumes duties of Manpower Office Supervisor in his absence

Reports to: Manpower Office Supervisor

Responsible for: Mobile Team Leader(s)

MOBILE TEAM LEADER(S)

General Responsibility: Directs activities of field personnel.

Operating Activities:

- Keeps records, prepares reports
- Keeps Manpower Office informed of activities of the Mobile Team

Reports to: Assistant Manpower Office Supervisor

Responsible for: Mobile Team

TRANSPORTATION LIASON OFFICER

General Responsibility: Supervises, directs transportation of personnel of Manpower Service.

Operating Activities:

- Requisitions, assigns equipment
- Determines priorities
- Coordinates with Transportation Section of Resource Mobilization Service

Reports to: Chief, Manpower Service

POST OFFICE DEPARTMENT (REGISTRATION AND INQUIRY SECTION)

General Responsibility: Responsible for keeping a continuing record of vital statistics.

Operating Activities:

- Confer with Manpower Office Supervisor

Job Activities: Resource Mobilization Service

CHIEF, RESOURCE MOBILIZATION SERVICE

General Responsibility: Coordinates and integrates activities of the Transportation Sections to form an effective total plan for the mobilization of all resources and production.

Building Activities:

- Confers with Chiefs, Transportation, Food Distribution, Supply, Plant Protection Sections in developing effective plans for each Section
- Confers with Civil Defense Director in order to coordinate all services
- Advises and supervises Chiefs in his service
- Generates an effective over-all Resources and Production Plan

Operating Activities:

- Confers with Civil Defense Director in order to coordinate all services
- Advises and supervises Chiefs in his service

Reports to: Civil Defense Director

Responsible for: Chiefs of the Supply, Transportation, Plant Protection and Food Distribution Sections and the Equipment Division Chief

EQUIPMENT DIVISION CHIEF

General Responsibility: Evaluates condition and directs maintenance of equipment; requisitions and distributes equipment.

Building Activities:

- Plans for purchases of needed equipment

Operating Activities:

- Coordinates with Engineering and Public Works Service for necessary redesign or renovation of existing equipment and introduction of substitute equipment

Reports to: Chief, Resource Mobilization Service

Responsible for: Equipment Division personnel

CHIEF, TRANSPORTATION SECTION

(See Chief, Transportation Section of Resource Mobilization Service for details.)

CHIEF, SUPPLY SECTION

(See Chief, Supply Section of Resource Mobilization Service for details.)

CHIEF, FOOD DISTRIBUTION SECTION

(See Chief, Food Distribution Section of Resource Mobilization Service for details.)

CHIEF, PLANT PROTECTION SECTION

(See Chief, Plant Protection Section of Resource Mobilization Service for details.)

JOB ACTIVITIES: Transportation Section

CHIEF, TRANSPORTATION SECTION

General Responsibility: Directs activities of Assistant Chiefs of motor, water, rail, air and Zone Transportation Officer

Building Activities:

- Establishes lines for continuity of the administration of the Section
- Responsible for effective transportation plan which covers air, water, rail, and motor transportation facilities

- Confers with other operating services such as Radiological, Rescue and Manpower
- Coordinates with Food Distribution and Supply Sections

Operating Activities:

- Confers with other operating services such as Radiological, Rescue and Manpower
- Coordinates with Food Distribution and Supply Sections

Reports to: Chief, Resource Mobilization Service

Responsible for: Assistant Chiefs of Motor, Air, Water, and Rail Transport and Zone Transportation Officer

DEPUTY CHIEF, TRANSPORTATION

General Responsibility: Assumes duties of Chief, Transportation Section in his absence; assists Chief as directed.

Building Activities:

- Assists Chief as necessary

Operating Activities:

- Assists Chief as necessary

Reports to: Chief, Transportation Section

(For responsibilities see Chief, Transportation Section)

ZONE TRANSPORTATION OFFICER(S)

General Responsibility: Responsible for recruiting, training and assignment of transportation personnel in zone.

Building Activities:

- Prepares charts, maps and records designating functions of personnel, location of allied services and positions of various transportation installations

- Coordinates with Zone Medical and Welfare personnel
- Procures necessary supplies for service

Operating Activities:

- Coordinates with Zone Medical and Welfare personnel
- Procures necessary supplies for service

Reports to: Chief, Transportation Section

Responsible for: Zone Transportation personnel

ASSISTANT CHIEF, MOTOR TRANSPORT

General Responsibility: Responsible for an effective motor transport plan to include use of private passenger cars, trucks, and buses.

