UNCLASSIFIED

AD 419027

DEFENSE DOCUMENTATION CENTER

FOR

SCIENTIFIC AND TECHNICAL INFORMATION

CAMERON STATION, ALEXANDRIA, VIRGINIA



UNCLASSIFIED

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.



3) 48 600 (1) 64-5

THE RECRUITMENT,
SELECTION,
AND TRAINING
OF SHELTER MANAGERS
AND CORE STAFFS

September 1963

OCT 7 1963

Engineering Psychology Program
AMERICAN INSTITUTE FOR RESEARCH

ME

7.60

Qualified requestors may obtain copies of this report from DDC.

THE RECRUITMENT, SELECTION, AND TRAINING OF SHELTER MANAGERS AND CORE STAFFS,



Max U. Eninger and

John R. Fetter .

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.

September 1963

AMERICAN INSTITUTE FOR RESEARCH
Pittsburgh, Pennsylvania

ACKNOWLEDGEMENTS

The authors are indebted to Dr. Dale W. Dysinger and Mr. Donald G. Norman for their early work on the project; also to Dr. James W. Altman, Mr. Emil Bend, and Mr. Robert W. Smith for furnishing technical advice and critical comments.

A special word of appreciation is extended to Mr. Fred Carr, Office of Civil Defense, for his timely advice and guidance during the life of the project and for his painstaking review of the final draft.

TABLE OF CONTENTS

		Page
1.	INTRODUCTION TO SHELTER MANAGEMENT RECRUITMENT,	
	SELECTION, AND TRAINING	1
	ORIENTATION AND DEFINITION OF BASIC TERMS	1
	BACKGROUND FACTS ON MANAGEMENT CADRE STAFFING	
	PROBLEM	1
	Need for Nationwide Shelter System	i
	Current Fallout Shelter Program	2
	Variation in Shelter Capacity	2
	MAGNITUDE OF THE SHELTER MANAGEMENT STAFFING	_
	PROBLEM	4
	Need for Qualified, Trained Shelter Management	•
	Cadres	4
	Magnitude of the Pre-Trained Shelter Management	7
	Cadre Problem	5
	The Added Problem of Public Attitudes Toward Civil	2
		6
11.	Defense	0
11.		-
	PRODUCT	7
	***************************************	7
	Objectives Related to Shelter Management	_
	Recruitment	7
	Objectives Related to Shelter Management	
	Selection	7
	Objectives Related to Shelter Management	
	Training	8
	DESCRIPTION OF BASIC STUDY APPROACH	8
	Adoption of a Framework of Assumptions	8
	Formulation of Shelter Goals and Phases	9
	Determination of Basic Shelter Management	
	Tasks	9
	Derivation of Required Knowledges and Skills	10
	Development of Shelter Managment Organization	
	Rationale	10
	Derivation of Shelter Management Selection	
	Standards	10
	Formulation of a Shelter Management Recruitment	. •
	Approach	13
	Approach	()

	Page
Formulation of the Shelter Management Selection	, 0 90
Approach	. 13
Derivation of Shelter Management Training	
Requirements	
Development of Shelter Management Training Rationale	
and Methodology	. 13
THE STUDY END-PRODUCT	
III. SHELTER MANAGEMENT GOALS, ACTIVITIES AND ORGANIZATION	
THE SHELTER SYSTEM GOALS OF MANAGEMENT	
The Shelter System Ultimate Goal	
The Shelter System Sub-Goals	. 15
BASIC SHELTER TASKS BY PHASE AND GOAL	
Implications for Selection and Training	
SHELTER MANAGEMENT ROLES, RESPONSIBILITIES, AND	. 20
DUTIES	. 27
Distinction between Roles and Position Titles	
Basic Roles and Their Responsibilities	
Conversion of Roles to Position Titles	
ALTERNATIVE SHELTER MANAGEMENT ORGANIZATIONS	
Criteria for Management Organization	. 46
Implications for Management Selection and	
Training	• 47
IV. SHELTER MANAGER AND CADRE SELECTION GUIDES	. 49
RATIONALE FOR SELECTION GUIDES	49
Need for Selection Standards	
Basic Categories of Selection Standards	
RECOMMENDED SELECTION GUIDES	-
Shelter Manager (Deputy Shelter Manager)	. 51 . 51
Deputy, Technical Services	. 52
Deputy, Special Services	
Medical Head	53
Mess Operation Head.	54
Sanitation Head	54
Security Head	55
Radiological Head	. 55
Communication Head	. 56
Fire Safety, and Rescue Head	. 56
Maintenance and Supply Head	
Training and Education Head	
Recreation Head	
Religious Services Head	
Support Services Head	
Division, Section, and Unit Heads	• 59
RELATION TO SELECTION STANDARDS TO SHELTER MANAGEMENT	(0

		Pag€
٧.	RECRUITMENT OF SHELTER MANAGERS AND CADRE STAFFS	61
	AN ORIENTATION ON THE RECRUITMENT PROBLEM	61
	The Basic Recruitment Problem	61
	Recruitment for Public and Private Shelters	62
	Relation Between Recruitment and Selection	62
	RECRUITMENT METHODS AND CRITERIA	63
	Types of Recruitment Methods	63
	Criteria for Acceptable Recruitment Methods	63
	A RECOMMENDED RECRUITMENT STRATEGY	65
	The Strategy of Recruiting from Occupants of	
	Shelter Facilities	65
	The Strategy of Recruitment Via the Community	
	Influence Structure	68
	BASIC STEPS OF THE RECRUITMENT APPROACH	71
	Identification of Shelter Facilities	71
	Identification of Key "Influentials"	71
	initial Contact of Key "Influentials"	72
	Operation of Community Action Committee	72
	Recruitment of Shelter Managers	73
	Orientation of Shelter Managers	74
	Formation of Complete Shelter Cadre	74 74
	Follow-Up on Status of Shelter Cadres	
VI.	A PROBLEM RELATED TO THE PROPOSED STRATEGY THE SELECTION OF SHELTER MANAGERS AND CADRE STAFFS	75 77
۷1.	THE NATURE OF THE SELECTION PROBELM	77
	SELECTING PERSONS FROM WITHIN AN ORGANIZATION	78
	SELECTING PERSONS FROM OUTSIDE THE ORGANIZATION	79 79
	Types of Selection Methods.	79
	Criteria for Selection Tool	79
	A RECOMMENDED SELECTION METHOD	81
	Selection from Within Shelter-Containing	•
	Facility	81
	Selection From Outside of Shelter-Containing	
	Facility	81
VII.	AN OVERVIEW OF THE SHELTER MANAGEMENT CADRE TRAINING	
	PROBLEM	85
	ORIENTATION ON CHAPTER PURPOSE	85
	FIVE BASIC TRAINING PROBLEMS	85
	The Problem of How Much Training Content	85
	The Problem of Training Method	87
	The Problem of Whom to Train	88
	The Problem of When to Train	90
	The Problem of Where to Train	91
	OTHER PROBLEMS RELATED TO SHELTER MANAGEMENT	
	TRAINING	92
	The instructor Problem	93
	The Training Evaluation Problem	93
	The Training Administrative Problem	95

		Pag e
VIII.	A CORE CONTENT FOR SHELTER CADRE TRAINING	97
	CORE AND SPECIALIZED CONTENT	97
	Definition of Core Content	97
	Definition of Specialized Content	97
	The Reason for the Distinction	97
	OUTLINE OF RECOMMENDED CORE CONTENT	98
	RECOMMENDED METHODS OF CORE CONTENT TRAINING	102
	Instruction by Local Personnel	102
	Training by Self-Instruction	103
	Training by Television	104
ıx.	SPECIALIZED CONTENT FOR SHELTER CADRE TRAINING	105
17.	SHELTER MANAGER AND DEPUTIES	105
	MEDICAL HEAD	105
	Restatement of Major Responsibility	105
	Recommended Specialized Training	106
	RADIOLOGICAL HEAD	107
	Restatement of Major Responsibility.	107
	Recommended Specialized Training	107
	COMMUNICATIONS HEAD	109
	Restatement of Major Responsibility	109
	Recommended Specialized Training	109
	MAINTENANCE AND SUPPLY HEAD	111
	Restatement of Major Responsibility	111
	Recommended Specialized Training	iii
	MESS OPERATION HEAD	114
	Restatement of Major Responsibility	114
	Recommended Specialized Training	114
		117
	FIRE SAFETY, AND RESCUE HEAD	117
	Recommended Specialized Training	117
	SANITATION SERVICES HEAD.	119
	Restatement of Major Responsibility.	119
	Recommended Specialized Training	119
	TRAINING AND EDUCATION HEAD	121
		121
	Restatement of Major Responsibility	121
	Recommended Specialized Training	122
		122
	Restatement of Major Responsibility	123
	Recommended Specialized Training	124
	RELIGIOUS SERVICES HEAD	124
	Restatement of Major Responsibility	124
	Recommended Specialized Training	124
	SUPPORT SERVICES HEAD	125
	Restatement of Major Responsibility	
	Recommended Specialized Training	125

	Page
SECURITY SERVICES HEAD	127
Restatement of Major Responsibility	127
Recommended Specialized Training	127
RECOMMENDED METHOD FOR TRAINING SPECIALIZED	
CONTENT	129
REFERENCES	121

LIST OF FIGURES AND TABLES

			Page
Figure	1.	Shelter Task Analysis Data Sheet	11
Figure	11.	Shelter Task Analysis Data Sheet, Reverse Side	12
Figure	111.	Relation of Subgoals and Basic Tasks to Primary Endgoal of Survival	20
Figure	١٧.	An Example of Shelter Management Organization For A 1,000 Person Shelter	44
Figure	٧.	An Alternative Shelter Management Organization For A 1,000 Person Shelter	45
Figure	٧1.	Shelter Management Information Record	83
Table	1.	Number of Shelter Facilities in Each Shelter Capacity Category at the End of 1962	3
Table	11.	Type and Number of Facilities Marked As Public	66

STUDY ABSTRACT

The study explores the need for a peacetime shelter management cadre. The principal method is a systematic analysis of the goals of a fallout shelter as a system and the enfolding of the implications of those goals for shelter management activities. It is concluded that a peacetime shelter cadre is necessary for establishing and maintaining the operational readiness of the shelter.

Based upon analysis of shelter management activities, prototype management organization plans are proposed. The basic qualifications of key management cadre positions are described. Occupations are identified from which qualified cadre members are most likely to be obtained.

Recruitment criteria are established and applied to potential recruitment methods. The criteria rule out traditional recruitment methods. A recruitment strategy is recommended which emphasizes recruiting from the regular occupants of the buildings containing the shelters. An analysis shows how community influence structures can be used to facilitate recruitment of basically qualified personnel.

Selection criteria are established and applied to potential selection methods. The criteria rule out many traditional selection methods. The selection strategy adopted is to rely on organization heads to recruit qualified persons from within their organizations. A biographical data form is offered as a selection aid.

The training of a shelter management cadre in peacetime is discussed in terms of: (1) content selection, (2) methods of training, (3) whom to train, (4) when to train, and (5) where to train. Also discussed are the problems of obtaining instructors, evaluating the training, and administering the training.

The recommended cadre training content is divided into: (1) an outline of core content suitable for all cadre positions, and (2) outlines of specialized content for each cadre position. A method for handling the specialized content training is recommended.

STUDY RECOMMENDATIONS

The major recommendations derived from this study are summarized below under appropriate headings. For details, consult report.

General Recommendations

The recruitment, selection, and training of peacetime shelter management cadres is recommended to facilitate the establishment of a ready shelter capability.

Recruitment Recommendations

- Mass media methods of recruiting volunteer cadres should not be employed.
- The recommended strategy for recruiting volunteers is to tap the management and/or administrative personnel of organizations occupying facilities containing fallout shelter space.
- The recommended tactic for recruiting such volunteers is to enlist
 the services of community influence structures on getting organizational heads to commit their organizations to provide the necessary
 managerial personnel.

Selection Recommendations

- The major strategy for selecting basically qualified persons for shelter management cadre positions is to recruit only from basically qualified personnel. Thus, the two processes of recruitment and selection become, in effect, a single process of selective recruitment.
- Traditional tools of personnel selection, such as psychological tests, diagnostic interviews, and letters of reference should not be used for the unique selection problem herein involved.

3. Organizations occupying facilities that contain fallout shelter space should be requested to select nominees for shelter cadre positions from among their own management personnel. Final selection from among such nominees should be made by a shelter manager appointed by the occupant organizations or a committee similarly appointed.

Training Recommendations

- 1. Shelter cadre members should be fully trained in peacetime.
- Formal training of the shelter cadre should be limited to the Shelter Manager, the Deputy Shelter Manager, plus key shelter technicians. All other cadre members should, in turn, be trained by the formally trained cadre members.
- The secondary school instrucors and facilities should be considered as a means of providing formal training for shelter cadre members.
- 4. The content of the training should be limited to what is necessary to assume cadre responsibilities and duties. The content should be organized into core content suitable for all cadre members and specialized suitable for specific management roles.
- The minimum training aid should be text manuals designed for both group instruction use and self-study without the benefit of group instruction.
- Training should be evaluated by means of both trainee opinionnaires and standardized objective examinations.
- Consideration should be given to the advantages of training films and television as a training medium.
- The Office of Civil Defense is urged to apply now to reserve one or more UHF channels for future training and education purposes.

CHAPTER I

INTRODUCTION TO SHELTER MANAGEMENT RECRUITMENT, SELECTION, AND TRAINING

Chapter I Outline

	Page
DRIENTATION AND DEFINITION OF BASIC TERMS	1
BACKGROUND FACTS ON MANAGEMENT CADRE STAFFING PROBLEM	1
Need for Nationwide Shelter System	1
Current Fallout Shelter Program	2
Variation in Shelter Capacity	2
MAGNITUDE OF THE SHELTER MANAGEMENT STAFFING PROBLEM	4
Need for Qualified, Trained Shelter Management Cadres	4
Magnitude of the Pre-Trained Shelter Management Cadre Problem	5
The Added Problem of Public Attitudes Toward Civil Defense	6

I. INTRODUCTION TO SHELTER MANAGEMENT RECRUITMENT, SELECTION, AND TRAINING

Orientation and Definition of Basic Terms

This report is addressed to the problem of peacetime recruitment, selection, and training of civil defense shelter management cadres. Recruitment refers to activities directed at arousing the willingness of people to volunteer their services. Selection refers to the evaluation of volunteers to determine whether they have the basic qualifications needed. Training refers to providing those selected with the essential knowledges and skills necessary to function as members of a shelter management cadre. Cadre refers to a peacetime nucleus of a shelter management which can expand quickly to a full shelter management organization. Staffing a shelter management cadre involves the three functions of recruiting, selecting, and training as needed to establish a cadre.

Background Facts on Management Cadre Staffing Problem

Need for Nationwide Shelter System

In the event of an all-out nuclear attack upon the United States, fallout casualties can be expected to range from 40,000,000 to 120,000,000 if the civilian population has no pre-established means of protection against radioactive fallout. The majority of casualties would be either fatal or totally incapacitating (35).

Such statistics have prompted official concern with the problem of protecting the civilian population against radioactive fallout from a nuclear attack. Defense Department studies, approved by the Joint Chiefs of Staff, indicate that over 90 per cent of the people who would otherwise die from nuclear radiation effects would survive if they are sheltered from fallout in facilities with a protection factor as low as 40 (35). This conclusion is based upon estimates of enemy capabilities for the next several years.

The foregoing statistics indicate the need for a nationwide system of civil defense shelters, correctly assessed for protective factor, marked for easy location, and stocked with the minima necessary for survival.

Current Fallout Shelter Program

At the beginning of 1963, approximately 134,000 shelter facilities were identified and marked, providing a total of 105,242,000 shelter spaces (37). By mid-1967, an estimated 275,000 to 300,000 shelter facilities will exist. On the assumption that it is desirable to have a peacetime shelter management cadre for each shelter facility, it is apparent that the country faces a tremendous task in recruiting, selecting, and training such cadre personnel.

Variation in Shelter Capacity

The problem of staffing public fallout shelters with part-time, volunteer peacetime management cadres is a qualitative as well as a quantitative problem. The qualitative aspect has to do with getting <u>basically qualified</u> persons to volunteer their services. The quantitative aspect is getting a sufficient number of such persons to volunteer to satisfy the cadre requirements of so many shelters.

The data in Table I have a bearing on both aspects of the total staffing problem. The table shows the number, per cent, and cumulative percentage of shelters in each of several shelter capacity categories. Notice the shelters range in capacity from a minimum of 50 persons per shelter to an undefined maximum above 3,000 persons per shelter.

The median shelter capacity is between 100 and 199. Stated differently, half of the shelter facilities marked at the end of 1962 have a personnel capacity greater than 100. The final median value, at mid-year of 1967, is likely to be much higher. Table I data were derived from facilities identified on the basis of a failout protection factor of 100 or higher. The current identification standard is a protection factor of 40 or higher. As a result of adopting a lower protection factor standard, those shelter facilities already marked will be reassessed to determine their personnel capacity under the lower standard. The reassessment will invariably increase the rated capacity to between 300 and 500 at the end of the current shelter marking program (35,39).

Table 1. NUMBER OF SHELTER FACILITIES IN EACH SHELTER CAPACITY CATEGORY AT THE END OF 1962. The median shelter size is between 100 and 199. The facts indicate that shelter managers will have large groups of people to protect. (75)

Shelter Capacity	Number	Per Cent	Cumulative Per Cent
50-99	24,373	28.8	28.8
100-199	20,676	24.4	53.2
200-299	9,350	11.0	64.2
300-499	9,652	11.3	75.5
500-999	9,211	10.8	86.3
1000-1999	5,494	6.5	92.8
2000-3000	2,119	2.5	3،زر
3000	3,977	4.7	100.0
TOTAL	84,862		

Even if the estimated median capacity is in error, the implication remains the same, namely that shelter managers will have relatively large groups of shelteress to manage in the event of nuclear attack. The fact has considerable significance for the management cadra recruitment and selection problem. Managerial skills will be an essential qualification requirement for shelter managers. Not everyone will do as a shelter manager, a fact which further compounds the recruitment and selection problem.