Building Activities:

- Directs issue of an emergency vehicle identification plate
- Designates areas such as Filling Station and Motor Repair shops as distributors of vehicle identification plates
- Responsible for evaluation of the effectiveness of motor equipment
- Coordinates activities of Assistant Chiefs of Truck Transport, Bus Transport, Private Passenger Car, Manager(s) Filling Station and Manager(s) Motor Repair Shop

Operating Activities:

- Controls distribution of motor transportation equipment
- Assesses damage to motor equipment
- Coordinates activities of Assistant Chiefs of Truck Transport, Bus Transport, Private Passenger Car, Manager(s) Filling Station and Manager(s) Motor Repair Shop
- Determines priorities of equipment and personnel

Reports to: Chief, Transportation Section

Responsible for: Assistant Chiefs of Private Passenger Car, Truck Transport, Bus Transport, and Manager(s) of Filling Stations and Motor Repair Shops

ASSISTANT CHIEF, PRIVATE PASSENGER CAR

General Responsibility: Plans, directs, supervises the mobilization and utilization of private passenger cars.

Building Activities:

- Directs registration of vehicles

Operating Activities:

- Determines priorities of equipment and personnel
- Issues emergency vehicle identification tags
- Assists in traffic control program
- Directs damage assessment of passenger cars

Reports to: Assistant Chief, Motor Transport

Responsible for: Private Passenger Car personnel

ASSISTANT CHIEF, TRUCK TRANSPORT

General Responsibility: Plans, directs; supervises the mobilization and utilization of trucks and similar vehicles.

Building Activities:

- Evaluates condition of equipment
- Directs registration of vehicles

Operating Activities:

- Determines priorities for equipment and personnel
- Issues emergency vehicle identification tags
- Assess damage to vehicles
- Assists in traffic control

Reports to: Assistant Chief, Motor Transport

Responsible for: Truck Transportation personnel

ASSISTANT CHIEF, BUS TRANSPORT

General Responsibility: Plans, directs, supervises the mobilization and utilization of buses and similar vehicles.

Building Activities:

- Directs registration and evaluates vehicles
- Evaluates condition of equipment

Operating Activities:

- Determines priorities of equipment and personnel
- Assists in traffic control
- Assesses damage to vehicles
- Issues emergency vehicles identification tags

Reports to: Assistant Chief, Motor Transport

Responsible for: Bus Transportation personnel

MANAGER(S), FILLING STATION(S)

General Responsibility: Supervises filling station personnel; refueling of vehicles being used for civil defense.

Building Activities:

- Recruits and trains filling station personnel

Operating Activities:

- Responsible for feeding and lodging of personnel
- Minor repair of vehicles

Reports to: Assistant Chief, Motor Transport

Responsible for: Filling Station personnel

MANAGER(S), MOTOR REPAIR SHOP(S)

General Responsibility: Supervises repair shop personnel; servicing and major repair of civil defense vehicles.

Building Activities:

- Recruits and trains repair shop personnel
- Issues emergency registration tags

Operating Activities:

- Requisitions and distributes auto supplies
- Arranges for feeding and lodging of personnel of shop

Reports to: Assistant Chief, Motor Transport

Responsible for: Motor Repair Shop personnel

ASSISTANT CHIEF, WATER TRANSPORT

General Responsibility: Plans, directs, supervises the mobilization and utilization of water transport resources.

Building Activities:

- Responsible for developing a water transport plan to include an effective port plan
- Evaluates condition of equipment

Operating Activities:

- Determines priorities of equipment, personnel
- Directs damage assessment activities
- Regulates water transport traffic
- Assists with decontamination program

Reports to: Chief, Transportation Section

Responsible for: Water Transport personnel

ASSISTANT CHIEF, RAIL

General Responsibility: Plans, directs, supervises the mobilization and utilization of rail transport resources.

Building Activities:

- Responsible for developing an effective rail transport plan
- Evaluates condition of equipment, supplies

Operating Activities:

- Determines priorities of rail equipment, personnel
- Directs damage assessment activities

- Regulates rail traffic
- Assists with decontamination program

Reports to: Chief, Transportation Section

Responsible for: Personnel, Rail Transport

ASSISTANT CHIEF, AIR

General Responsibility: Plans, directs, supervises the mobilization and utilization of air transport resources.

Building Activities:

- Responsible for developing an effective air transport plan
- Evaluation of condition of equipment

Operating Activities:

- Determines priorities of equipment, personnel
- Directs damage assessment program
- Regulates air traffic

Reports to: Chief, Transportation Section

Responsible for: Personnel, Air Transport

JOB ACTIVITIES: Food Distribution Section

CHIEF, FOOD DISTRIBUTION SECTION

General Responsibility: Develops an effective food distribution plan which includes planned stocking of shelters, distribution of decontaminated food, etc.

Building Activities:

- Surveys and evaluates local food supplies
- Coordinates with shelter managers
- Arranges for requisitioning of food with local food distributors and producers
- Confers with Radiological Service

Operating Activities:

- Directs damage assessment activities
- Assists with decontamination program
- Coordinates with shelter managers
- Arranges for requisitioning of food with local food distributors and producers
- Determines priorities
- Confers with Radiological Service
- Implements rationing measures
- Assists with decontamination program

Reports to: Chief, Resource Mobilization Service

Responsible for: Food Distribution Section personnel

FOOD OFFICER

General Responsibility: Assists Chief, Food Distribution Section and assumes duties of Chief in his absence.

Building Activities:

- Implements food distribution plan
- Directs Food Advisory Committee
- Cooperates with Public Information Officer, Radiological Service
- Coordinates with shelter manager

Operating Activities:

- Evaluates disaster effects on existing food supply
- Requisitions food supplies from producers and merchants in the area
- Keeps inventory of available supplies
- Cooperates with Public Information Officer, Radiological Service
- Coordinates with shelter manager

Reports to: Chief, Food Distribution Section

Responsible for: Food Advisory Committee and personnel of Food Distribution Section

FOOD ADVISORY COMMITTEE

General Responsibility: Coordinates the local food industry which includes wholesale grocers, bakers, pasturizing and processing plants, refrigerated warehouses, food mills, etc.

Building Activities:

- Plans for dietary substitutes

Reports to: Food Officer

ZONE FOOD DISTRIBUTION CHIEF

General Responsibility: Requisitions, stores, and distributes food.

Building Activities:

- Maintains inventory of zone food supplies

Operating Activities:

- Evaluates need for and availability of food in his zone
- Coordinates with Food Advisory Committee
- Coordinates with Zone Welfare Services, shelter managers
- May perform monitoring and/or decontamination activities

Reports to: Chief, Food Distribution Section

Responsible for: Zone Food Distribution Officer, and Community Unit Food Distribution Officer

COMMUNITY UNIT FOOD DISTRIBUTION OFFICER

General Responsibility: Keeps record of available food stores, with respect to type, amount, and location; distributes food accordingly, as directed.

Building Activities:

- Takes inventories of community food supplies

Reports to: Zone Food Distribution Officer

Responsible for: Community Unit Food Distribution personnel

JOB ACTIVITIES: Supply Section

CHIEF, SUPPLY SECTION

General Responsibility: Plans, directs, supervises the inventory, requisition and distribution of supplies.

Building Activities:

- Develops an effective supply plan
- Recruits and assigns personnel
- Coordinates with local business, industries
- Directs training of supply personnel
- Inspects and evaluates supplies
- Requisitions and distributes supplies

Operating Activities:

- Coordinates with local business, industries
- Requisitions and distributes supplies
- Directs damage assessment, monitoring activities of supply personnel

Reports to: Chief, Resource Mobilization Service

Confers with: Equipment Division Chief and Transportation Chief

Responsible for: Supply Section personnel

SUPPLY OFFICER

General Responsibility: Directs and supervises Supply Section personnel (including office personnel).

Building Activities:

- Responsible for recording, mapping of information on supplies

Operating Activities:

- Assumes duties of Chief, Supply Section in his absence
- Performs decontamination activities
- Evaluates disaster effects on supply resources

Reports to: Chief, Supply Section

Responsible for: Supply Service Office, personnel

SUPPLY ADVISORY COMMITTEE

General Responsibility: Coordinates local suppliers such as the fuel industry, soft goods industry, services industries, basic industries, pharmaceutical firms.