Magnitude of the Shelter Management Staffing Problem

Need for Qualified, Trained Shelter Management Cadres

"Given a group of people in any prolonged emergency situation, leader-ship will emerge from the group to cope effectively with the emergency." The statement exemplifies the wishful thinking which characterizes those who hold there is no need for peacetime shelter management cadres. Such thinking is based upon a lack of awareness of the complexity and criticality of problems likely to confront shelter managers. It is also based upon a . "life-boat" concept of leadership, i.e., the idea that a "hero" will emerge as the resourceful leader who will solve problems by his own direct action and forceful personality. Such a concept of leadership is wholly inappropriate for fallout shelters containing hundreds, in many cases thousands of shelterees. Reason and experience argue strongly against it (11, 81, 93, 94, 98, 99).

The case for a peacetime shelter cadre rests on two major lines of reasoning: (1) the need to establish and maintain the operational readiness of shelters in peacetime, and (2) the need to have a ready shelter management capability in wartime. The two points are discussed below:

- The need to establish and maintain operational readiness. A shelter is operationally ready when it has been: (1) stocked with the equipment and materials essential for its operation, (2) staffed with a trained shelter management cadre, and (3) equipped with plans and procedures that will characterize its wartime operation. In this sense, a civil defense shelter is analogous to a complex weapon system. It is not the hardware per se that makes a weapon system operational. It is the integration of equipment, personnel, and procedures into a ready capability. The same reasoning applies to a fallout shelter. Unless it has a cadre of trained personnel, with carefully developed plans for shelter organization, procedures, rules, etc., it cannot be considered operationally ready. It is merely a raw facility. From a standpoint of the total effectiveness of a system which must accomplish more than simply protection against fallout, such a shelter is not ready to receive shelterees. It lacks trained personnel. It lacks a plan of operation tailored to its physical characteristics, its contents of equipment, materials, and supplies, and its likely inhabitants.
- 2. The need for a ready shelter management capability. There can be no question about the advantages of having a trained shelter management in the shelter shortly after the attack warning has sounded.

The trained leadership requirements will be formidable. Within individual shelters, hundreds, sometimes thousands, of shelterees will have to be organized into an integrated team, willing and able to carry out the multitude of tasks required to run the shelter. By all normal standards, the shelters will be congested. poorly ventilated, inadequately equipped, and often under-illuminated. There will be problems of providing shelterees with food and water, with medical care, with conditions of sleep and rest. with protection against demoralization and loss of social control. and with time-using activities to allay anxieties and ward off trouble-breeding boredom. A full shelter management organization will have to be developed and trained even where a small management cadre already exists. Teams will have to be readied to act in the event of shelter fire, blast damage, massive casualties, epidemics, and other contingencies. Routine in-shelter procedures will have to be established and communicated to shelterees. In short, there will be a myriad of responsibilities and duties which require action from virtually the moment shelterees begin to stream into the shelter.

The above reasoning points to one conclusion. A peacetime shelter management cadre is desirable. If not necessary, for every public shelter facility. The conclusion is indirectly supported by habitability studies (3, 102) which have reported the need for trained shelter managers. One such study (3) specifically reports trained leaders are more efficient and effective than untrained "emergent" leaders.

Magnitude of the Pre-Trained Shelter Management Cadre Problem

On the assumption that there will be 275,000 separate shelter facilities by mid-1967, each requiring a peacetime management cadre capable of quick expansion into a full management organization, the recruitment, selection, and training problem will be tremendous from a quantitative standpoint. Assuming a minimal cadre consisting of a shelter manager and four assistants, (see Figure 4 and 5, pages 44 and 45 respectively), a total of 1,375,000 volunteers will have to be selected and trained. The figure can be considered conservative because very large shelter facilities will undoubtedly require a larger management cadre to facilitate quick expansion in a crisis.

The qualitative aspects of the problem are equally formidable. The relationship between shelter capacity and the need for basically qualified, experienced managers has already been mentioned. Such people—the professional managers—are not plentiful. Moreover, they will not be easily recruited. They are very likely to shun mass appeals, burdened as they are with their professional responsibilities. It will take a very sophisticated recruitment and selection approach to enlist their talents. In addition, they will require training programs which take into consideration their status as professionals, their native abilities, their likely rejection of training, poorly conceived and executed. These are but some of the qualitative aspects of the problem.

There is a long-term aspect of the shelter management cadre concept that must also be mentioned. The recruitment, selection, and training of such volunteer personnel will be a <u>continuing</u> task, not a <u>one-time task</u>. There will be a constant attrition of trained personnel because of death, illness, retirement, relocation, loss of interest, and other causes. Those so lost will have to be replaced; otherwise, in a few years, the cadre capability for manning and organizing shelter facilities will be crippled.

The Added Problem of Public Attitudes Toward Civil Defense

The prevailing public attitudes toward civil defense further aggravate the problem of developing shelter management cadres. To say the least, polled public opinions on civil defense are a potpourri of contradictions. Such polls suggest that the American public is as yet poorly informed on the subject.

A recent study by Berlo (17), is illustrative. Berlo reports the public is split almost 50-50 on the question of the usefulness of fallout shelters in a nuclear war. Of 2,000 persons polled, 51 per cent thought shelters would save a significant number of lives; 40 per cent believed the number of lives saved would be insignificant; and 9 per cent said they had no opinion. Nevertheless, the same respondents were overwhelmingly (86 per cent) in favor of the current shelter marking and stocking program. Berlo notes the apparent contradiction, and associates it to the confused state of public information and opinion.

More to our present purpose is Berlo's finding that the managerials, of all occupational groups, were the <u>least</u> in favor of the fallout shelter program. Fully 76 per cent of the managerials interviewed believed the United States would <u>not</u> be involved in a nuclear war within the next ten to twenty years. Moreover, 31 per cent thought the Federal government should do <u>less</u> than it is now doing to develop a rational shelter capability. Berlo concludes further work is needed with high socio-economic levels to determine the source of their negative attitudes toward shelters and to develop arguments which will be of value in changing such attitudes.

Berlo's findings and conclusions are of particular significance for the concept of a pre-trained shalter management cadre. The very class of people whose management skills and know-how are most needed are those least in favor of developing a national fallout shalter capability. This means the recruitment strategy for enlisting the voluntary services of people with managerial experience must take into account the finding of managerials to be skeptical of 'vil defense efforts. The strategy must be capable of overcoming negative attitudes based upon misconceptions and incomplete understanding of the national civil defense problem.

CHAPTER II

STUDY OBJECTIVES, BASIC STUDY APPROACH, AND THE END-PRODUCT

Chapter II Outline

	<u>Page</u>
DESCRIPTION OF STUDY OBJECTIVES	7
Objectives Related to Shelter Management Recruitment	7
Objectives Related to Shelter Management Selection	7
Objectives Related to Shelter Management Training	8
DESCRIPTION OF BASIC STUDY APPROACH	8
Adoption of a Framework of Assumptions	8
Formulation of Shelter Goals and Phases	9
Determination of Basic Shelter Management Tasks	9
Derivation of Required Knowledges and Skills	10
Development of Shelter Management Organization Rationale	10
Derivation of Shelter Management Selection Standards	10
Formulation of a Shelter Management Recruitment Approach	13
Formulation of the Shelter Management Selection Approach	13
Derivation of Shelter Management Training Requirements	13
Development of Shelter Management Training Rationale and Mathodology	13
THE STUDY END-PRODUCT	14

II. STUDY OBJECTIVES, BASIC STUDY APPROACH, AND THE END-PRODUCT

Description of Study Objectives

Objectives Related to Shelter Management Recruitment

The study objectives related to shelter management recruitment are as follows:

- 1. Establish criteria for cadre recruitment methods.
- Identify alternative recruitment methods, and evaluate in terms of adopted criterion.
- 3. Recommend a basic "best" recruitment approach.
- 4. Develop an illustrative procedure for applying the recommended "best" recruitment approach.
- Describe variations of applying the recommended recruitment approach.

Objectives Related to Shelter Management Selection

The study objectives related to shelter management selection are as follows:

- 1. Establish criteria for cadre selection methods.
- Identify alternative selection methods, and evaluate in terms of adopted criterion.
- Establish pre-selection qualifications for each shelter management role.
- Identify the occupations from which potential shelter management positions are best filled.
- Establish a generally applicable selection procedure suitable for shelter staffing.

Objectives Related to Shelter Management Training

The study objectives related to shelter management training are as follows:

- Establish the knowledge and skill requirements for each shelter management role.
- Identify the basic training problems and develop related guidelines for training planners.
- Identify and sequence into topic outlines the basic training content for each shelter management role;
- Evaluate alternative training methods, and develop related guidelines for training planners.

Description of Basic Study Approach

The basic approach taken to accomplish the study objectives involved ten steps:

- 1. Adoption of a framework of assumptions.
- 2. Formulation of shelter goals and phases.
- 3. Determination of basic shelter management tasks.
- 4. Determination of required knowledges and skills.
- 5. Development of management organization rationale.
- 6. Derivation of management selection requirements.
- 7. Derivation of management training requirements.
- 8. Formulation of recommended recruiting approach.
- 9. Formulation of recommended selection approach.
- 10. Development of training contents and methods.

Potentially relevant literature was reviewed and related to each of the above steps. A description of each step follows.

Adoption of a Framework of Assumptions

The concepts, principles, and procedures recommended in this report were developed on the basis of a systems analysis of shelter management activities plus a framework of assumptions. They are not directly the product of experimental or demonstrational research.

. Where there were no hard research facts to point the way, it was necessary to assume the need for certain management tasks. For example, it was assumed that shelteree morale and social control would benefit from some type of shelteree activity program, even though the research data in support of the assumption is meager (95,64). Once made, the assumption generated a number of shelter management tasks having to do with planning, organizing, and supervising an activity program. In a similar way, other assumptions generated a variety of other management tasks.

Assumptions were also made about the criteria governing recruitment, selection, and training methods. For example, it was assumed that a recruitment method was unacceptable if it involved the risk of arousing public fears and anxiety. Such criterial assumptions provide much of the rationale for recommending specific recruiting, selection, and training methods. Unlike the shelter management task-generating assumptions, they are made explicit so that the rationale for recommendations may be understood.

Formulation of Shelter Goals and Phases

In order to derive the basic tasks for shelter management by the systems analysis method, the shelter was conceived as a planned system that had a definite set of management goals to achieve. A total of 16 management subgoals was identified and related to the ultimate goal of survival. Once the management goals were identified, the shelter as a system was divided into temporal phases, beginning with the phase of establishing operational readiness of the shelter facility in peacetime and ending with the phase of leaving the shelter after it had served its wartime purpose. The shelter management goals and the shelter temporal phases are described fully in Chapter III.

Determination of Basic Shelter Management Tasks

Once the management goals were established and the temporal phases of the shelter as a system were defined, the stage was set for determining the basic management task. Each phase was analyzed in terms of each management goal. The invariable question was, what could or should shelter management do in this particular phase toward the achievement of this particular goal. For example, one question was, what can or should a shelter management do to establish the operational readiness of the shelter for feeding the shelter population? In this way, basic tasks were identified.

Figure 1 shows the task analysis form used. A partially completed analysis is shown on the form to illustrate how basic management tasks were described. For a summary of all basic management tasks identified by this method, consult Figure 3-A, 3-B, 3-C in Chapter III.

Derivation of Required Knowledges and Skills

Once the basic management tasks were determined, the next step was to derive the knowledges and skills required by the tasks. To facilitate this analysis, tasks were either broken down into a sequence of component steps or described more fully in other ways. The resulting details set the stage for the knowledge and skill analysis. The question put to each basic task was, what general or specific knowledge and/or skill does this task require for either its execution or direction? Figure 2 shows how ideas about required knowledges and skills were recorded on the reverse side of the task analysis form.

Development of Shelter Management Organization Rationale

Before consideration could be given to the problems of recruiting, selecting, and training a shelter management cadre, it was necessary to establish a management organization rationale and some prototype organizations. Based upon a review of literature concerning management organization, criteria were adopted to guide the development of acceptable shelter management organizations. One criterion, for example, was that no member of shelter management would report directly to more than one superior in the management structure. The assumption was that responsibility to two or more management superiors would unnecessarily risk confusion and possibly conflict.

On the basis of such criteria plus knowledge of the basic management roles which had to be assumed, two ways of organizing shelter management were charted. For details, consult Figures 4 and 5 in Chapter III.

Derivation of Shelter Management Selection Standards

Selection standards were derived by doing a rational analysis of the kinds of skills and experiences required for each key management role. Practicality of application proved to be the major factor on how the standards were expressed. The basic standards for each key management role were stated in two ways: (1) a general description of recommended knowledges and skills and other personal characteristics, and (2) a listing of occupations from which qualified persons were most likely to be forthcoming. These selection standards are described in Chapter IV, together with a rationale on the need for such standards.

SHELTER TASK ANALYSIS DATA SHEET

GOAL: Radiological Protection

TASK: Establishing Operational Readiness

PHASE OBJECTIVES: (1) To establish maximal, feasible readiness of physical structure to protect against radiation. (2) To establish maximal readiness of personnel to perform essential tasks of radiation protection. (3) To establish readiness of all equipment, materials, and supplies needed for radiation protection. (4) To plan and stock operating plans and procedures for radiological protection.

			MO I TO LONG OF THE PROPERTY O	VHO?	EQUIPMENT/MATERIALS
Hake feasible modification to the casisting structure to increase the tradiction factor. 2. Determine feasibility of structural and stock capability for the take-shelter warning. 2. Determine feasibility of structural and steer the take-shelter warning. 3. Obtain materials and store strategically. 4. Train cadre in what to do. 5. Record and stock plans of what to do. 6. Record and stock plans of what to do. 7. Determine most likely blast damage repairs. 8. Obtain and stock plans of what to do. 9. Determine most likely blast damage repairs. 9. Determine and stock monitoring equipment. 10. Determine and stock monitoring plan. 11. Determine and stock monitoring plan. 12. Determine and stock monitoring plan. 13. Determine and stock monitoring plan. 14. Train cadre in what to do. 15. Record.and stock monitoring plan. 16. Establish ready capability to betermine and stock monitoring plan. 17. Train cadre in what to do. 18. Establish ready capability to betermine and stock monitoring plan. 19. Determine and stock monitoring plan. 10. Determine suitable materials. 10. Determine and stock monitoring plan. 11. Train cadre in what to do. 12. Determine and stock monitoring plan. 13. Determine and stock monitoring plan. 14. Train cadre in what to do. 15. Develop skill through exercises.		REQUIRED/RECOMMENDED TASKS	TASK BREAKDOWN ON DESCRIPTION		
Establish a ready capability for 1. Identify openings in need of sealing or barricading the shelter protection after the take-shelter warning. 2. Determine suitable materials. 3. Obtain materials and store strategically. 4. Train cadre in what to do. 5. Record and stock plans of what to do. 6. Record and stock plans of what to do. 7. Determine most likely blast damage which will permit fallout to enter. 8. Obtain and stock plans of what to do. 9. Decide barricading materials. 10. Determine and stock monitoring equipment. 11. Determine and stock monitoring equipment. 12. Establish ready capability to 1. Determine and stock monitoring plan. 13. Obtain and stock monitoring equipment. 14. Train cadre in what to do. 15. Establish recording and reporting plan. 16. Train cadre in what to do. 17. Develop skill through exercises.	<u> </u>		Identify unnecessary openings and other potential sources of radiation infiltration.		As required.
Establish a ready capability for or barricading. up-grading the shelter protection after the take-shelter warning. 2. Determine suitable materials. 3. Obtain materials and store strategically. 4. Train cadre in what to do. 5. Record and stock plans of what to do. 6. Record and stock plans of what to do. 7. Decide barricading materials. 8. Obtain and stock plans of what to do. 9. Determine and stock plans of what to do. 9. Record. and stock plans of what to do. 10. Determine and stock monitoring plan. 11. Determine and stock monitoring plan. 12. Establish recording and reporting procedure. 13. Establish recording and reporting procedure. 14. Train cadre in what to do. 15. Develop skill through axercises.					
Establish reasonable capability Establish reasonable capability for making blast damage repairs. 2. Determine most likely blast damage which will permit fallout to enter. 2. Decide barricading materials. 3. Obtain and stock plans of what to do. 4. Train cadre in what to do. 5. Record and stock plans of what to do. 5. Record and stock plans of what to do. 5. Record and stock plans of what to do. 7. Record and stock monitoring plan. 8. Establish recording and reporting procedure. 9. Establish recording and reporting procedure. 10. Determine and stock monitoring plan. 11. Train cadre in what to do. 12. Establish recording and reporting procedure. 13. Establish recording and reporting procedure. 14. Train cadre in what to do. 15. Develop skill through exercises.	ri		1		Sealing and/or barricading materials depending upon up-grading problems.
3. Obtain materials and store strategically. 4. Train cadre in what to do. 5. Record and stock plans of what to do. 6. Record and stock plans of what to do. 7. Determine most likely blast damage which will permit fallout to enter. 8. Obtain und store strategically. 9. Obtain und store strategically. 9. Train cadre in what to do. 9. Record and stock plans of what to do. 9. Record and stock monitoring equipment. 10. Determine and stock monitoring plan. 11. Establish ready capability to a stablish and stock monitoring plan. 12. Establish recording and reporting procedure. 13. Establish recording and reporting procedure. 14. Train cadre in what to do. 15. Develop skill through exercises.		after the take-shelter warning.			
Establish reasonable capability for making blast damage repairs. 2. Decide barricading materials. 3. Obtain and store strategically. 4. Train cadre in what to do. 5. Record and stock plans of what to do. 5. Record and stock monitoring plan. 9. Establish ready capability to 1. Determine and stock monitoring plan. 9. Establish recording and reporting procedure. 14. Train cadre in what to do. 5. Develop skill through exercises.					
Establish reasonable capability for making blast damage repairs. 2. Decide barricading materials. 3. Obtain and store strategically. 4. Train cadre in what to do. 5. Record.and stock plans of what to do. 6. Record.and stock monitoring equipment. 7. Establish ready capability to monitor the shelter area (and 2. Establish and stock monitoring plan. 3. Establish recording and reporting procedure. 4. Train cadre in what to do. 5. Develop skill through exercises.					
Establish ready capability to 1. Determine and stock monitoring equipment. 2. Establish and stock monitoring plan. 3. Establish recording and reporting procedure. 4. Train cadre in what to do. 5. Develop skill through exercises.	<u></u>	1	I		Suitable materials to cover blast-clused openings. Materials should be as massive as possible to re- duce radiation penetration.
	<u>į</u>		1. Determine and stock monitoring equipment. 2. Establish and stock monitoring plan. 3. Establish recording and reporting procedure. 4. Train cadre in what to do. 5. Develop skill through exercises.		Monicoring equipment. Radiological data forms.