Building Activities:

- Plans for alternate uses of supplies, recovery, reconstruction

Operating Activities:

- Plans for alternate uses of supplies, recovery, reconstruction

Reports to: Supply Officer

EMERGENCY FUEL DISTRIBUTION POINT OFFICER

General Responsibility: Controls and directs distribution, handling such storage of fuels.

Building Activities:

- Maintains an up-to-date inventory of fuel resources
- Develops an effective plan for storage of fuels during emergency, emphasizing safety from looting, fire, etc.

Operating Activities:

- Determines availability and condition of local fuel resources
- Coordinates with Transportation Section

Reports to: Supply Officer

Responsible for: Emergency Fuel Distribution Point personnel

ZONE SUPPLY OFFICER

General Responsibility: Requisitions and distributes supplies.

Building Activities:

- Evaluates and inventories supplies in zone
- Plans for necessary augmentation of supplies

Operating Activities:

- Assesses damage to supplies
- Plans for necessary augmentation of supplies
- Determines priorities of supplies, personnel in zone

Reports to: Supply Officer

Responsible for: Zone Supply Officer and Community Unit Supply Officer

COMMUNITY UNIT SUPPLY OFFICER

General Responsibility: Procures and distributes supplies within the community unit.

Building Activities:

- Inventories, evaluates and reports on community resources
- Confers with community suppliers

Operating Activities:

- Damage assessment, monitoring, decontamination activities

Reports to: Zone Supply Officer

Responsible for: Community Unit Supply personnel

JOB ACTIVITIES: Plant Protection Section

CHIEF, PLANT PROTECTION SECTION

General Responsibility: Develops plans for protection, recovery, reorganization and reconstruction of industry.

Building Activities:

- Directs and supervises Deputy Chiefs
- Coordinates with industrial leaders in areas to plan for Plant Protection

- Establishes lines of continuity for Plant Protection personnel
- Directs safeguarding of various documents

Operating Activities:

- Directs and supervises Deputy Chiefs

Reports to: Chief, Resource Mobilization Service

Responsible for: Plant Protection personnel

DEPUTY CHIEF(S), PLANT PROTECTION SECTION

General Responsibility: Assists in developing effective plant protection plans and implements these plans for the plant or plants for which he is responsible.

Building Activities:

- Recruits, appoints, trains plant protection personnel
- Coordinates with other appropriate Deputy Chiefs
- Directs program of drills and practices

Operating Activities:

- Coordinates with other appropriate Deputy Chiefs
- Participates in damage assessment activities, recovery activity

Reports to: Chief, Plant Protection Services

Responsible for: Plant Protection personnel

PLANT SUPPLY CHIEF

General Responsibility: Requisitions and distributes supplies and equipment.

Building Activities:

- Keeps inventory of available supplies
- Determines priorities of supply needs
- Stores supplies
- Recruits and trains personnel

Operating Activities:

- Determines priorities of supply needs
- Communicates with Supply Section of Resource Mobilization to meet specific needs

Reports to: Deputy Chief, Plant Protection

Responsible for: Plant Supply personnel

PLANT EMERGENCY MAINTENANCE CHIEF

General Responsibility: Requisitions and stores equipment and supplies in key areas as needed for structural repairs, power lines, etc.

Building Activities:

- Recruits and trains personnel

Operating Activities:

- Responsible for restoration activities
- Responsible for emergency maintenance

Reports to: Deputy Chief, Plant Protection Section

Responsible for: Emergency Maintenance personnel

PLANT PUBLIC INFORMATION OFFICER

General Responsibility: Disseminates Civil Defense information to plant personnel.

Building Activities:

- Keeps employees informed of plant protection activities
- Informs appropriate members of community of plant protection arrangements through newspapers, radio, etc.
- Coordinates with Public Information Officer

Reports to: Deputy Chief, Plant Protection

Responsible for: Public Information personnel

PLANT POLICE CHIEF

General Responsibility: Implements plans for safeguarding against looting, protection of classified items, prevention of panic, control of traffic, and identification of plant personnel and visitors.