CONTINUE NEXT PAGE

Figure 1. SHELTER TASK ANALYSIS DATA SHEET. The data sheet is completed to illustrate how information was recorded.

1		
	KNOWLEDGE AND SKILL REQUIREMENTS	
1.		
8	×	
. <u>:</u>		
٠,		
<u>~</u>	Characteristics of fallout.	
<u>-</u> †	Effects of fallout exposure.	
5.		
9	Protection by personnel rotation.	
7.	Protection by materials.	
99	OPERATIONAL KNOWLEDGE:	
_:	Types of structural modification.	
2.	Methods of protection up-grading.	
m.	Use of monitoring equipment.	
. j	Developing a monitoring plan.	
ķ	Keeping monitoring records.	
<u>ن</u>	Types of monitoring equipment.	
7.	Critical radiation levels.	
60	Sources of monitoring equipment.	
<u>م</u>	Training monitoring teams.	
.0	Methods of decontamination.	
=	Decontamination equipment.	
12.	Developing decontamination teams.	
<u>.</u>	Repair of monitoring equipment.	
<u> </u>	Adjustment of monitoring equipment.	
	Monitoring outside the shelter.	
<u>.</u>	Keeping cumulative dose rates.	
17.		
.]	- 1	

Figure 2. SHELTER TASK ANALYSIS DATA SHEET. REVERSE SIDE. The data sheet is partially completed to illustrate how data was recorded.

Formulation of a Shelter Management Recruitment Approach

The recruitment approach recommended herein was decided upon as a result of: (1) evaluating potential recruiting methods in terms of criteria which should characterize the ideal recruiting method, and (2) recognizing that a shelter management cadre could in most instances be recruited from the regular, peacetime occupants of structures housing public shelters. The concept of a community influence structure was invoked and incorporated into a general recruitment strategy.

Formulation of the Shelter Management Selection Approach

Traditional personnel selection tools were evaluated for their applicability to the selection problem. The criteria applied ruled out most traditional selection procedures. The most practical selection tool proved to be the principle of selective recruitment, i.e., recruiting from occupations most likely to provide qualified persons for shelter management. A combined application and interview form was developed as the principal selection device.

Derivation of Shelter Management Training Requirements

The training requirements for various shelter management positions were derived from: (1) analyzing the knowledge and skill requirements which resulted from the aforementioned system analysis, and (2) reviewing civil defense literature for training topic implications. Two types of training outlines were developed. A core outline was developed which contained topics suitable for all members of shelter management. In addition, more specific training outlines were developed for each of the key management roles. The method of using topical outlines for describing training requirements was considered sufficient for the study purposes.

Development of Shelter Management Training Rationale and Methodology

An analysis was made of the following training problems: (1) What approach should govern the scope of the training content?, (2) What methods are applicable?, (3) Who should be formally trained?, (4) When should the maximum training effort take place?, and (5) Where should training take place?

In addition, consideration was given to such problems as development of instructors, administrative control of the training effort, and evaluation of training results. Only general recommendations were made. Procedural details were considered to be beyond the scope of the study.

The Study End-Product

This technical report is the study end-product. It deals with the management, recruitment, selection, and training problem at the OCD planner level rather than the procedural detail level. It is concerned with basic concepts, principles, and approaches, not with providing "how-to-do" instructions to those who ultimately will have to to the job of recruiting, selecting, and training.

The content and organization of the technical report is indicated broadly in the Table of Contents, and more specifically in the chapter outlines which precede each chapter. The report is culminated with recommendations for further research and development.

CHAPTER III

SHELTER MANAGEMENT GOALS, ACTIVITIES AND ORGANIZATION

Chapter III Outline

	Page
THE SHELTER SYSTEM GOALS OF MANAGEMENT	15
The Shelter System Ultimate Goal	15
The Shelter System Sub-Goals	15
BASIC SHELTER TASKS BY PHASE AND GOAL	19
Relation of Shelter Tasks to Phases	19
Implications for Selection Training	26
SHELTER MANAGEMENT ROLES, RESPONSIBILITIES, AND DUTIES	27
Distinction between Roles and Position Titles	27
Basic Roles and Their Responsibilities	27
Conversion of Roles to Position Titles	43
ALTERNATIVE SHELTER MANAGEMENT ORGANIZATIONS	43
Criteria for Management Organization	43
Implications for Management Selection and Training	47

III. SHELTER MANAGEMENT GOALS, ACTIVITIES AND ORGANIZATION

The Shelter System Goals of Management

A fallout shelter that is adequately equipped and stocked, staffed by a trained management team, and occupied by shelterees under nuclear wartime conditions can be conceptualized as a <u>system with basic, well-defined goals</u> to accomplish. The goals of the system are by definition also the goals of the shelter's management. These goals are of two kinds: The broad ultimate goal of survival and the basic sub-goals necessary for the accomplishment of the ultimate goal.

A brief discussion of these goals is desirable. They generate the basic tasks from which shelter management responsibilities and duties are derived. They also illustrate the complexity which confronts shelter managers, and therefore have a bearing on the recruitment, selection, and training of shelter management staffs.

The Shelter System Ultimate Goal

The ultimate goal of shelter management is the return of the shelterees to the post-attack world, physically and psychologically capable of assuming a responsible role in the restoration and eventual reconstruction of our society. So stated, the ultimate goal implies a broad range of shelter management responsibilities. These, in turn, are clustered around the shelter subgoals.

The Shelter System Sub-Goals

The shelter management sub-goals described below are either directly or indirectly related to shelteree survival. Some are of more critical importance than others. Nevertheless, all most be recognized by shelter management as problem areas for planning and organization.

1. Protection against radiation injuries. Protecting shelterees against radiation injuries is not entirely a matter of passive reliance upon the shelter's structural protection factor. There are specific actions and decisions available to shelter management to ensure maximal radiation protection for shelterees. A first-order responsibility is to develop a capability for radiation monitoring.

- 2. Protection against blast and thermal effects. A shelter may be within reach of damaging blast and thermal effects, yet be beyond the range of total destruction. Shelter management must therefore act resourcefully to upgrade, within limits of practicality, the shelter protection against blast and thermal effects. The fact that shelters are intended primarily for fallout protection rather than blast protection does not mean shelter managers may ignore possibilities for increasing blast protection.
- 3. Protection against shelter fire and flooding. In-shelter fire and flooding are two contingencies against which management must have a ready capability. Flooding, from broken water mains or backed-up sewage, is less likely to be a critical problem. In-shelter fires can be disastrous. Management will have to plan and develop a ready capability both to prevent and control in-shelter fires. The control capability may also have to extend to fires outside the shelter which may spread to the shelter.
- 4. Protection against hazardous atmospheric conditions. The shelterees will need to be protected against oxygen deficiency, carbon dioxide imbalance, and gas, fume, and vapor hazards. Such hazards may result from poor shelter ventilation, failure to vent gas or fume-emitting equipment, or blast damage to stored sources of gases, fumes, and vapors. Unless shelter management assesses potential atmospheric hazards in advance, and establishes a capability to prevent and/or eliminate them, the survival of shelterees will be jeopardized.
- 5. Protection against temperature extremes. Heat may be the major shelter problem in many shelters. Without adequate ventilation, the accumulation of body heat from the shelterees may reach a hazardous point. Seasonal temperatures may further complicate the heat problem. To avoid heat debilitation and heat casualties, shelter management will have to develop a capability for controlling in-shelter heat.
- 6. Provision for food and water. Shelterees may be confined to shelters for as long as two weeks. Obviously, they will need food and water to survive an extended stay in the shelter. Shelter management, therefore, must have the capability for providing at least minimally adequate amounts of food and water for a two-week shelter stay. The capability will involve numerous management tasks, e.g., storage, inventory, disbursement, preparation, distribution, and clean-up.

- 7. Provisions for sleep. The length of time shelterees may be required to stay in shelters makes it necessary that shelter management make provisions for sleep. The minimal provision may be an assigned sleeping space and control procedures to reduce sleep disturbance. Going beyond the minimum will be a matter of available facilities. The importance of sleep as a contribution to shelteree morale and social control must be understood by shelter management.
- 8. Provisions for medical care. The possibility of injuries caused by blast, thermal and radiation effects, and the likelihood of non-nuclear connected injuries and illnesses makes it imperative that every shelter have a minimally adequate medical capability. The absence of such a capability runs the risk of shelteree demoralization in the event appreciable numbers of ill or injured are left untreated. In addition, there are likely to be fewer survivors where there is no medical capability.
- 9. Provisions for shelter sanitation. Shelters will require some type of toilet facilities to service the needs of shelterees, along with provisions for shelter sanitation. The presence of insects, rodents, vermin, uncovered human waste, and other sources of health and morale problems should be prevented, and if necessary, eliminated. While shelter sanitation is of less critical importance for survival than other sub-goals, the possibility of epidemic illnesses, even though remote, requires that it be considered a major management sub-goal.
- 10. Provision for religious needs. The inner strength that many people gain from active practice of their religious convictions makes it desirable that shelter management do what can be done to provide for religious needs. Shelteree morale and social control will be major management problems (95). Provision for some kinds of religious services are likely to reduce the risk of demoralization or loss of social control. It will behoove shelter management to tap all resources for help in achieving maximum morale and social control. Religious beliefs are one such resource.
- 11. Provisions for recreational activities. Inactivity under conditions of prolonged and intense stress and anxiety is intolerable for most people. It invites incapacitating tension symptoms, and morale and social control problems which may seriously jeopardize the operations of the shelter (95). A program of planned recreational activities will help in reducing negative emotional states. It behooves shelter management,

therefore, to develop and put to work a capability for reducing tension, apathy, and boredom through recreational outlets.

Management should not rely upon shelterees to plan and organize their own recreational activities.

- 12. Provisions for training and education. Sheltarees will have to be oriented on the rules and procedures governing their stay in the shelter. Also, many will require training in the operations necessary to run the shelter. It would be impractical to train a complete shelter management staff for each shelter during peacetime; hence, the necessity for training the bulk of the shelter staff after the shelter has been occupied. Shelterees must also be oriented and trained for post-shelter survival and reconstruction. Lastly, some form of on-going education is advisable for children, primarily to keep them occupied.
- 13. Maintenance of social control. Shelter management must seek to prevent and control such deviant behaviors as theft, violence, sexual activity, rumor spreading, and other anti-social acts which may create social control and morale problems. A breakdown in social control could seriously threaten the survival of the shelterees. For this reason, shelter management must implement well-planned measures to guard against a deterioration of social control. Not the least of such measures should be a program of organized activities to relieve tension and boredom.
- 14. Development of group morale. Morale means a willingness to cooperate as a team to accomplish the shelter goals. Such a willingness must be developed. It does not materialize spontaneously. People must know what is expected of them. They must have confidence in their leadership, and the will to survive. This implies shelter management must create the conditions from which morale springs, i.s., achievement of basic sub-goals, evidence of competent leadership, and orientation of shelterees so they know what to do.
- 15. Provision for special services. There are a class of special services for which shelters should have some capability. They include provision for non-medical care of ill, injured, and infirm; care of infants and young children; organized physical fitness activities; and general services as required by shelterees. Relative to the other sub-goals, the capability of providing for such services is of lesser importance.

Basic Shelter Tasks by Phase and Goal

Relation of Shelter Tasks to Phases

in order to identify the basic tasks necessary for the survival of the shelteres, the shelter system was conceived as a series of temporal phases, starting with the phase of establishing the operational readiness of the shelter and ending with the phase in which the shelter might be used as a base for initial post-attack reconstruction activities. Within each phase, the basic tasks related to shelter sub-goals were identified. They are charted in this section to further illustrate the complexity of running a shelter. First, however, a definition of the shelter phases, together with a statement of the management objectives in each phase, is appropriate. The phase and phase objectives are as follows:

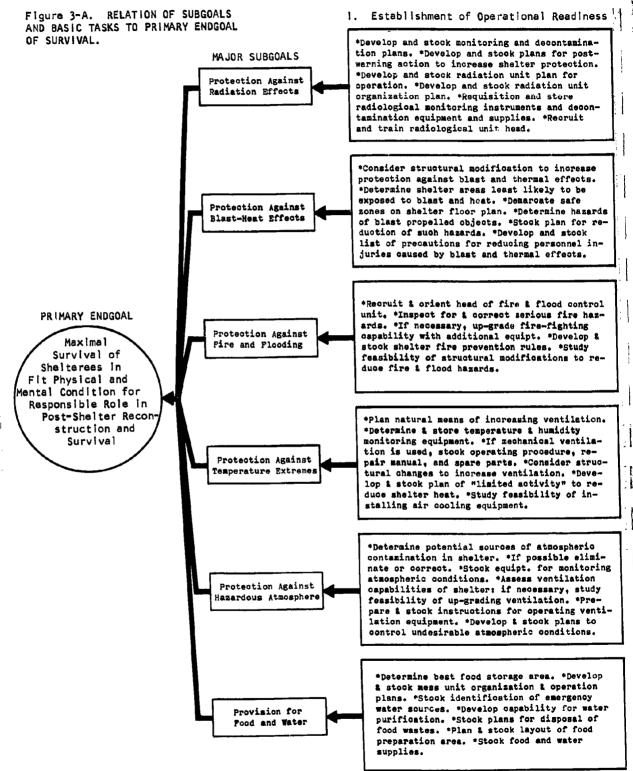
 Establishment of operational readiness. This phase begins with the selection of a shelter manager charged with the responsibility of establishing the operational readiness of the shelter, and ends when the shelter is operationally ready in terms of plans, procedures, equipment, supplies and cadre personnel.

The basic objective of this phase is to convert a potential shelter facility into an operationally ready shelter facility, i.e., a shelter ready in every essential way to receive shelterees. That will include stocks of essential supplies, equipment in place and ready to use, plans and procedures formulated and "on paper", and a cadre of trained management personnel.

 Maintenance of operational readiness. This phase begins when operational readiness has been established and terminates when the attack warning has been sounded.

The basic objective of the phase is to <u>maintain</u> the shelter in a state of operational readiness in terms of plans, procedures, equipment, supplies, and cadre personnel. All elements of operational readiness are subject to change. Supplies may deteriorate. Equipment may require repairs. Plans may require change in the light of new civil defense developments. Personnel may require replacement or refresher training. Hence, the need for activity to maintain operational readiness.

3. Warning, shelter entry, and immediate post-entry. This phase begins with the warning of a nuclear attack underway, continues through the period of shelter entry, and terminates when the shelter is ready for routine shelter confinement for fallout protection. Such readiness means any attack effects have been brought under control.



*Meintain stocked radiological units plans and procedures up-to-date. *Inspection for and re-placement of damaged, missing, or obsolete supplies. *Arrange for continued up-grading of structural protection. *Recruit and train radiological unit cadre. *Meintain cadre readiness with refresher training and exercises as needed.

*Modify blast and thermal protection plans if necessary. *Maintain up-to-date plans for shelter evacuation because of blast damage. *If feasible, continue structural modifications to up-grade protection against blast and thermal effects. *Maintain capability for quick repairs to blast damage which threatens safety of shelterees.

*Periodically inspect for and eliminate fire hazards. *Inspect fire-fighting equipment regularly. *Periodically review and up-date stocked plans. *If possible, recruit and train potential replacement for fire and flood control unit. *Continue to up-grade fire and flood control capability. *Maintain file on CD information pertaining to shelter fire prevention.

*Continue to seek means of up-grading shelter capability of combating extreme heat. *Inspect stocked plans and spare parts periodically. *Maintain standard filters at air intake points of ventilating system. *Maintain a ready equipment repair capability for essential equipment by recruiting and training maintenance personnel as part of shelter cadre. *Familiarize all cadre in operation of air exchange and/or cooling.

*Maintain file on relevant CD information.
*If feasible, up-grade ventilation capability.
*Periodically review & up-date plans for monitoring & controlling atmospheric conditions.
*Periodically inspect stocked detection equipt;
if necessary, replace. *Maintain ventilating
equipt. in operating condition. *Maintain airintake filtration system if special purpose
system has been installed.



*Periodically review & up-date all stocked plans, e.g., mess unit organization, food preparation area, food preparation & distribution, & waste disposal. *Inspect periodically for missing, damaged, or spoiled food & water stocks; replace as required. *If feasible, recruit & train cadre replacement for head of mess unit. 3. Warning-Entry - Immediate Post-Entry

*Execute plan for post-warning increase of radiation protection. *If situation permits, complete staffing of radiological unit. *Test and ready equipment for monitoring and decontamination. *If situation permits, begin training of unit staff.

*1

A:

8:

*

i

o

ŧ

1

1

*Remove objects capable of becoming flying missiles as a result of blast. *If planned, erect temporary shields or barriers to mitigate blast effects. *Guide shelterees to predetermined maximal safety areas. *Request that they assume a prone position to minimize blast injuries. *Alert fire-fighting teams to be ready in the event of fires caused by thermal effects.

*Recruit necessary fire control unit staff from incoming shelterees. *Orient and station staff near fire-fighting equipment. *Inspect for and correct obvious fire hazard. *Prohibit smoking by shelterees during this phase to minimize fire hazard during the crucial entry and immediate post-entry phase. *If feasible, prepare to orient shelterees on fire prevention.

*Shut off building heat supply to shelter area. *Set ventilating and/or cooling equipment into operation if not already in operation. *Turn off ventilating and/or cooling equipment if fallout is distributed into shelter.

*If shelter situation permits, start ventilation equipment. *Monitor air-intake for air contaminants, such as toxic gases, fumes, vapors, and dusts (shelters in or near some industrial plants should consider the possibility of such contaminants versus their planning).

*Check food & water supplies. *If possible, augment food & water supplies. *If necessary to evacuate, evacuate supplies also. *Review plans for setting up & operating the mess unit. *Assess shelter occupancy & plan rationing accordingly.

ry - Immediate Post-Entry

post-warning increase of ion. *If situation permits, of radiological unit. *Test nt for monitoring and deconituation permits, begin train-

capable of becoming flying sult of blast. *If planned, shields or barriers to ffects. *Guide shelterees maximal safety areas. *Reassume a prone position to njuries. *Alert fire-fight-ready in the event of fires.! effects.

ry fire control unit staff elterees. *Orient and station fighting equipment. *Inspect obvious fire hazard. *Prohibit erees during this phase to .zard during the crucial entry steentry phase. *If feasible, t sholterees on fire pre-

ng heat supply to shelter area.; and/or cooling equipment into already in operation. *Turn and/or cooling equipment if ributed into shelter.

uation permits, start ventit. *Monitor air-intake for
s, such as toxic gases, fumes,
ts (shelters in or near some
ts should consider the possicontaminants versus their

water supplies. *If possible, water supplies. *Safeguard or supplies. *If necessary to tate supplies also. *Review ing up 1 operating the mess shelter occupancy 2 plan ratingly.

4. Routine Extended Confinement Phase

*Execute plan for shelter monitoring. *Record and analyze radiological data. *Decontamination as required. *Maintain operability of equipment. *Training of radiological unit staff. *Check performance of staff members; retrain if necessary. *Maintain cumulative dose records. *Advise shelter manager on in-shelter radiation levels.

*If possible, repair blast damage which threatens safety to shelterees. *If damage is too extensive, and shelterees are threatened by radiation or structural damage, evacuate as per plan after determining alternate shelter facility.

*Orient shelterees on fire prevention rules and what to do in the event of fire. *In-spect shelter daily for fire hazards. *Establish fire watch. *Complete training of fire-fighting teams. *Enforce fire prevention regulations. *Take planned corrective actions in event of shelter flooding.

*Inspect & maintain ventilating cooling equipment. *Monitor & record shelter temperature.
*Control shelteree activity as necessary.
*Control or limit use of heat-generating equipment as needed. *Make maximal use of natural ventilation. *If possible, increase water rations & salt intake when necessary. *If necessary, hook auxiliary power system to ventilation equipt.

*Monitor regularly for excessive CO₂ & air contaminants. *Provide ventilation as needed within evailable ventilation capability. *Enforce rules for preventing shelteree-caused air contamination. *If necessary, evacuate into uncontaminated shelter areas. *Inspect and maintain mechanical ventilating equipment.

*Orient shelterees on mess operation plans.
*Expand mess unit personnel as required.
*Initiate mess unit plan of operation.
*Maintain inventory of food & water supplies.
*Check water purity; if necessary, purify.
*If possible, increase supplies from outside sources. *If necessary, modify daily rations.
*Maintain safeguards on supplies.

5. Pre-Shelter Exit and Exit Phase

*Obtain and report regional radiation hazards.
*Continue in-shelter radiological monitoring.
*Advise shelter manager on shelter exit radiation hazards. *Assist training of shelterees on post-shelter radiological protection.

*Determine regional hazards left by aftermath of blast and thermal effects. *Orient shelterees on hazards and precautions necessary in blast-torn, post-shelter environment.

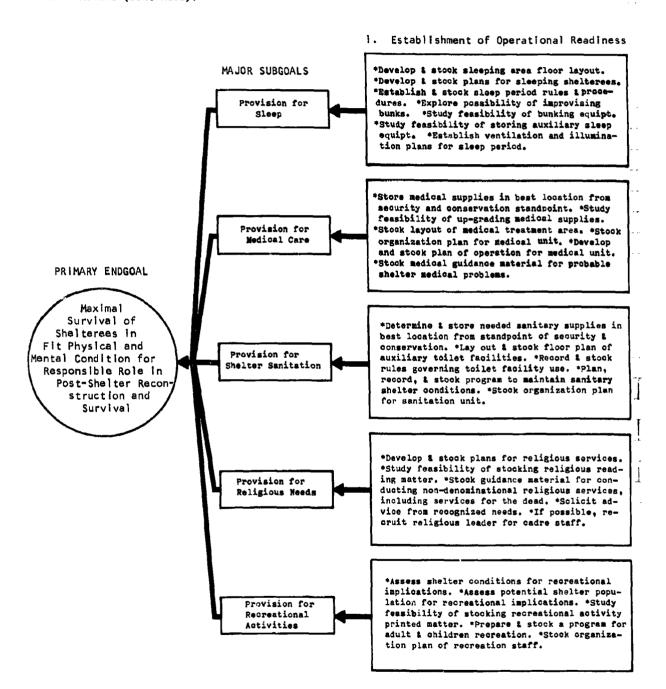
*Continue fire prevention activities until shelter exit time. *Orient shelterees on post-shelter environment fire hazards and fire protection. *Prohibit smoking during shelter exit to prevent fire hazards during this critical period. *After shelterees have left shelter, make final check for fire hazards.

*If fallout rate permits, increase shelter openings for short time periods, when necessary to reduce shelter heat. *Maintain all heat control activities.

*Continue as in previous phase. *Shutdown sll ventilation equipment after shelterees have left the shelter. *Restore monitoring equipment before leaving shelter.

*Operate mess unit as in previous phase. *If food supplies are abundant, distribute excess according to local plan. *Close-down and clean-up mess facilities.





2. Maintenance of Operational Readiness

*Periodically review and up-date all stocked plans. *Inspect periodically stored sleeping equipt.; replace if necessary. *Maintain civil defense information pertaining to sleep function.

*Periodically review & up-date stocked plans.
*Periodically inspect medical equipt. and supplies; if necessary, replace. *Recruit and train medical head replacement. *If feasible, recruit & train medical aid personnel.

*Periodically review and up-date stocked plans.
*Periodically inspect stocked sanitary equipt.;
replace if necessary. *Recruit % train sanitation head replacement. *Maintain file of newly
released data on shelter sanitation.

*Periodically j _ect stored materials; replace if necessary.

*Periodically review and up-date stocked plans. *Periodically inspect stored materials, if any. *Maintain civil defense literature pertaining to in-shelter recreational activities. *Explore possibilities for up-grading recreational capability of shelter through community contributions. *Recruit & train potential replacement for recreation head.

3. Warning-Entry - Immediate Post-Entry

(The criticality of other activities in this phase suggests no action be taken in regard to preparing sleeping arrangements until the more important activities are completed.)

*O: *A: *WI P: S: S:

*0:

Ca

pl ta

* A

pr

*Rt

ate

*C(

*C(

*0

th

ic sh

11

& pe ir

*Safeguard medical supplies against blast and fire damage. *If shelter situation permits, recruit persons with medical care experience. *Set up the medical treatment area. *Render emergency medical treatment as needed. *Segregate casualties as per plan. *If situation permits, train additional needed personnel to complete organisation plan.

*Make available, but control unnecessary use of toilet facilities. (The criticality of other activities in this short phase preclude other sanitation activities.)

*Provide last rites as needed. *Provide religious aid and comfort as needed.

(The criticality of other activities in this short period precludes any recreational activities.)



v - Immediate Post-Entry

of other activities in this o action be taken in regard to ng arrangements until the ctivities are completed.)

al supplies against blast and f shelter situation permits, with medical care experience. cal treatment area. *Render al treatment as needed. *Segreas per plan. *If situation additional needed personnel to sation plan.

e, but control unnecessary use lities. (The criticality of es in this short phase prenitation activities.)

ites as needed. *Provide

ty of other activities in this precludes any recreational

4. Routine Extended Confinement Phase

*Orient shelterees on sleeping arrangements.

*Assign shelterees to specific sleep areas.

*Where plans for improvising bunks exist, improvise. *Where regular bunks require being set up, *Communicate rules governing sleep period. *Distribute auxiliary equipt.; if available. *Establish sleep watch as planned.

*Enforce sleep period rules.

*Organize for continued treatment of non-ambulatory casualties. *Orient shelterees on sick-call procedures. *Conduct sick-call as per plan. *Maintain medical treatment log. *Maintain control and inventory of medical supplies. *Advise shelter manager on status of medical problems.

*Recruit & train sanitation unit staff. *Operate & service toilet facilities as per plan. *Conduct daily shelter housekeeping inspection. *Conduct anti-vermin activities as needed. *Order area clean-up as required. *Dispose of the dead as per plan.

*Reassess stocked plans for conducting religious services. *If necessary, modify to suit shelter needs. *Recurit & train to expand religious unit staff. *Conduct denominational & non-denominational services as situation permits. *Encourage prayer and meditation during quiet periods. *Provide sid & comfort to individuals as needed.

*Analyze shelter registration data for recreational implications. *Expand staff to complete organization plan. *Review and modify as needed the stocked recreational activity program. *Direct planned recreational activity program. *Canvass shelter for materials for recreational purposes. *Modify activities to fit changing shelter conditions.

5. Pre-Shelter Exit and Exit Phase

*Operate sleep reriod as per previous phase until shelter exit period. *Store sleep equipt. in manner stored prior attack before shelter exit.

*Continue medical treatment as required until shelter exit time. *Orient shelterees on health hazards outside of shelter. *According to local plan continue treatment of non-ambulatory patients after shelter is evacuated, until other authority assumes responsibility. *Set up for carrying on out-patient clinic for former shelterees. *Turn medical records over to other authorities. *Distribute excess supplies accordingly to local plan.

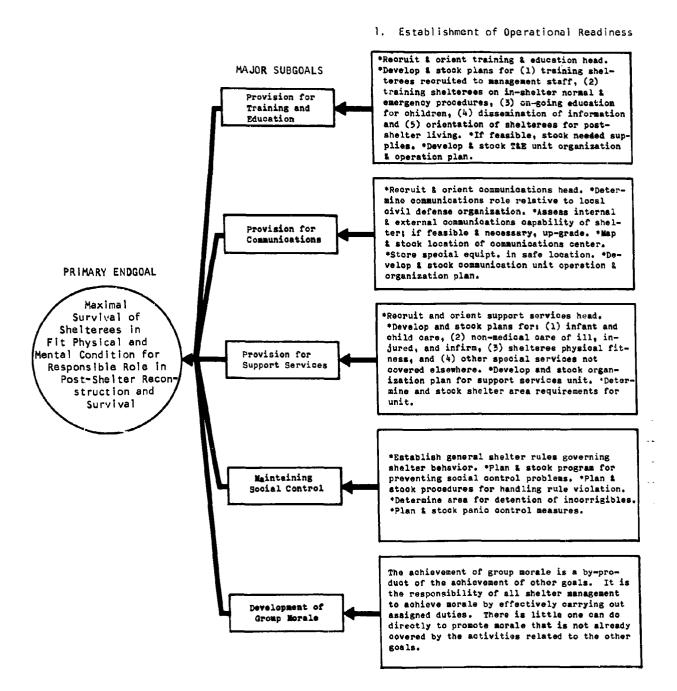
*Maintain sanitary standards as in previous phase. *Direct shelter clean-up prior to shelter exit. *Distribute excess sanitary supplies according to local plan. *Orient shelterees on sanitary problems & practices cutside the shelter if local conditions require.

*Continue to service religious needs.

(Not applicable.)



Figure 3-C. RELATION OF SUBGOALS AND BASIC TASKS TO PRIMARY ENDGOAL OF SURVIVAL (Contined).



2. Maintenance of Operational Readiness

*Periodically review and up-date all TEE plans.
*Inspect stocked supplies & guidance materials;
if necessary, replace. *Recruit & train replacement for TEE head.

*Periodically inspect stored equipt.; if necessary, replace. *Check with local CD for changes in communications role. *Periodically review plan of operation. *Recruit & train replacement for communications center head. *Maintain file of CD information pertaining to shelter communications. *Study feasibility of auxiliary power unit.

*Periodically review and up-date all stocked support services plans. *Maintain file of CD information pertaining to special service activities. *Recruit and train replacement when necessary.

*Review all stocked plans periodically. *Modify rules, procedures, etc., in light of new CD advices or findings. *Maintain file of CD information pertaining to social control problems.

(See initial box)

3. Warning Entry - Immediate Post-Entry

*The criticality of other activities in this phase preclude training and education activities. *All Tag chaff should assist in other, more needed activities.

*Safeguard special communications equipt. from blast & fire. *Maintain communications contact with CD authorities as per plan. *Keep shelter manager informed as per plan.

*The criticality of other activities in this short phase preclude special services activities. *All support services staff should assist on other, more needed activities.

*Expand cadre staff quickly to maintain order a compliance to instructions among incoming shelteress. *If necessary, apply anti-panic measures.



Entry - Immediate Post-Entry 4. Routine Extended Confinement Phase 5. Pre-Shelter Exit and Exit Phase *Expand Tie staff as per organization plan by recruiting & training shelterees. *Implement of other activities in this *Train shelterees for post-shelter living, program for orientation of shelterees. *Intraining and education activ-*Continue information program until shelter itiate daily news & information service. *Dirstaff should assist in other, exit time. *Restore any TLE equipt. & supplies ect on-going educational activities program ivities. for school children. *Conduct other training before leaving shelter. as requested by shelter management. *Expand communications center staff as needed. *Continue to operate as in previous phase. .al communications equipt. from *Implement communications center operation Maintain communications contact plan. *Maintain incoming & outgoing message *Restore communications equipt., at shelter ties as per plan. *Keep shelter log. *Communicate all incoming messages to exit time, unless shelter will function as ed as per plan. shelter manager or deputy. *Maintain operabila base for recovery and reconstruction operations. ity of communications equipt. *Expand support services staff as per organi-*Continue to operate in previous phase until zation plan. * Initiate infant and child care ty of other activities in this shelter exit time has arrived. *Assist in services as per plan. *Coordinate with medical eclude special services activipreparation for and control of shelter exit. head in providing services to ill, injured port services staff should *If non-ambulatory patients are to be kept in and infirm. *Coordinate with recreation head shelter after exit time, provide for conr, more needed activities. in physical fitness activities. *Provide other tinuance of support services to such patients. support services as the need arises. *Orient shelterees on shelter rules 2 regulastaff quickly to maintain order tions. *Orient expanded shelter staff on *Continue as in previous phase. *Orient shelto instructions among incoming social control problems & need for strict rule terees in orderly procedure for leaving the If necessary, apply anti-panio enforcement. *Apply program of preventive acshelter. *Turn serious law violators over to tions to ensure social control. *Enforce comcivil authorities. pliance with rules, procedures, etc., as per (See initial box) (See initial box) (See initial box)

The phase has two major objectives: (1) to position shelterees in shelter locations which will give the maximal possible protection against blast, thermal, and other nuclear weapon effects, and (2) to cope successfully with any emergency conditions imposed upon the shelter as a result of nuclear weapon effects.

4. Extended shelter confinement. This phase begins when post-attack emergency conditions, e.g., shelter damage, fire, flooding, or large-scale injuries, have either not occurred or have been brought under control. It ends when plans for the pre-exit phase are initiated.

The basic objective of this phase is to organize and administer the shelter routines for the protection and care of shelterees.

5. Pre-exit and exit phase. This phase commences when shelter management has determined that it will be safe for shelterees to leave the shelter in another 48-hour period and terminates when the shelterees have left the shelter.

The major objectives of this phase are: (1) to get the shelterees ready via orientation and training to cope with the problems of the post-shelter environment, and (2) an orderly evacuation of the shelter.

The basic tasks in each phase which are related to the shelter sub-goals are charted in Figures 3-A, 3-B, and 3-C. The tasks are stated generally.

Implications for Selection and Training

The major shelter management activities identified in Figure 3-A, 3-B, and 3-C give a glimpse of the need for carefully selected and trained shelter management personnel. While the sub-tasks of these activities can often be done by persons with relatively little instruction or training, it takes a basically qualified, well-trained shelter cadre personnel to carry out the implied management functions, e.g., determining equipment, maintenance, and supply requirements; developing plans and procedures, organizing and coordinating in-shelter activities; training personnel in various shelter sub-tasks, directing emergency activities; and many others.

Shelter Management Roles, Responsibilities, and Duties

Distinction between Roles and Position Titles

The building blocks of a shelter management organization are <u>not</u> position titles, but essential management <u>roles</u>. For different shelters, position titles may vary in nomenclature and number. The essential management roles will remain the same.

A management role can be defined as the embodiment of a basic management function in a person. The corporation provides a clarifying analogy. Every corporation has a chief executive officer. His function is to direct the affairs of the corporation through the organization structure at his disposal. Customarily, he is called "President"; sometimes he is the "Chairman of the Board." Regardless of his title the function or role is the same, namely, chief executive officer. The distinction between roles and position titles applies also to shelter management.

It should also be pointed out that while a member of shelter management customarily has only one position title, he may have more than one management role. For example, the "medical officer" may have responsibility for both the medical and sanitation function (role).

Basic Roles and Their Responsibilities

An identification of the basic shelter management roles and their related responsibilities will be helpful to those who must plan and develop a shelter management team. Knowing the basic role is very much related to understanding the recruitment, selection, and training of such a team.

The following basic roles have been identified through analysis of the shelter as a system:

 Shelter Head. Has over-all responsibility for developing and maintaining shelter operational readiness in time of peace and for running the shelter efficiently in time of war. The following specific duties are recommended:

- Recruits, selects, orients, and trains the peacetime shelter management cadre.
- Directs the activities of the peacetime cadre in developing the shelter's operational readiness.