Building Activities:

- Recruits and trains personnel

Operating Activities:

- Coordinates with Plant Rescue Chief

Reports to: Deputy Chief, Plant Protection

Responsible for: Police personnel

PLANT FIRE CHIEF

General Responsibility: Responsible for fire prevention and control activities.

Building Activities:

- Recruits and trains personnel
- Coordinates with Plant Rescue Chief
- Directs drills and exercises

Operating Activities:

- Directs fire crews
- Assists in assessing damages and planning for repair or replacement
- Coordinates with Plant Rescue Chief

Reports to: Deputy Chief, Plant Protection

Responsible for: Fire fighting personnel

PLANT RESCUE CHIEF

General Responsibility: Directs rescue operations and first-aid activities.

Building Activities:

- Recruits and trains personnel
- Directs drills and exercises

Operating Activities:

- Coordinates with Plant Fire Chief

Reports to: Deputy Chief, Plant Protection

Responsible for: Rescue personnel

PLANT WELFARE CHIEF

General Responsibility: Arranges for emergency food, clothing and lodging for industrial employees.

Building Activities:

- Selects, arranges, trains personnel

Operating Activities:

- Coordinates with local Welfare Agencies for further information
- Communicates with other services for information concerning relatives' location, health, etc.
- Determines need for and/or provides monetary assistance
- Assists in maintaining social and psychological control

Reports to: Deputy Chief, Plant Protection

Responsible for: Welfare personnel

PLANT MEDICAL OFFICER

General Responsibility: Responsible for medical activities as they relate to emergency use and recovery.

Building Activities:

- Recruits and trains in first-aid techniques and medical self-help
- Procures and maintains up-to-date inventory of medical supplies
- Directs record keeping of medical histories, including blood types of plant personnel

Operating Activities:

- Attends to the wounded
- Keeps records of casualties and deaths

Reports to: Deputy Chief, Plant Protection

Responsible for: Medical personnel

Job Activities: Welfare Service

CHIEF, WELFARE SERVICE

General Responsibility: Supervises, directs, and organizes Welfare operations: sheltering, mass feeding, clothing, lodging, and registration operations.

Building Activities:

- Requisitions and distributes supplies
- Recruits and trains personnel

Operating Activities:

- Determines priorities for equipment, supplies, and personnel
- Coordinates with Chaplain and Medical Services and other operating services

Reports to: Civil Defense Director

Responsible for: Welfare Service staff

DEPUTY CHIEF, WELFARE SERVICE

General Responsibility: Assists Chief, Welfare in the performance of his duties and in the event of his absence assumes his role. Coordinates activities of shelter managers.

Reports to: Chief, Welfare

SHELTER MANAGER(S)

General Responsibility: Responsible for all in-shelter activities.

Building Activities:

- Maintains operational readiness of shelter
- Responsible for training potential shelterees

Operating Activities:

- Coordinates activities and personnel

- Determines priorities as related to personnel, food, supplies, etc.
- Directs in-shelter activities.

Reports to: Deputy Chief, Welfare Service

Responsible for: Personnel in shelter

WELFARE CENTER MANAGER

General Responsibility: Responsible for mass feeding, lodging and clothing.

Operating Activities:

- Determines priorities of personnel and supplies
- Directs registration and inquiry activities
- Supervises mobile teams sent into the field

Reports to: Chief, Welfare Service

Responsible for: Welfare-Health Officer, Welfare Operations Officer, Supervisor of Registration and Inquiry, Supervisor of Lodging, Supervisor of Clothing, Supervisor of Feeding, Supervisor of Emergency Aid Bureau

WELFARE-HEALTH OFFICER

General Responsibility: Responsible for the evaluation and determination of the adequacy of the lodging, food, and clothing as relates to the health of the population.

Operating Activities:

- Conducts surveys and inspections, coordinates with epidemiologist
- Arranges for decontamination

Reports to: Welfare Center Manager

Responsible for: Welfare-Health Staff

WELFARE OPERATIONS OFFICER

General Responsibility: Directs and supervises operation of the Welfare Center.

Operating Activities:

- Responsible for communications with other services
- Keeps records of all activities, supplies, personnel, etc.
- Obtains necessary transportation facilities for Welfare team use
- Directs flow of homeless to appropriate locations
- Requisitions and distributes supplies

Reports to: Welfare Center Manger

Responsible for: Welfare Operations Staff

SUPERVISOR OF REGISTRATION AND INQUIRY

General Responsibility: Responsible for effective operations of the Registration and Inquiry Section

Operating Activities:

- Coordinates with Post Office Department

Reports to: Welfare Center Manager

Responsible for: Registration and Inquiry personnel

SUPERVISOR OF FEEDING

General Responsibility: Responsible for requisition, preparation and serving of food in the Welfare Center

Building Activities:

- Assists in the preparation of an adequate plan for emergency mass feeding

Operating Activities:

- Directs and supervises staff

Reports to: Welfare Center Manager

Responsible for: Feeding Staff

SUPERVISOR OF LODGING

General Responsibility: Supervises community lodging facilities.

Building Activities:

- Prepares specialized lodging facilities for the aged, infirm, orphaned, and handicapped

Operating Activities:

- Directs record-keeping activities involving placement of persons and location of facilities
- Responsible for the physical safety, adequate stocking of supplies, proper sanitation, and discipline in lodging facilities

Reports to: Welfare Center Manager

Responsible for: Lodging personnel

SUPERVISOR OF EMERGENCY AID BUREAU

General Responsibility: Responsible for the investigation, evaluation, and subsequent granting of financial assistance.

Operating Activities:

- Coordinates with Fiscal Department of local government

Reports to: Welfare Center Manager

Responsible for: Emergency Aid Staff

SUPERVISOR OF CLOTHING

General Responsibility: Responsible for requisition and distribution of clothing on a mass basis.

Building Activities:

- Implements an effective plan for meeting clothing needs
- Inventories and provides for storage of clothing

Operating Activities:

- Determines priorities of clothing needs
- Directs clothing repairs activities
- Inspects clothing to determine need for decontamination

Reports to: Welfare Center Manager

Responsible for: Clothing personnel

Job Activities: Chaplain Service

CHIEF, CHAPLAIN SERVICE

General Responsibility: Maintains communications with the various denominational groups regarding civil defense matters

Building Activities:

- Confers with Medical and Welfare Service
- Advises Civil Defense Director on religious matters
- Recruits and trains clergymen for Civil Defense role

Operating Activities:

- Responsible for directing all religious affairs, services, etc.
- Confers with Medical and Welfare Service
- Coordinates with Mortuary Section of Medical Service
- Advises Civil Defense Director on religious matters

Reports to: Civil Defense Director

Responsible for: Chaplain Service Staff

JEWISH CHAPLAIN(S)

General Responsibility: Assists the Chief, Chaplain Service in the performance of his duties and in the event of his absence may assume his role. (See Chief, Chaplain Service for details.)

Building Activities:

- Confers with local religious leaders of his sect

Operating Activities:

- Provides spiritual support as needed

Reports to: Chief, Chaplain Service

PROTESTANT CHAPLAIN(S)

General Responsibility: Assists Chief, Chaplain Service in the performance of his duties and in the event of his absence may assume his role. (See Chief, Chaplain Service for details.)

Building Activities:

- Confers with local religious leaders of his sect

Operating Activities:

- Provides spiritual support, as needed

Reports to: Chief, Chaplain Service

CATHOLIC CHAPLAIN(S)

General Responsibility: Assists Chief, Chaplain Service in the performance of his duties and in the event of his absence may assume his role. (See Chief, Chaplain Service for details.)

Building Activities:

- Confers with local religious leaders of his sect

Operating Activities:

- Provides spiritual support, as needed

Reports to: Chief, Chaplain Service

OTHER DENOMINATIONAL CHAPLAIN(S)

General Responsibility: Assists Chief, Chaplain Service in the performance of his duties, and in event of his absence may assume his role. (See Chief, Chaplain Service for details.)