- Approves all cadre-recommended plans, policies, and procedures governing the wartime use of the shelter.
- Approves cadre-recommended plans and procedures for stocking equipment, supplies, and materials.
- Directs inspections, exercises, and other means of personnel and equipment evaluation for maintenance of operational readiness.
- Keeps self and cadre informed on new developments in field of civil defense.
- -. Maintains liaison with community or state civil defense officials in charge of command.
- Maintains full complement of basically qualified and trained shelter management cadre.
- Maintains inventory of stocked supplies, equipment, guidance material, cadre-developed plans and procedures, and other stored materials.
- Directs development of shelter rules and regulations.
- Directs recruitment and training of shelter management standby personnel if requested by civil defense organization.

- Directs entry and initial location of shelterees in the shelter.
- Initiates and directs preparations to increase shelter protection against blast, radiation, and thermal effects.
- Coordinates post-attack efforts to repair shelter damage and treat ill and injured persons.
- Directs expansion of shelter cadre into full-scale shelter management organization.
- ~ Authorizes execution of plans for the organization of shelterees into pre~planned organizational units.
- Coordinates activities of shelter management staff units directly or through services of deputies.
- Assumes over-all direction of shelter emergency situations, e.g., fire, blast, disease, etc.
- Evaluates performance of shelter management staff and line units. Replaces personnel not performing their duties adequately.
- Organizes shelter advisory committee to represent shelterees, and meets with committee daily to discuss shelteree problems.

- Censors news from the "outside" when his judgment decides it will create a morale and/or social control problem.
- Meets daily with staff and line management heads to exchange information about problems in connection with running the shelter.
- Orders such disciplinary action as is necessary to assure social control in the shelter. Stimulates preventive measures to avoid social control problems.
- Approves master schedule of in-shelter operational and nonoperational activities.
- Determines priorities in use of personnel, equipment, and supplies in the event of major shelter emergency.
- Medical Head. Has primary responsibility for developing and applying a shelter medical capability to meet the minimum requirements of ill and injured. Specific recommended duties include:

Before shelter habitation:

- Determines, requisitions, and stores medical equipment, supplies, and record-keeping materials.
- Assists supply head in periodic inspection of medical supplies for damage, deterioration, or missing inventory.
- Develops, records, and stocks an organization plan of the shelter medical unit.
- Develops, records, and stocks a plan of operation for the shelter medical unit.
- Selects shelter hospital area, and notates area and layout on shelter floor layout plan.
- Recruits, orients, and trains his own replacement.
- Keeps informed of medical information pertaining to nuclear war casualties.
- Maintains contact with medical head of local civil defense organization.
- At request of shelter manager, recruits, orients, and trains standby personnel for medical unit.

After shelter habitation:

- Selects, orients, and trains additional personnel from shelterees to complete organization plan of unit.

- Directs selection and training of shelter area "medics" when advisable.
- Directs operation of shelter hospital, including record-keeping.
 Directs medical care.
- Conducts daily sick-call as per plan of operation.
- Advises shelter manager on medical problems affecting welfare of shelterees.
- Directs activities of auxiliary medical service volunteers.
- At request of shelter manager, organizes first-aid and medical self-help classes for shelterees.
- Discharges other duties as requested by organizational superior.
- 3. Radiological Head. Has directed responsibility for developing and directing a shelter radiological monitoring and decontamination capability in accordance with shelter requirements. Specific recommended duties include:

- Determines, requisitions, and stores radiological monitoring and decontamination equipment, supplies, and record-keeping materials.
- Assists supply head in periodic inspection of radiological equipment and supplies for damage, deterioration, and missing inventory.
- Develops, records, and stocks an organization plan for shelter radiological unit.
- Develops, records, and stocks a plan of operation for the monitoring and decontamination activities.
- Selects shelter base of operation, and notates area on shelter floor layout plan.
- Recruits, orients, and trains his own replacement.
- Keeps self informed of new developments in the field of radiological monitoring and decontamination.
- Maintains contact with radiological head of local civil defense organization.
- At request of shelter head, recruits, orients, and trains stand by personnel for radiological unit.

- Selects, orients, and trains additional personnel from shelterees to complete organization plan of radiological unit.
- Directs shelter radiological monitoring operation.
- Assesses radiological data, and advises shelter head on radiation problems affecting welfare of shelterees.
- Directs, when necessary, shelter fallout decontamination activities.
- Advises shelter head on methods of increasing radiation protection.
- Maintains operability of monitoring equipment.
- Directs maintenance of radiological records, such as cumulative dose rates, area radiation rates, etc.
- At request of shelter head, organizes training sessions on radiation topics for shelterees and/or shelter staff members.
- Discharges other duties as requested by organizational superior.
- 4. <u>Communication Head</u>. Has over-all responsibility for developing and directing both an internally and externally oriented communications capability in accordance with shelter and community requirements and capabilities. Specific recommended duties include:

- Determines, requisitions, and stores communication equipment for the shelter area.
- Assists supply head in periodic inspection of communication equipment for damage, deterioration, or missing inventory.
- Develops, records, and stocks an organization plan for the shelter communications unit.
- Develops, records, and stocks a plan of operation for the shelter communications center.
- Selects shelter base of operation, and notates area on shelter floor layout plan.
- Recruits, orlents, and trains his own replacement. Directs voluntary services of potential replacement.
- Keeps self informed on new developments in inter- and intra-shelter communication requirements and capabilities.
- Maintains contact with communication head of local civil defense organization.
- At the request of the shelter head, recruits, orients, and trains standby personnel for communications center.

- Selects, orients, and trains additional personnel from shelterees to complete staffing of communications unit.
- Directs operation of communication center in accordance with approved plan of operation.
- Directs maintenance of communication center log.
- Keeps shelter head informed on communications from outside the shelter.
- Directs installation and/or repair of communication equipment.
- Directs daily shelteree information program.
- Communicates to other shelters or to shelterees of own shelter as directed by shelter head.
- Discharges other duties as requested by organizational superior.
- Maintenance Head. Has direct responsibility for developing and directing a repair and maintenance capability for the shelter. Specific duties recommended include:

- Assesses potential repair and maintenance problems of the shelter.
- Determines, requisitions, and stores the minimum required tools and materials for repair and maintenance work, after taking into account what tools and materials are likely to be available in the shelter.
- Develops, records, and stocks a plan of operation for maintenance
- Develops, records, and stocks a staff organization plan for the maintenance unit, together with regular assignments for each person.
- Selects shelter base of operations, and notates area on shelter floor layout plan.
- Recruits, orients, and trains his own replacement.
- At the request of the shelter head, recruits, orients, and trains standby personnel for the maintenance unit.
- Coordinates with radiological head in developing plans for postwarning action to increase shelter radiation protection.
- Advises and/or directs installation of special equipment for shelter, such as ventilation equipment.

- Directs activities to increase the protection factor of the shelter prior to arrival of fallout.
- Selects, orients, and trains additional personnel from shelteree volunteers to complete staffing of maintenance unit.
- Maintains operability of essential shelter equipment by routine inspection, servicing, and when necessary, repair work.
- Assesses and repairs shelter structural damage caused by fire, blast effects, etc. when damage constitutes a threat to shelteree safety.
- Advises shelter head on maintenance and repair problems which warrant the latter's attention.
- Discharges other duties as requested by organizational superior.
- 6. Mess Operation Head. Has direct responsibility for developing and directing the shelter capability for providing food and water. Specific recommended duties include:

- Determines, requisitions, and stores food supplies above minimal requirement represented by Federally-stocked supplies.
- Establishes plan for assuring usable condition of supplies; also assists supply head in periodic inspection of stored supplies for damage, deterioration, and missing inventory.
- Develops, records, and stocks an organization plan for staffing the shelter mess unit.
- Develops, records, and stocks a plan of operation for the mess unit which includes food and water preparation and distribution.
- Determines and recommends food and water preparation and distribution equipment when no such equipment is available.
- Selects shelter mess area(s), and notates area and layout on shelter floor layout plan.
- Develops capability for providing special "menus" for infants, young children, seriously III and injured persons, and aged or infirm.
- Keeps self informed generally about new developments in civil defense, particularly those related to primary responsibility.
- Recruits, orients, and trains his own replacement.
- At the request of the shelter head, recruits, orients, and trains standby personnel for mess unit.

- Selects, orients, and trains additional personnel from shelteree volunteers to complete staffing of mess unit.
- Directs operation of mess unit in preparing and distributing food and water; preparing special-purpose menus; maintaining running supply inventory; and maintaining sanitary mess conditions.
- Advises shelter head on need to modify food and water rations, and other problems related to shelteree rations.
- Coordinates with shelter head in determining schedule for distributing food and water rations.
- Discharges other duties as requested by his organizational superior.
- 7. Supply Head. Has primary responsibility for the procurement, storage, security, inventory, and issuance of stocked equipment, materials, and supplies, except where a portion of such responsibility has been assigned to another member of shelter cadre. Specific recommended duties include:

- Requisitions, inspects, stores, and maintains an inventory record on equipment, materials, and supplies stocked or otherwise availble for shelter habitation.
- With the assistance of other unit heads, conducts a program of regular inspection of all stocks and stored equipments to check for damage, deterioration, and missing inventory. Delegates, but controls much of this inspection activity.
- Develops, records, and stocks an organization plan for staffing the supply unit.
- Develops, records, and stocks a plan for the operation of the supply unit consistant with the needs of those drawing supplies.
- Selects shelter supply storage area, and notates area and layout on shelter floor plan.
- Develops a plan for storage of supplies during wartime conditions.
 Plan may be for centralized or decentralized storage depending upon which best suits the shelter conditions.
- Recruits, orients, and trains his own replacement.
- Keeps self informed generally about new developments in civil defense, particularly those related to primary responsibilities.
- At the request of the shelter head, recruits, orients, and trains standby personnel for supply unit.

- Selects, orients, and trains additional personnel from shelteree volunteers to complete staffing of supply unit.
- Directs operation of supply unit in distributing supplies, maintaining inventory, and providing supply security.
- Advises shelter head on problems related to supplies.
- Requisitions from in-shelter sources such supplies as might be needed for shelter habitation period.
- Discharges other duties as requested by his organizational superior.
- 8. Fire Safety, and Rescue Head. Has primary responsibility for developing and directing a capability for: (1) fire prevention and control, (2) in-shelter accident prevention, and (3) rescue operations.

- Determines, requistions, and strategically stores fire prevention and control equipment when shelter facility is lacking necessary equipment.
- Inspects fire-fighting equipment periodically where there are no other arrangements to do so.
- Develops, records, and stocks an organization plan for staffing the fire prevention and control unit.
- Develops, records, and stocks a plan of operation to prevent, and if necessary, fight in-shelter fires through the use of volunteer fire brigades.
- Inspects shelter facility, and advises shelter head on the need to correct fire and accident hazards.
- Develops shelter accident and fire prevention rules and regulations for shelter head approval. Approved rules are stocked.
- Advises supply head on safe storage of flammables and combustibles.
- Recruits, orients, and trains his own replacement.
- Keeps self informed generally on new developments in civil defense, particularly those related to primary responsibility.
- At request of shelter head, recruits, orients, and trains standby personnel for fire unit.

- Selects, orients, and trains additional personnel from shelteree volunteers to complete staffing of fire, safety, and rescue unit.
- inspects shelter area for accident and fire hazards, and directs correction as soon after shelter habitation as possible.
- Organizes shelteree orientation sessions on accident prevention and fire prevention and control. Posts approved accident and fire prevention rules and regulations.
- Directs activities of shelter fire-fighting brigades.
- Advises shelter manager on establishing fire and security watch.
- Directs operation of trained rescue unit when the need arises.
- Discharges other duties as requested by his organizational superiors.
- Sanitation Head. Has over-all responsibility for developing and directing a shelter personal hygiene and sanitation capability. Specific recommended duties include:

- Determines and recommends personal hygiene and sanitary supplies, to supplement federal stocks.
- Assists supply head in periodic inspection of sanitary supplies for damage, deterioration, or missing inventory.
- Develops, records, and stocks an organization plan for staffing a sanitation squad.
- Develops, records, and stocks a plan of operation for sanitation squad.
- Selects shelter area as a base of operation, and notates area on shelter floor plan.
- Recruits, orients, and trains his own replacement.
- Keeps informed generally of new developments in civil defense, particularly in area of primary responsibility.
- Advises supply head on safe storage of sanitary supplies.
- At the request of shelter head, recruits, orients, and trains standby personnel for sanitation unit.

- Selects, orients, and trains additional personnel from shelteree volunteers to complete staffing of sanitation squad.
- Directs inspection and clean-up activity of sanitation squad.
- Advises shelter manager on sanitation and hygiene problems.
- Directs capability for combating rodents, insects, and vermin infestations.
- Directs disposal of the dead, human waste, shelter debris, food waste, and other sources of unsanitary conditions.
- Develops for shelter head approval rules governing shelter sanitation.
- Assists shelter head in developing staff and shelteree cleanup responsibilities.
- Directs set-up of temporary toilet facilities.
- If necessary, recommends schedule for use of toilet facilities.
- Determines best placement of containers for the disposal of waste materials by shelterees.
- Discharges other duties as requested by his organizational superiors.
- 10. <u>Training and Education Head</u>. Has primary responsibility for developing, organizing, and directing a shelteree training and education program. Also is responsible for assisting shelter head in orientation of shelter cadre. Specific recommended duties include:

- Assists shelter head in developing and applying a general orientation of shelter management cadre.
- Develops, records, and stocks an organization plan for staffing a training and education unit.
- Develops, records, and stocks a program of training and educational activities for adults and school-age children.
- Determines and recommends guidance material to be stocked in support of educational program.
- Recruits, orients, and trains his own replacement.
- Keeps self informed on new developments in civil defense, particularly those related to his primary responsibility.

- Maintains contact with training and education head in the local civil defense organization.
- At the request of shelter manager, recruits, orients, and trains standby personnel for training and education unit.
- Trains other shelter cadre members in methods of training others.

- Selects, orients, and trains additional personnel from shelteree volunteers to complete staffing of training and education unit.
- Directs operation of planned training and education program, including post-shelter survival training.
- Assists recreation head in organizing adult discussion groups.
- Advises shelter head on educational and training problems that warrant his attention.
- Discharges other duties as requested by his organizational superior.
- 11. Recreational Activities Head. Has primary responsibility for developing and directing a shelter recreational program adapted to the circumstances of the shelter and the characteristics of shelterees.
 Specific duties recommended are as follows:

- Assesses materials and supplies normally found in shelter for potential use in recreational activities.
- Assesses characteristics of shelter and potential shelterees for implications for recreational activity planning.
- Determines and recommends guidance material for planning or leading recreational activities.
- Develops, records, and stocks an organization plan for staffing recreation unit.
- Plans, records, and stocks a program of organized recreational activities. Also, stocks plans for stimulating self-initiated recreational activities. Relates the duties of recreation unit to the operation of the recreational program.
- Determines feasibility of stocking reading materials obtained by community donations.
- Keeps self informed on new developments in civil defense, particularly those related to his primary responsibility.

- Recruits, orients, and trains his own replacement.
- At request of shelter head, recruits, orients, and trains standby personnel for recreation unit.

- Selects, orients, and trains additional personnel from shelteree volunteers to complete staffing of recreation unit.
- Directs operation of sheiter recreational activities program.
- Controls circulation of reading materials.
- Assists education head in organizing adult discussion groups.
- Advises shelter head or deputy shelter head on problems related to recreational activities.
- Discharges other duties as requested by his organizational superior.
- 12. Religious Services Head. Has primary responsibility for planning, organizing, and directing a religious services program compatible with shelteree religious needs. Specific recommended duties include:

Before shelter habitation:

- Determines and recommends minimal religious services supplies for stocking in shelter.
- Enlists aid of leaders of different religious faiths in the development of a religious services program. Records and stocks the plan for such services, including services for the dead.
- Selects area of shelter suitable for holding religious services. Notates area on shelter floor plan.
- Canvasses area surrounding shelter for religious leaders who may be expected to utilize shelters. Recruits their services as advisors.
- Develops, records, and stocks an organization plan for a shelter religious services unit.
- Recruits, orients, and trains his own replacement.
- At the request of shelter head, recruits, orients, and trains standby personnel for religious services.unit.

After shelter habitation:

- Selects, orients, and trains additional personnel, preferably recognized religious leaders, from among shelterees to complete staffing of religious services unit.

- Organizes non-denominational religious services.
- Schedules denominational religious services where formal religious leaders are present to conduct such services.
- Directs operation of religious services unit in counseling and comforting shelterees in need of such services.
- Assists shelter head in dealing with individual morale and social control problems.
- Conducts final rites and "burial" services.
- Discharges other duties as requested by his organizational superior.
- 13. Support Services Head. Has primary responsibility for planning, organizing, and implementing a support services program which will absorb idle shelteree time as well as render useful services, e.g., care and control of infants and young children; support care of ill, injured and aged infirm; aid and comfort to emotionally-disturbed persons; and guidance of physical fitness activities. Specific recommended duties include:

Before shelter habitation:

- Develops, records, and stocks a plan of operation for a support services unit. Plan is to be based upon services to shelterees and shelter staff personnel not otherwise assigned as duties to other members of shelter management.
- If feasible, obtains and stocks materials and supplies useful for carrying out planned support activities.
- Develops, records, and stocks an organization plan for staffing the special services unit.
- Determines and recommends stocking of guidance material useful for conduct of support services.
- Keeps self informed on new developments in civil defense, particularly those related to his primary responsibility.
- Recruits, orients, and trains his own replacement.

After shelter habitation:

- Recruits, orients, and trains additional personnel from shelteree volunteers to complete staffing of special services unit.

- Recruits daily volunteers for conduct of various special services on the principle of maximizing the participation of shelterees in useful activities.
- Directs operations of the special services unit. Arranges for unanticipated special services upon request from shelter leader or deputies.
- Discharges other duties as requested by shelter leader or deputies.
- 14. Security Head. Has primary responsibility for the control of extreme cases of shelteree non-cooperation, including violence and law-breaking, which are beyond the normal control of unit, section, and division heads.

Before shelter habitation:

- Develops, records, and stocks a plan of organization and operation, including methods of physical restraint and/or isolation for extreme cases.
- Keeps self informed on new developments in civil defense related to his primary responsibility.
- Establishes and stocks plans for training other members of shelter management in security measures.
- Determines and stocks special equipment necessary for dealing with extreme cases of non-cooperation.
- Recruits, trains, and orients his own replacement.

After shelter habitation:

- Recruits, orients, and trains additional personnel from among shelterees to expand team as per plan.
- Orients key members of the expanded shelter management organization on security measures and nature of his team's services.
- If necessary, render security services as needed.

The role of security head need not be formally recognized with a position title as shown in Figures 4 and 5. It can be subsumed under another title. There is, however, one advantage in recognizing the role by title. It may be reassuring to most shelterees to know there is a security team to implement social control. It is not likely that shelterees will take affront to the police function of a security team, provided the police function is reserved only for extreme cases of non-cooperation or law-breaking.

15. Division, Section, and Unit Heads. The roles of division, section, and unit heads are called for only after shelter habitation, and then only when the number of shelterees call for such heads in order to facilitate direction and control of shelterees. The functional relationship of division, section, and unit heads to other members of shelter management is shown in Figures 4 and 5. Unit heads are responsible to Section Heads. The latter are responsible to Division Heads. Division Heads, in turn, are responsible to the Shelter Manager through the person of the Deputy Shelter Manager.

The primary responsibility of unit, section, and division heads, in large shelters which require such organization, is to orient, guide, and direct the shelterees in the routines of shelter living, and to take steps to ensure that shelterees comply with established shelter rules and procedures. Specific recommended duties are as follows:

- Instruct shelterees on shelter rules and regulations, and act to ensure compliance.
- Orient shelterees on shelter procedures related to sleep, food, water, medical care, recreation, training, and other shelteree needs.
- Cooperate with staff heads in soliciting volunteers for staff organizations.
- Assist shelterees with personal problems of adjustment to the extent that capability permits.
- Act on shelteree grievances, and settle disputes between shelterees.
- Assist staff units in the execution of programs which provide for shelteree needs.
- Report to higher levels of shelter management problems which cannot be resolved at lower levels.
- Execute orders issued by the shelter manager as they may apply to shelterees and shelter areas for which responsible.

It should be clear from the responsibilities and duties of division, section, and units heads why these members of shelter management are <u>not</u> members of a peacetime shelter cadre. The only time such positions should be considered for a peacetime cadre is when the shelter will be inhabited by members of a single peacetime organization. For example, a large company may wish to completely organize the management structure of a shelter within its company shelter.

16. Deputies, Operational Services, Technical Services, and Special Services. Each of these deputies heads a group of staff services (See Figure 5.) Their primary responsibility is to direct coordinate, supervise, and evaluate the activities of the staff units reporting to them. It is assumed that each staff head reporting to these deputies is fully capable of planning, organizing, and directing the activities of his unit. It is not expected that deputies will actively assume the responsibilities and duties described for their staff heads, except when the cadre is limited to the minimum indicated in Figures 4 and 5. In the latter case, the deputies must assume the peacetime responsibilities and duties heretofore described for their subordinate staff heads.

The Service Deputy roles are necessary because without them too many staff and line shelter management heads in large shelters would be reporting to the Shelter Manager and/or his Deputy Shelter Manager.

Conversion of Roles to Position Titles

The basic shelter management roles described in the preceeding section can be thought of as individual shelter management positions, or two or more may be combined into a single position. The choice is for the shelter manager to make, since he will have to tailor the cloth to fit the situation. In the section that follows, some of the roles are shown combined in two recommended ways to organize a shelter management team. The combinations shown are certainly not the only logical combinations.

One principle should guide those who wish to combine two or more roles into a single position. The combination should be natural so that it is reasonable to expect one man to be basically qualified to handle the multiple responsibilities and duties involved. An example of a compatible combination is "maintenance" with "supply" for the position, "Maintenance and Supply Officer." The combination of "radiological" and "recreation" roles would be incompatible, not necessarily because the one man could not be qualified for both, but because the duties would conflict in time and place.

Generally, compatiable combinations include medical and sanitation, radiological and communication, fire and safety, maintenance and supply, training
and information, recreation and religion, and mess and supply. In shelters
short on peacetime volunteers, the members of the management cadre may have
to assume even more than two roles until additional staff can be recruited.
Under wartime conditions, that would be inadvisable because actual assumption of so many responsibilities and duties would inevitably result in
conflict.

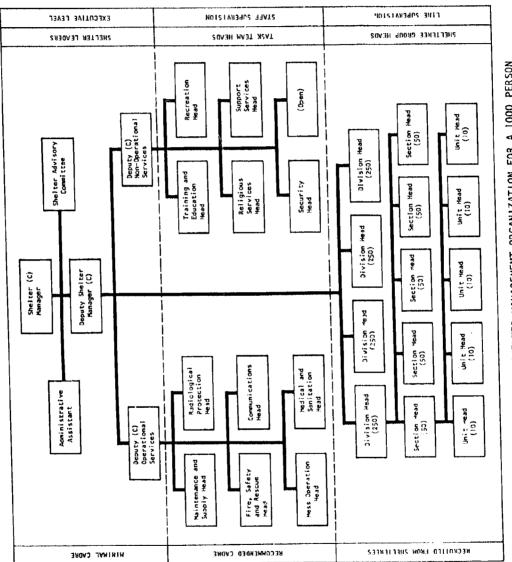
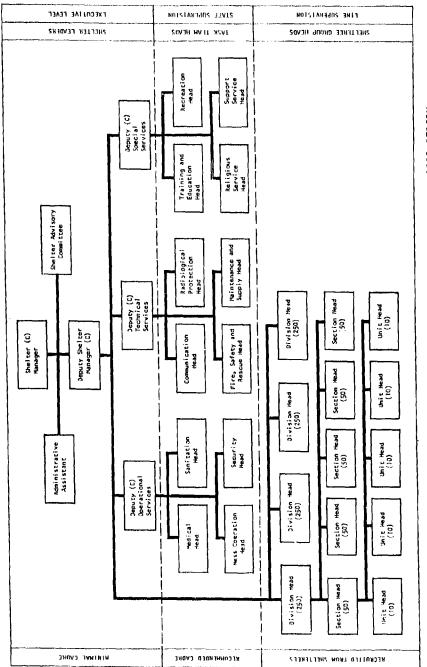


Figure 4. an EXAMPLE OF SHELTER MANAGEMENT ORGANIZATION FOR A 1000 PERSON SHELTER. The boxes marked "C" indicate a minimum peacetime cadre. The recommended cadre includes the minimal cadre plus the heads of staff units. The division, section, and unit the heads are part of the line management, and not included in a heads are cadre. The markers in brackets indicate the number of shelterees under each line head.



AN ALTERNATIVE SHELTER MANAGEMENT ORGANIZATION FOR A 1000 PERSON SHELTER. The major change in this alternative is a reduction in the number of staff supervisory heads which report to the deputy level. The change is intended to make the deputy position more effective by reducing the number of functions under each deputy. ķ Fi gure

Alternative Shelter Management Organizations

The magnitude of the management recruitment, selection, and training problem for any given shelter facility will depend, in part, upon the management organization planned for the shelter. For that reason, a discussion of management organization is appropriate. A more complete discussion of shelter management organization will be found in Bend, 1963.

Criteria for Management Organization

From the standpoint of effectiveness, there are some known good and poor ways to organize a management structure. The followin quidelines are based upon generalizations drawn from industrial managements plus an interpretation of the shelter management problem. They should be taken into account whenever a shelter management team is organized.

- 1. Absence of line of command conflict. From the shelter manager on down, each member of the management team should be under the direction of one, and only one person in order to avoid conflict in the line of command. The principle has always been axiomatic in military organizations. Non-military organizations have come to recognize its merit.
- 2. Coverage of essential roles. The essential roles involved in running a shelter, along with their related responsibilities and duties, must be covered by the shelter management organization. Stated differently, some member of the management organization must be directly responsible for each of the essential roles. This implies that knowledge of essential management roles and tasks is a necessary prerequisite to establish the management organization plan.
- 3. Capability for rapid expansion. The basic organization plan of shelter management should be such that a management cadre could be rapidly expanded into a full management complement without altering the organization plan. Thus, it should not be necessary to rethink and change the organization plan that governed the preshelter habitation cadre when going to the shelter habitation management team.
- 4. Separation of staff and line activities. Staff services are those special services which must be rendered to the shelterees and the shelter as a system. Line functions are those which govern the behavior of the mass of shelterees not involved in staff services. It is the opinion here that line and staff activities are basically incompatible in a shelter situation because of time, place, activity, and qualification conflicts. Therefore, line and staff functions should be clearly separated in the shelter management organization.

- 5. The pyramid principle. The higher the position on the management ladder, the broader is the total scope of responsibility. It is imperative that the increasingly broader responsibilities are not prevented from realization by having too many persons reporting to, and thereby competing for, the attention of higher level positions. Hence, the organization structure should reflect the principle, the higher the position, the fewer the people reporting to the position. No management position should have more than six lower management positions reporting directly to it.
- 6. Replacement coverage for key positions. The management organization structure should be such that the replacements for key management positions should be clearly implied by the qualifications, responsibilities, and duties associated with immediately subordinate positions. Where this is not possible, line of succession will have to be indicated. Thus, a structure in which a single deputy reports directly to the shelter head clearly implies the line of succession. Where, however, two deputies report to the shelter manager, the line of succession must be clarified. Line of succession problems should be avoided if possible by designing the organization structure to avoid them.

Implications for Management Selection and Training

The shelter management organization charts shown in Figures 4 and 5 have some basic implications for the selection and training of shelter management personnel. The upper levels of shelter management, and particularly the shelter manager, must be selected for their ability to get results through a multi-layered organization structure. The point is readily clarified by focusing on the role of the shelter manager. Except in the smallest shelters, the shelter manager must not attempt a direct, takecharge posture on each of the multitude of problems likely to characterize the shelter. His position is analogous to the manager of a large industrial plant. The latter must develop or modify a management organization to meet the plant objectives. He must delegate broad responsibilities to his line and staff middle management. He cannot attempt to solve low-echelon plant problems by his own direct intervention. If he does, he risks being ineffective on the broad level of formulating plant policy and procedure. He also risks undermining the status and authority of his middle management. The same can be said for the shelter manager. He can no more be a one-man show than the plant manager. The greater the shelter capacity, the larger will be his management team, and the more he will have to delegate responsibility and authority to others.

All this is quite contrary to the notion, held by some, that a shelter manager must have the same resourcefulness and leadership qualities as the head of a survivor-crowded lifeboat, or the top sergeant of a lost platoon, or, reaching back to our own resourceful pioneers, the head of a wagon train making its way through Indian country. Though it sounds romantic and idealistic, this is not the kind of shelter leadership that is needed. What is needed basically is the leadership of the experienced, competent manager who can develop and work through a team.

The talents of the professional manager are rarely demonstrated by those relatively inexperienced at managing. For that reason, the following selection principle is strongly recommended: Select for any shelter management position only a person whose occupational experience reflects the management or supervisory skills which the shelter position will require. By this principle, a physician with no significant administrative experience would be a poor choice to manage a 500-person capacity shelter. A plant manager with that many people in his plant would, other things equal, be a better choice.

The above reasoning also has implications for shelter management training. Basic managerial skills cannot be learned from reading a book or taking a course, however helpful such efforts may be. In the last analysis, such skills are learned by being a manager. The implication for the training of shelter managers and their top level staff personnel should be clear. Such training should not attempt to develop managerial skills. Indeed, if it does so, it may undermine the principle of selecting primarily those who have such skills. Instead, such training should concentrate on what the person who already has management skills needs to know to run a shelter. It should deal with topics specifically related to the problems of planning, organizing, and running a shelter.

CHAPTER ${f IV}$

SHELTER MANAGER AND CADRE SELECTION GUIDES

Chapter IV Outline

	Page
RATIONALE FOR SELECTION GUIDES	49
Need for Selection Standards	49
Basic Categories of Selection Standards	49
RECOMMENDED SELECTION GUIDES	50
Shelter Manager (Deputy Shelter Manager)	51
Deputy, Operational Services	51
Deputy, Technical Services	52
Deputy, Special Services	52
Medical Head	53
Mess Operation Head	54
Sanitation Head	54
Security Head	55
Radiological Head	55
Communication Head	56
Fire Safety, and Rescue Head	56
Maintenance and Supply Head	57
Training and Education Head	57
Recreation Head	58
Religious Services Head	58
Support Services Head	59
Division, Section, and Unit Heads	59
RELATION TO SELECTION STANDARDS TO SHELTER MANAGEMENT POSITIONS	60

IV. SHELTER MANAGER AND CADRE SELECTION GUIDES

Rationale for Selection Guides

Need for Selection Standards

The shelter management cadre will be the nucleous of the fully-expanded shelter management organization. During peacetime, it will have the full responsibility for establishing and maintaining the operational readiness of the shelter. During wartime, it will run the shelter with the help of the expanded staff. The responsibilities involved in both of these periods are many and complex. Not all who volunteer will necessarily have the capability for assuming such responsibilities. It makes sense, therefore, to screen cadre volunteers, including potential shelter managers, to ensure that they are qualified. Such screening will necessitate the use of selection standards to guide those who must make the selection decisions.

Basic Categories of Selection Standards

The selection standards (guides) for cadre roles can be classified as follows:

Technical knowledge and skill requirements. Some cadre roles
will require persons with a background of technical knowledge
and skills. A maintenance head, for example, should have the
knowledge to direct repair and maintenance work. Since such
a technical background cannot be acquired via short-term training, it must be regarded as an essential qualification for the
position.

A distinction must be made between technical knowledge which is necessary as a prerequisite for selecting a person to be a member of the shelter cadre and technical knowledge which can be acquired by post-selection training. The concern here is only with technical knowledge essential or highly desirable before selection.

2. Managerial knowledge and skill requirements. Managerial and supervisory experience will be desirable for all cadre positions, and imperative for the key positions. The managerial and supervisory know-how, like the technical, cannot be acquired by short-term training. It must, therefore, be regarded as an essential qualification for key positions.

3. Personal characteristic requirements. Leadership studies have failed to identify a unique combination of personal traits which characterize effective leaders (94, 98). Nevertheless, some personal attributes can be considered highly desirable for key shelter management positions. Also, there are some personal factors which are highly undesirable. Selection guides should take both kinds into account.

Recommended Selection Guides

The qualifications for key shelter management positions described in this section were derived from the analysis of responsibilities and duties associated with those positions. Three things should be made clear about the qualifications recommended: (1) They represent a best judgment based upon available information. They are not experimentally derived or validated. (2) Persons lacking such qualifications are not necessarily beyond consideration for shelter management positions, albeit they are less likely to be effective than those possessing such qualifications. (3) The qualifications listed were restricted to those which could be ascertained in the selection situation likely to characterize evaluation of volunteers. An elaborate, professional evaluation of volunteers is impractical. Consequently, there is little point in listing qualifications which would require such evaluation.

In addition to a general description of qualifications, a list of occupations is provided from which persons may be recruited for the key positions. The recruitment of persons from the listed occupations is the functional equivalent of applying many of the selection qualifications. Persons selected from such occupations are likely to have the basic qualifications. Thus, for the most part, occupational experience provides the objective yardstick of evaluating the suitability of volunteers for certain shelter management positions.

Descriptions of desirable trait attributes have, for the most part, been omitted because they add nothing to the selection standard. It can be assumed that stable personalities with qualities of leadership and resource-fulness are wanted. Unfortunately, such adjectives are of little help in screening personnel.

The shelter management roles discussed in this section are those identified in Figure 5, p. 45. The basic qualifications would remain the same even if more of the roles were combined under a different organization plan.

Shelter Manager (Deputy Shelter Manager)

- 1. Responsibilities and duties. See p. 27.
- Recommended selection qualifications. Technical knowledge: An engineering background is desirable but not essential. The technical knowledge required can be acquired by post-selection training. Managerial experience: Requires experience managing an organization of comparable complexity to the shelter organization which he will head. For example, if he is to head a 1,000 person shelter with a four-level management structure, he should have comparable management experience. Personal characteristics: The following visible characteristics are undesirable: lack of poise, distracting nervous mannerisms, defects of speech or hearing, pronounced physical handicaps including excessive obesity, and evidence of emotional instability.
- 3. Recommended Sources: The occupations from which potential Shelter Managers may be recruited should be compatible with the status and complexity of the Shelter Manager's position. These in turn will be determined by the size of the shelter.

Likely occupational sources of shelter managers include factory managers, industrial plant superintendents, department store executives, company officials, civil service administrators, hospital administrators, bank managers, educational administrators, contruction superintendents, and other occupations involving equivalent executive experience.

Deputy, Operationale Services

- 1. Responsibilities and duties. See p. 43.
- 2. Recommended selection qualifications. Technical knowledges: An engineering background is desirable, but not essential. Any technical knowledge required by this position can be acquired by post-selection training. Managerial experience: Requires managerial experience to plan, direct, coordinate, and evaluate the activities of the staff units under his direction. Managerial experience may be less than required for the Shelter Manager, but not so much less that he could not assume the latter's role if necessary. Under no circumstances should his peacetime managerial rank or status greatly exceed that of the Shelter Manager or the Deputy Shelter Manager. Personal characteristics: Same as those cited for Shelter Manager.

3. Recommended sources: The larger the shelter, the more staff personnel will come under this Deputy's direction. Therefore, the occupations from which to recruit this Deputy must be compatible with his shelter status and responsibility.

Likely occupational sources include service heads in industrial, commerical, and community service organizations, e.g., managers of employee relations, advertising, public relations, industrial relations, sales, etc.; also, middle level administrators of hospitals, schools, banks, charitable organizations, hotels, etc. Summary: Select middle-level managers and administrators with emphasis on personnel services rather than technical services.

Deputy, Technical Services

- 1. Responsibilities and dutles. See p. 43.
- 2. Recommended selection qualifications. Technical knowledge: A professional background in engineering, construction, plant maintenance, and instrumentation would be an asset for this role, but such a background is not absolutely essential. At this level managerial experience is by far the more important prerequisite. Managerial experience: Same as cited for Deputy, Operational Services. Personal characteristics: Same as cited for Shelter Manager.
- 3. Recommended sources. Likely occupational sources for recruiting a Deputy, Technical Services include services heads with a technical background from industrial, consulting, construction, utility, and governmental organizations, e.g., heads of industrial engineering, construction engineering, plant maintenance, etc.; also engineering consultants, physical laboratory administrators, construction superintendents, mining engineers, etc.; also middle-level production heads such as departmental production heads.