Building Activities:

- Confers with local religious leaders of his sect

Operating Activities:

- Provides spiritual support, as needed

Reports to: Chief, Chaplain Service

APPENDIX C

Source Materials for Training Courses

Source Materials for Training Courses

General Civil Defense Orientation Course

1. Office of Civil Defense. Information Bulletins, especially codes: 6, 7, 9, 10, 13, 17, 18, 21, 22, 27, 28, 30, 34, 35, 37, 38, and 40.
2. Office of Civil Defense Program Guide: "Organized Action for Civil Defense." Code: PG-6.
3. Journal of the American Society of Training Directors, September 1961, Vol. 15, No. 9.
4. Industrial Security, July, 1962, Vol. 6, No. 3
5. Department of Defense. Office of Public Affairs, News Releases.
6. Office of Civil Defense. Civil defense program guide. The national program as it pertains to local and state civil defense. Battle Creek: Author, February 6, 1962.
7. Committee on Government Operations. New civil defense program. Ninth report. Washington, D. C.: Government Printing Office, September 21, 1961.

Local System Orientation Course

1. Office of Civil Defense. Information Bulletin, especially codes: 10, 22, 27, 33, 36.
2. Office of Civil Defense Kit. "Organized Action for Civil Defense."
3. Operational Plans, e.g., City of Livermore, California: Community Shelter Report, 1962; Montgomery County, Maryland, Operational Plan, 1962.

4. Office of Civil Defense Program Guide: "Organized Action for Civil Defense." Code: PG-6
5. Department of Defense. Revised edition of The Effects of Nuclear Weapons. (Published by the Atomic Energy Commission.)
6. Editorial: "As We See It," Rochester Times-Union, issue of July 31, 1962.
7. Archibald, Gordon R., & Sherman, Howard, Jr., "Shelters-- Why? What Kind? For Whom?" Civil Engineering, June 1962.
8. McAuliffe, A. C. "How Local Officials Can Promote Fallout Shelters," County Government, November 1961. (Official publication of New York State County Officers Association)
9. Paxton, J. W. "Nuclear Attack and Responsibilities of the County Officers," County Government, April 1962.
10. Rigdon, W. E. (Article summarizing reactions of local Civil Defense Directors to preceding article by Paxton) in. County Government, June 1962.
11. New York State Civil Defense Commission. New York State Civil Defense News Letter, No. 613, October 27, 1962. (Summary of Cuban crisis briefing of local Civil Defense Directors by State Civil Defense Director.)
12. Office for Local Government, 155 Washington Avenue; Albany, New York. (Available for municipal attorneys--model local legislation providing for continuity of government in the event that the local officials are incapacitated by enemy attack or public disaster.)

Job Responsibility Training Course (Chief, Engineering and Public Works Service)

1. Office of Civil Defense. Information Bulletin, No. 60, March 19, 1963. (Address of Assistant Secretary Pittman to Civil Engineers conference.)
2. Archibald, Gordon R., & Sherman, Howard, Jr., "Shelters-- Why? What Kind? For Whom?," Civil Engineering, June 1962.

Job Responsibility Training Course (Monitor)

1. Montgomery County Operational Survival Plan. Annex H, Radiological Service.
2. Office of Civil Defense. Monitoring and Reporting Systems Division. Technical operations. Civil defense principles concerning external whole body emergency gamma radiation exposure, applicable to the general public, September 1962.
3. Office of Civil Defense. Federal civil defense guide, Part E, Chapter 5, Appendix 2. Plans and organizations, March 15, 1963.
4. Office of Civil Defense. Federal Guidance for State and Local Civil Defense. Part E, Emergency Services, Chapter 5, Radiological.
5. Office of Civil Defense. Handbook for Radiological Monitors. April 1963.
6. Office of Civil Defense. Monitoring and Reporting Systems Division. Radiological Defense Planning and Operational Guide.
7. State of New York. Department of Labor. New York State Dictionary of Occupational Titles and Codes. Part II - Job Descriptions.

Job Responsibility Training Course (Plotter)

1. Office of Civil Defense. Federal Civil Defense Guide, Part E, Chapter 5, Appendix 2. Plans and Organization.
2. Office of Civil Defense. Monitoring and Reporting Systems Division. Radiological Defense Planning and Operational Guide.

Job Proficiency Training Course (Chief, Engineering and Public Works)

1. Relevant professional literature.
2. Service Chief's Manual. (Preparation of which was recommended under "Job Responsibility Training.")
3. Local system planning documents, including Service plan(s).
4. Reports and descriptions of "Operational Exercises."
5. All current Office of Civil Defense: Technical Bulletins, Technical Manuals, and Technical Reports.

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