 Summary: Select middle-level managers and administrators with emphasis on technical services rather than personnel services.

Deputy, Special Services

1. Responsibilities and duties. See p. 43.

- 2. Recommended selection qualifications. Technical knowledge: A professional background in such areas as training, education, employee relations, social work, or adult recreation would be an asset for the reason that immediate subordinates will be concerned with activities related to such a background. However, such a background is not absolutely essential. The technical knowledge related to such activities, that must be known by this deputy can be acquired by post-selection training. Managerial experience: Same as cited for Deputy, Operational Services. Personal characteristics: Same as cited for Shelter Manager.
- 3. Recommended sources. Occupational sources for recruiting a Deputy, Special Services include training and education director, personnel manager, school principal, school physical education director, employee services director, social services organization director, religious leader, recreational director, community welfare director, YMCA director, youth camp director, social work supervisor public service organization (Red Cross) administrator and other similar type occupations.

Medical Head

- 1. Responsibilities and duties. See p. 29.
- 2. Recommended selection qualifications. Technical knowledge: A physician with knowledge of general medical diagnosis and treatment and of minor surgery is desirable, and should be sought. Where a physician cannot be recruited, the same qualifications should be sought in persons with a medical or related field background. A professional medical background is increasingly important as the shelter capacity increases. Managerial experience: Helpful, but not essential. Personal characteristics: No specific requirements.
- 3. Recommended sources. Every effort should be made to recruit a physician as the shelter Medical Head. Where a physician cannot be recruited, the following occupations should be considered: dentist, registered nurse, surgical nurse, first-aid instructor, veterinarian, surgical technician, medical intern, school nurse, and hospital administrator. Retired persons with such occupational histories should also be considered.

Mess Operation Head

- 1. Responsibilities and duties. See p. 33.
- Recommended selection qualifications. Technial knowledge: Unless the shelter is or will be equipped to serve prepared meals via kitchen facilities, no technical knowledge of food preparation is required. Where kitchen facilities are to be used, the Mess Head should be familiar with dietetics, food preparation, and kitchen organization. Managerial experience: The larger the shelter, the larger will be the mess unit, and the more desirable will it be for the Mess Head to have supervisory experience. Personal characteristics: Freedom from communicable disease is essential for the Mess Head and all food and water handlers.
- 3. Recommended sources. Where normal food preparation is planned, the Mess Head may be recruited from the following occupations: chef, cook, kitchen supervisor, dietician, home economics teacher, restaurant manager, nutritionist, short-order cook, luncheonette owner, cafeteria supervisor, catering service manager, and retired persons with a background in food preparation. Where the plan is to feed only survival rations, the above occupational backgrounds are less essential.

Sanitation Head

- 1. Responsibilities and duties. See p. 36.
- Recommended selection qualifications. Technical knowledge: Principles and techniques of disease prevention through sanitation are desirable, but not essential. Managerial experience: Some supervisory experience is desirable, particularly when the sanitation unit exceeds six in number. Personal characteristics: No specific requirements.
- 3. Recommended sources. Occupations from which Sanitation Heads may be recruited include sanitary engineer, hygiene teacher, supervisor of hospital orderlies, public health engineer, hygienist, nurse, and hospital custodian. Where such occupations cannot be tapped consideration should be given to any occupation related to personal hygiene and/or public and institutional sanitation problems. The possibility of combining the sanitation responsibility and the medical responsibility under one head should also be considered when selecting cadre for small to medium sized shelters.

Security Head

- 1. Responsibilities and duties. See p. 41.
- 2. Recommended selection qualifications. Technical knowledge: The Security Head should have a knowledge of techniques for violence control and other security measures. A police function background is desirable, but not absolutely essential. Managerial experience: No supervisory experience is required except in large shelters where the Security Head will have to plan, organize, and direct security measures. Personal characteristics: A tall, physically capable individual is to be preferred because of the psychological and physical advantages for dealing with anti-social individuals.
- 3. Recommended occupational sources. The Security Head may be recruited from the following occupations: policeman, fireman, plant protection guard, and other occupations related to security work. Consideration should also be given to persons who have had experience in police or security work, even though they may no longer be engaged in such work.

Radiological Head

- 1. Responsibilities and duties. See p. 30.
- 2. Recommended selection qualifications. Technical knowledge: A background in electronic repair work or instrumentation is desirable but not essential. Managerial experience: Some supervisory experience is desirable for Radiological Heads who will operate in large (greater than 500) shelters. The ability to plan, organize, direct, and evaluate the activities of radiological monitoring teams is essential. Personal characteristics: More than other persons, the Radiological Head may be required to risk radiation exposure under certain shelter circumstances. Acceptance of this possibility is an essential selection qualification.
- 3. Recommended occupational sources. The Radiological Heads may be recruited from the following occupations: electronic engineer or technician, radio-TV repairman, electronic equipment repairman, instrumentation repairman, X-ray technologist, X-ray repairman, physicist, laboratory equipment technician, physics teacher, electronics teacher, radiologist, and electrical engineer. Also consider retired persons with an appropriate occupational history.

Communication Head

- 1. Responsibilities and duties: See p. 31.
- Recommended selection qualifications. Technical knowledge: If radio and/or other electronic equipment is to be used, a background in operating or repairing such equipment is essential. Otherwise, no technical background is necessary. Managerial experience: Some supervisory experience would be helpful, but not essential. Personal characteristics: Absence of speech and hearing defects.
- 3. Recommended sources. If electronic communication equipment is to be used, the Communication Head should, if at all possible, be recruited from occupations familiar with the operation and repair of such or similar equipment. Such occupations include radio repairmen, electronic technicians, aircraft control tower operators, radio dispatcher, electrical engineer, communications officer (military reserves), message center operator, and communications equipment repairmen. The "ham!" radio operator is an excellent source because of his interest and electronic resourcefulness. Where the communication equipment is nothing but a telephone, recruiting from above occupations is not necessary. Do not overlook retired persons with the above occupational backgrounds.

Fire Safety, and Rescue Head

- 1. Responsibilities and duties. See p. 35.
- 2. Recommended selection qualifications. Technical knowledge: A background in fire prevention and control work and/or industrial safety is highly desirable. Managerial experience: Some supervisory experience is desirable for such heads who will operate in large (greater than 500) shelters. The ability to plan, organize, train, and direct fire and rescue teams is essential. Personal characteristics: A stable personality is essential. The person must be capable of forceful leadership in an emergency situation.
- 3. Recommended occupational sources. The Fire Safety and Rescue Head may be recruited from the following occupations: municipal firemen, fire school instructors, industrial plant firemen, salesman of fire fighting equipment, plant safety engineers, safety directors, loss prevention administrators, insurance company fire specialists, and custodial occupations which include training in fire prevention and control. Also give consideration to retired persons with such occupational histories.

Maintenance and Supply Head

- 1. Responsibilities and duties. See p. 32.
- 2. Recommended selection qualifications. Technical knowledge: If the shelter contains auxiliary power equipment, ventilating equipment, and/or air-conditioning equipment, the Maintenance Head should have a mechanical and electrical background sufficient to operate, maintain, and if necessary repair such equipment. Where the operation of such equipment is essential to life in the shelter, technical competence to service the critically needed equipment is imperative. Where such equipment is not essential to life, the technical qualification for this position can be regarded as desirable, but not absolutely essential. It is also desirable that the Maintenance and Supply Head have some knowledge of structural and electrical repairs. Managerial experience: Supervisory experience would be helpful, but not essential. Personal characteristics: No specific requirements.
- 3. Recommended occupational sources. The Maintenance Head may be recruited from the following occupations: plant maintenance foreman, ventilation engineer, air conditioning repairman, construction supervisor, carpenter, plumber, electrician, motor repairman, custodial engineer, building superintendent, small general contractor, building repair and remodeling contractor, and retired persons with such backgrounds. Where ventilation, air conditioning, and auxillary power equipment are essential for shelter functioning, the Maintenance Head should be chosen on the basis of his experience with such equipment.

Training and Education Head

- 1. Responsibilities and duties. See p. 37.
- 2. Recommended selection qualifications. Technical knowledge: A background in training and/or education work is highly desirable, but not absolutely essential. Particularly desirable would be a background in adult education or high school teaching. Managerial experience: Some supervisory experience is desirable, but not essential. The ability to plan, organize, direct, and evaluate shelter training and educational activities for children and adults is essential. Personal characteristics: Because of exposure to large numbers of shelterees in a training situation, a friendly, outward-going personality is desirable. Also, the absence of speech defects, facial disfigurement, and mannerisms likely to distract trainees is desirable.

3. Recommended occupational sources. The Training and Education Head may be recruited from the following occupations: public or private school teachers, school principal, university instructor, adult education teacher, vocational school teacher, plant training supervisor, training director, educational researcher, and middle-level management positions which employ training. Consideration should be given to retired persons with such occupational histories.

Recreation Head

- 1. Responsibilities and duties. See p. 38.
- 2. Recommended selection qualifications. Technical knowledge: An occupational background associated with planning and guiding recreational activities for either adults and/or children is highly desirable. Managerial experience: Supervisory experience is desirable, particularly for large (greater than 500) shelters. Requires basic ability to plan, organize, direct, and evaluate recreational programs. Personal characteristics: A sociable, out-going personality is desirable in addition to the ability to work with schoolage children. Also, see Shelter Manager requirements.
- 3. Recommended occupational sources. The Recreational Head may be recruited from the following occupations: directors of youth camps, community welfare centers, community recreational centers, YMCA and YMHA organizations; director of employee services, hospital recreation supervisor, playground supervisor, public and private school teachers, social worker, church youth leader, scout leader, personnel manager, physical education instructor, vocational therapist, and other occupations related to recreational services, excluding professional entertainers. Consideration should also be given to retired persons with such occupational histories.

Religious Services Head

- 1. Responsibilities and duties. See p. 39.
- 2. Recommended selection qualifications. Technical knowledge: A background as a minister, priest, or rabbi is desirable, but not essential. Managerial experience: Not necessary. Personal characteristics: if not a formal religious leader, should be devout in religious convictions, capable of counseling people with problems, and a good listener. Emotional maturity and ability to set personal example are essential. An essential prerequisite is a belief in the importance of religious services in a shelter situation.

3. Recommended occupational sources. The Religious Services Head may be recruited from the following occupations: minister, priest rabbi, member of a religious order; e.g., monk or nun; member of church board, school principal, school teacher, counselor or any religious-minded person from a middle-management position. Retired persons who are active in church work should be considered when volunteers cannot be had from the above sources.

Support Services Head

- 1. Responsibilities and duties. See p. 40.
- Recommended selection qualifications. Technical knowledge: None required. Managerial experience: Supervisory experience is desirable for Support Service Heads of large shelters. Should have the ability to plan, organize, and assign special service teams to duties such as child care, and control hospital patient care, psychological aid, and other social services. Personal characteristics: No specific requirements.
- 3. Recommended occupational sources. The Support Services Head need not be selected from any particular occupation. A resourceful woman with supervisory experience, such as a school teacher or office supervisor, would be satisfactory.

Division, Section, and Unit Heads

- 1. Responsibilities and duties. See p. 42.
- 2. Recommended selection qualifications. Technical knowledge: None required. All technical information related to the responsibilities and duties of these positions can be provided by training after recruitment and selection. Managerial experience. Since these positions will function in a managerial and supervisory role, persons for them should be selected on the basis of having suitable managerial or supervisory experience. A possible exception is the Unit Head. The latter will be responsible for about ten shelterces. It may be desirable to have the shelterces elect their own Unit Heads.
- 3. Recommended occupational sources. Division, Section, and Unit Heads need not be selected from any particular occupational background. It is desirable only that the first two have supervisory experience commenserate with their responsibilities as shelteree group leaders.

Relation to Selection Standards to Shelter Management Positions

The foregoing selection standards (guides) were, with some exception, described separately for each management role. It does not necessarily follow that a shelter will be organized so there is one position for each role. The conversion of roles into positions, discussed in Chapter III, may result in two or more roles being combined in one position. For example, the roles of "maintenance head" and "supply head" may be combined under one position title, a.g., maintenance and supply officer, or some equivalent title. The foregoing selection qualifications for "maintenance head" and "supply head" were so combined to illustrate the principle.

When a person is sought for a multiple-role position, consideration should be given to the selection qualifications pertinent to all roles involved in the position. More weight should be given to the role qualifications which are most essential to the position. For example, if the "medical" and "sanitation" role were to be combined in one position, the selection qualifications for the "medical" role should govern the actual selection because they have greater essentiality than those for the "sanitation" role.

 $_{\text{CHAPTER}}\,\mathbf{V}$

RECRUITMENT OF SHELTER
MANAGERS AND CADRE STAFFS

Chapter V Outline

	Page
AN ORIENTATION ON THE RECRUITMENT PROBLEM	61
The Basic Recruitment Problem	61
Recruitment for Public and Private Shelters	62
Relation Between Recruitment and Selection	62
RECRUITMENT METHODS AND CRITERIA	63
Types of Recruitment Methods	63
Criteria for Acceptable Recruitment Methods	63
A RECOMMENDED RECRUITMENT STRATEGY	65
The Strategy of Recruiting from Occupants of Shelter Facilities	65
The Strategy of Recruitment Via the Community Influence Structure	68
BASIC STEPS OF THE RECRUITMENT APPROACH	71
Identification of Shelter Facilities	71
Identification of Key "Influentials"	71
Initial Contact of Key "Influentials"	72
Operation of Community Action Committee	72
Recruitment of Shelter Managers	73
Orientation of Shelter Managers	74
Formation of Complete Shelter Cadre	74
Follow-Up on Status of Shelter Cadres	74
A PROBLEM RELATED TO THE PROPOSED STRATEGY	75

•

V. RECRUITMENT OF SHELTER MANAGERS AND CADRE STAFFS

1 :

An Orientation on the Recruitment Problem

There are several aspects of the cadre recruitment problem which warrant discussion before considering the details of recruitment strategy and procedure. They concern (1) peacetime versus wartime recruitment, (2) public versus private shelter cadre recruitment, and (3) the relationship between recruitment and selection.

The Basic Recruitment Problem

There can be both a peacetime and a wartime recruitment problem. In order to justify the emphasis of this chapter, a discussion of both is in order.

- 1. The peacetime recruitment problem. The basic problem in peacetime is to recruit a shelter management cadre for each of the public fallout shelters. Such peacetime management cadres, recruited from the citizenry, are necessary to establish and maintain the operational readiness of public shelter facilities. That, in brief, is the what and why of the peacetime shelter management recruitment problem.
- 2. The wartime recruitment problem. In the event of a nuclear attack, the peacetime shelter management cadre may not make it to the shelter. In that unlikely event, the shelter will be without a nucleous of a shelter management organization. The basic recruitment problem, then, will be to recruit a management organization from the shelterees.

The two kinds of recruitment problems warrant two further comments:
(1) The distinction is not one involving alternatives. The viewpoint of this report is that both types of recruitment may be necessary. A peacetime cadre is the only practical solution to the problem of developing and maintaining shelter operational readiness. (2) Of the two recruitment problems, peacetime recruitment of a cadre is immeasurably the more difficult problem. Even with the best recruitment techniques, it will be no easy task to convince the kind of people who need to be recruited to devote their time and energy for something as controversial as civil defense. The emphasis of this chapter, therefore, is on the peacetime recruitment problem.

Recruitment for Public and Private Shelters

The recruitment problem will be different in public and in private shelters.

- 1. The private shelter recruitment problem. Large private shelters, established by financial, commercial, industrial, and other organizations for primarily their own personnel, will have no recruitment problems as such. It is reasonable to expect that such organizations will select shelter management organization cadres from the framework of their own management structures. It is also likely that the line of command in the cadre organization will parallel closely the line of command in the parent organization.
- 2. The public shelter recruitment problem. Private organizations that lend their facilities for potential use as public fallout shelters will not necessarily recruit from their own management personnel a peacetime shelter management cadre. Even if they were so inclined, they will not necessarily have the basically qualified personnel to provide a management cadre, albeit they will probably have someone to represent their own interests on such a cadre in the event that it materializes. The recruitment problem, therefore, will be to get volunteers from either the organization which has donated its facility as a public shelter or from outside-the-organization sources.

Clearly, the real recruitment problem concerns only the public fallout shelters. The emphasis of this chapter, therefore, is exclusively on that problem.

Relation Between Recruitment and Selection

Recruiting methods are not wholly independent of selection methods. When recruitment methods are applied to a selected class of people, they automatically have a selection function. For example, if only municipal Fire Captains were considered for recruiting a shelter-fire officer, the selection problem would be virtually non-existent. A Fire Captain would, by virtue of his training and experience, be automatically qualified to be a shelter fire officer. Unfortunately, such selectivity in applying recruitment techniques is not always possible. Nevertheless, the principle of selective application of recruiting techniques should be applied where possible to reduce the selection problem. Volunteers should be sought from among those who are most likely to be qualified.

Recruitment Methods and Criteria

Types of Recruitment Methods

There are many methods for arousing people to volunteer their services for so-called worthy causes. Some of the more commonly used methods are listed below.

Not all of the methods listed below are suitable to the task of recruiting a shelter management cadre. Indeed, most would be detrimental to the recruitment purpose for reasons to be discussed later. They are listed so they can be rejected on rational grounds rather than by the fact of omission.

- 1. Radio and television appeals
- 2. Movie house film appeals
- 3. Direct mail appeals
- 4. Newspaper advertisement appeals
- 5. Appeals by public officials
- 6. Appeals to organizations
- 7. Personal addresses to small groups
- 8. Person-to-person appeals
- 9. Billboard and poster appeals
- 10. Appeals by public "heros"

Criteria for Acceptable Recruitment Methods

The basis for rejecting certain potential recruitment methods lies in the criteria which acceptable methods should meet. The criteria are as follows:

1. Control over number of volunteers. The recruitment method should have a high degree of control over the number of volunteers who are responsive to the recruitment appeal. If the method is such that many more volunteers may apply than are needed or can be handled, there is the possibility that large numbers of volunteers may have to be rejected. Such an outcome is likely to generate negative attitudes toward the civil defense effort. People who make a special effort to volunteer their services don't expect to be turned down or ignored.

Recruitment appeals via the mass media, i.e., radio, television, newspapers, magazines, and billboards are rejected by the above criterion when they are designed to bring forth volunteers directly. Mass media appeals are likely to result in more volunteers than are needed or than can be handled. Similarly, appeals to heads of national organizations for mass soliciting of volunteers from within the organizations would have to be rejected as an acceptable method for the reason of no control over the number of volunteers.

2. Control over type of volunteers. The recruitment method should be selective so that it controls the caliber of people who volunteer their services. The need is for people who have the necessary basic qualifications. A mass appeal recruitment technique creates the problem of turning down large numbers of unqualified people. This, in turn, means risking negative attitudes on the part of those who were rejected. It also means an unnecessary degree of processing many to get few.

The above criterion rules out mass media recruitment techniques. The latter offer no control over the type of volunteers unless they request only specific types. Such specific requests in mass media techniques are not recommended because of the possible offense to many would-be volunteers. Also ruled out by the above criterion are (1) appeals by public "heros," (2) mass-directed mail appeals, and (3) public appeals by public officials. None of these methods assure any degree of control over who will volunteer.

- 3. Minimal disturbance of the public. The ideal recruitment method should not alarm or arouse the public into thinking a nuclear war crisis is near. Any large-scale use of a mass media approach runs the risk of alarming a sizable segment of the population. To many people, it will sound as if the Government were getting ready for war. Indeed, there is even the impact upon foreign governments which needs consideration. Negative public reactions are particularly likely to be intense if a mass media recruitment campaign happens to coincide with a sudden increase in cold-war tensions. The result could be a public clamor for clarification, and a public reaction against civil defense in the aftermath of a reduction in coldwar tensions.
- 4. Avoidance of organization ties. The recruitment method should not be based on the principle of getting recruits from within a small number of national organizations. For example, it would be undesirable to attempt to recruit volunteers from veteran's organizations, or any other type of national organization, on an exclusive approach basis. Such a tactic runs the risk of (1) associating civil defense with certain organizations rather than all citizens, (2) having to accept

volunteers who are not qualified, and (3) alienating segments of the public who react negatively to certain national organizations. The ideal recruitment approach should seek qualified volunteers independent of any particular organizational membership.

- 5. Avoidance of military cadres. Appealing though it may seem to some, a recruitment technique applied exclusively to retired military personnel, reservists, and National Guard personnel is counter-indicated for several reasons: (1) influential segments of the public may take serious exception to the military flavor of the shelter cadres, (2) It is questionable whether such sources will provide qualified personnel for all key cadre positions, (3) it may also have the look of a war preparation to many persons here and abroad, and (4) it divorces citizens from the civil defense effort.
- 6. Maximal use of local citizenry. The ideal recruitment method should involve local citizens in a voluntary effort. The purpose of the principle is to involve responsible citizens in civil defense efforts in their own communities. Any method that uses established federal or state organizations puts the local citizens exclusively on the receiving end of the recruitment campaign. By forcing the local citizenry to assume a passive role at the onset, the recruitment effort fails to harness the participation of influential local citizens who, while not in a position to volunteer, may be in a position to influence others to volunteer.

A Recommended Recruitment Strategy

The Strategy of Recruiting from Occupants of Shelter Facilities

The overwhelming majority of public fallout shelters are peacetime facilities which are occupied by relatively large numbers of people for eight hours or more at least five days a week. It makes sense to explore the possibility that a shelter management cadre can be recruited from the people who regularly occupy such facilities.

The type of peacetime facilities which house fallout shelters are shown in Table ().

TABLE 11. TYPE AND NUMBER OF FACILITIES MARKED AS PUBLIC FALLOUT SHELTERS AS OF MID-1963 (75). The types of shelter facilities suggest that single or multiple management organizations exist as the normal, peacetime occupants of most facilities.

1.1

Residential Facilitles (Hotels, Apartments, etc.)	29,21
Commercial and Industrial Facilities	39,30
Educational Institution Facilities	14,60
Government Office Facilities	9,07
Military Services Facilities	4,57
Welfare Institution Facilities	2,38
Amusement and Public Meeting Facilities	2,08
Religious Institution Facilities	3,59
Transportation Terminal Facilities	2,19
Hospital and Clinic Facilities	4,3

The critical question is, are management calibre people likely to be found as the regular occupants of such facilities? Quite obviously, the answer is affirmative. The majority of such facilities have one or more management organizations as a normal, peacetime facility occupant. That means it is highly probable that the kind of basically qualified persons needed for shelter management cadres are already normal occupants of the facilities which house fallout shelters.

There is still another aspect of these facilities that simplifies the recruiting problem. Many of them are single management organization facilities; that is, a facility occupied wholly by a single management organization. For example, a given insurance company may occupy an entire building. That means the existing management organization may provide the shelter management cadre. Moreover, if the top management or administrative heads of such single management organization facilities can be convinced that their organization should establish (recruit) an active shelter management cadre, the recruitment problem is virtually solved for such facilities. This general reasoning also applies to multiple management organization facilities. The fact that a building may be occupied by more than one management organization simply means that a cadre should not be recruited exclusively from one organization.

It is the recommendation of this report, therefore, that whenever the facility containing the fallout shelter is a single or multiple management organization facility, as defined above, the cadre for the shelter be recruited from <u>basically qualified</u>, <u>regular occupants</u>. Moreover, the formation of the cadres should result from the express direction of those who

head the normal, peacetime management organizations found in such buildings. It should only be necessary to go outside the building to recruit shelter management cadres when (1) the regular occupants of the building fail to volunteer their services, or (2) there is a lack of qualified persons among the regular occupants. Even then, there is a question of whether or not it is feasible to recruit a cadre whose members are not regular occupants of the building and/or a part of the management organization(s) which occupy the buildings in peacetime.

The advantages of the recommended strategy need to be stated:

- 1. Recruiting problem is simplified. By narrowing down the location of the potential shelter management cadre to the facility containing the fallout shelter, the recruiting problem is greatly simplified. One knows at least where the potential cadre members are to be found. Moreover, the possibility of convincing the heads of the peacetime management organizations which occupy such facilities to initiate such a cadre for their own shelter facility simplifies the recruitment problem even more. Once such heads are convinced, the recruitment problem is little more than tapping qualified people within the already existing management organization.
- 2. Cadre interaction is simplified. Meetings of the cadre to develop the operational readiness of the shelter are facilitated by having the cadre from among the regular occupants of the building. Meetings may be held during or after working hours, depending on circumstances and convenience. Normal everyday interactions will pave the way for working together.
- Cadre will know the structure. Being regular occupants of the building, the cadre will be familiar with the environmental characteristics of the shelter. There will also be close contact with the building maintenance personnel.
- 4. Minor structural changes will be easier to make. When the cadre is drawn from companies occupying the shelter structure, they will be in a better position to recommend or request minor structural changes from the building owners to improve the shelter facility. Such requests can be made through normal contacts with building owners. If an occupant company is the owner of the building, the cadre recommendations are even more likely to gain acceptance, particularly if the cadre contains high-level members of the company management.
- 5. Cadre can reflect management structure of participating company or companies. The acceptance of responsibilities and duties by cadre members will be facilitated when the cadre reflects the

management structure of the participating companies. For example, if the person selected as shelter manager is a responsible company official, his cadre subordinates may also be his company subordinates. This cannot help but facilitate the operation of the cadre.

- 6. Cadre will be known to many potential shelterees. This would greatly facilitate the establishment of shelter management authority in the event of nuclear attack. The shelter management would substantially be those persons who were known to the shelterees as people in positions of managerial authority and experience. There is also the advantage that the cadre will know persons to tap quickly for the expansion of the shelter cadre into a full shelter management organization in the event of wartime shelter habitation.
- 7. Cadre planning will be simplified. Drawing the cadre from the management structure of occupant companies will greatly simplify the planning and organizing activities of the cadre. For example, pre-registration of building occupants as potential shelteres will be more easily handled, evaluation of shelter characteristics can be more readily accomplished, assessment of normally available equipment, materials, and supplies will present no serious problems, and so on.

The above advantages are not the only ones that can be cited. They should suffice, however, to make a strong case for the strategy of attempting to recruit shelter management cadres from regular occupants of buildings containing public shelter areas. The strategy's major weakness is that it rests on an unverified albeit reasonable assumption; namely, that basically qualified people will be found among the regular occupants of shelter buildings. The assumption needs to be verified via actual survey.

The Strategy of Recruitment Via the Community Influence Structure

The aforementioned strategy of recruiting the peacetime shelter cadre from the management or administrative organizations which normally occupy the shelter-containing facilities is not in itself sufficient to answer the recruitment problem. It does not solve the problem of how the heads of such organizations can be influenced to recruit cadres from within their own organizations. This problem is also in need of a strategy rather than a specific recruiting tactic. The strategy recommended in this report involves tapping the resources of the community influence structure(s) to persuade (1) the heads of organizations occupying shelter-containing facilities to establish shelter cadres for their facilities, and (2) other basically qualified people to volunteer their services for those shelter-containing facilities not normally occupied by management organizations.

The concept of a community influence structure involves two kinds of communities:

- I. The political community. This type of community is defined by political organization and boundaries. It includes such increasingly large units as townships, towns, cities, boroughs, counties, and even states. Each such political-geographical unit may be regarded as a community of people within a larger community of people.
- 2. The professional community. Within the political communities, there are sub-communities. One type of sub-community is the professional community. Each such community is defined by a common professional or occupational interest. Thus, for example, those engaged in the medical profession comprise a medical community, those engaged in educational activities comprise an educational community, and so on. The existence of such communities of interests is often made visible by the professional, industrial, and other types of organizations which function as communication centers for the members of the professional communities.

In every political community, there is a social structure characterized by a differential power or influence over people within the community (29). Within this social stratification, a relatively small number of key people have a disproportionately large measure of power to influence the affairs of the community. Their status as actual or potential sources of influence stems from their relatively high position in the community plus their associations with others also in high positions. While they may be at or near the apex of a professional community structure, their power to influence usually crosses professional community boundaries. Thus, for example, there is often a mutuality of influence between industrial and political leaders within a community. It is this social structure, with relatively few people occupying positions of community-wide influence, that constitutes one type of community influence structure.

There is still another type of influence structure. It is associated with professional communities. Each professional community has its own internal influence structure. Thus, within any professional community, there are some who have considerable power to influence the attitudes and beliefs of others within their professional community. For example, within the medical community of a political community, there will be a minority who have considerable influence because of their position, or their accomplishments, or the force of their personalities, or a combination of all three. The concept applies to all professional communities, i.e., industrial, commercial, financial, legal, medical, educational, and many others.

Those who are at the top of the political community influence structure are usually also at the top of a particular professional influence structure.

The converse is less likely, in that some leaders of professional communities may not be widely known outside of their own professional community. This is particularly the case with leaders in the educational, scientific, and art communities.

The influential minorities of both the political and professional communities may exert their influence in many ways, some quite subtle and unexposed to the public. They influence others through their public speeches and writings. They influence their own kind in their personal contacts and conversations. They exert influence in their roles as officers of professional organizations. They influence by their direct superior-subordinate relationships with others in their own organizations. They influence by endorsing or failing to endorse the ideas and actions of others. They sometimes influence by the social favors they bestow and by their interlocking associations within the community influence structure.

Such influence structures are a fact, a social reality. They hold the key to the problem of recruiting, selecting, and training shelter management cadres in peacetime. In a certain sense, they also hold the key to broad public acceptance of the concept of peacetime shelter cadres. They are the ones who can influence each other to assume a responsible role in the development of a community-wide civil defense capability. Even more readily, they can influence those who head the management organizations that occupy the shelter-containing facilities, e.g., industrial plants, hospitals, general office buildings, educational institutions, and so on. Therein lies their practical importance to the recruitment problem.

. 1

There is one further aspect of the concept of using the local community influence structure to trigger off the chain of events that will result in a peacetime shelter management cadre for every shelter facility that needs comment. It may appear that the solution merely begs the question. It may be asked, can the key people in the local community influence structure be motivated to take the first necessary steps? The answer lies in the recognition that a local influence structure is a part of a larger influence structure. One of the most successful of influence tactics is the personal contact via mail, phone, or face-to-face encounter. This same tactic is recommended as the connecting link between the key people in the local influence structures and those in the larger influence structures. This is a reasonable strategy. It recognizes and makes use of the spiral of influence from nation to village.

The fact that the concept of an influence structure is an over simplification need not be disturbing. All concepts that purport to describe social phenomena are oversimplifications. That does not mean they can't be very useful tools in providing a strategy for a practical purpose.

Basic Steps of the Recruitment Approach

The recommended recruitment approach involves the following basic steps:

- 1. Identification of shelter facilities.
- 2. Identification of key "influentials."
- 3. Initial contact of key "influentials."
- 4. Operation of community action committee.
- 5. Recruitment of shelter managers.
- 6. Orientation of shelter managers.
- 7. Formation of complete shelter cadres.
- 8. Follow-up on status of shelter cadres.

Each of the above steps is discussed in general terms below. This section is intended to be illustrative of what can be done rather than an invariant formula.

Identification of Shelter Facilities

The local civil defense organization, or if none exists, a higher-level civil defense organization, should draw up a list of the federally-marked fallout shelters located within the community. The list should identify location of shelter, rated capacity of shelter, type of facility, e.g., hotel, industrial plant, office building, etc., and the organizations which normally occupy the facility.

The purpose for identifying occupant organizations is to permit a later identification of organization heads who will have to be contacted in a subsequent step of the recruitment approach. In very large urban communities, it will be desirable to develop such a list of facilities in terms of smaller community areas within the larger urban community. The sub-division of a metropolitan area should follow established and recognized lines of sub-division. Voting precincts or wards, for example, may provide a suitable basis for such sub-division.

Identification of Key "Influentials"

Once shelter facilities have been listed as described above, the next step is to identify the top influential people in the community. These will be top industrialists, financiers, educators, political figures, and other key influentials. The number to be identified will depend upon the size of the political community. The number so identified will be the apex group of influentials upon which the strategy relies for influencing the recruitment of those who will form the needed cadres.

For someone unfamiliar with a community to attempt to identify the key people who have the influence capability needed can be a formidable task. A more practical procedure would be to discuss the problem with someone in a position where he can identify some of the key community figures. preferably some one who is a part of the community's influential circle. The logical person would be the political head of the community. Since such persons are not available to everyone, they may require some type of contact from a higher level to encourage their cooperation. Once a cooperative and knowledgable "insider" is found, it should not be too much trouble to identify the people at the top of the influence structure. On the contrary, the problem will be one of reducing the number of influential people identified to a reasonable number for contact. Some of the people who make the final list should, if possible, be among those who head the organizations that occupy facilities containing fallout shelters. This is important because they will have a direct interest in the development of shelter cadres, since the shelter capability will be for the benefit of their own organizations. This direct interest may make them more willing to play an active, albeit indirect role in developing shelter cadres.

Initial Contact of Key "Influentials"

The next basic step is to plan a suitable approach for orienting the listed influentials and appealing for their assistance. A group contact is best. They should hear a carefully planned orientation on the basic problem, namely the need for establishing shelter cadres for existing shelters. The importance of a short, excellent presentation of the problem can not be overemphasized. Such a presentation would be a make-or-break point. (A filmed orientation and appeal would be the most reliable way to ensure the success of this step. A psychologically-engineered film can be factual, persuasive, and consistant, unlike a well-intentioned, but inexperienced speaker.)

In advance of the orientation, it would be desirable to solicit the cooperation of one or two key figures to help mold opinion after the orientation portion of the meeting is completed. A simple acknowledgement by a prominant person that the problem is real and warrants study by civic-minded citizens should be sufficient to deflect any strong negative reaction. After adequate time for questions and discussion, an action committee should be formed to discuss and recommend a community plan of action. The formulation of such a committee at this time is important. It establishes the machinery for further efforts in the wake of the initial interest aroused by the orientation. The postponement of the formation of the committee until another time runs the risk of many would-be volunteers having second thoughts about their participation on the action committee.

Operation of Community Action Committee

The basic promise is that the shelter cadres should come, for the most part, from the organizations occupying the shelter-containing facilities.

That being so, the primary task of the community action committee is to persuade the heads of such organizations to assist in the development of a peacetime cadre for the facility occupied by their organization. Certainly one of the lines of persuasion can be the point that such cooperation will be for the benefit of their own personnel.

It is not appropriate to attempt to detail here how the community action committee should operate to attain the above objective. If its membership has been correctly chosen, the committee will include the kind of resourceful leadership that will be capable of developing necessary plans and procedures.

Such committees can be aided in one way. Their major task will be to persuade the heads of organizations to assist in the development of cadres. This means they must communicate the basic problem which shows the need for such cadres. It is recommended that an OCD-prepared orientation film be made available to such community action committees to help them in their orientation of others. An accompanying phamphlet describing how the film may be used should complete the package.

Recruitment of Shelter Managers

The shelter managers would be recruited from the organizations occupying the shelter-containing facilities by the heads of such organizations. Where a facility is occupied by a number of organizations, the solution would be to select the shelter manager from the organization with the greatest number of employees working in the facility, and to select deputy shelter managers as needed from the other organizations. In some cases, it may well be the case that the head of an organization will become the nominal peacetime shelter manager, with a deputy selected from his own organization to carry out the peacetime duties of the position.

Under this approach, the term recruitment may no longer have its original meaning. Where organization heads have been convinced of the desirability of establishing a peacetime shelter management cadre, they will be inclined to appoint qualified persons from within their own organizations rather than ask for volunteers. This is not undesirable. On the contrary, it probably ensures a higher calibre shelter manager.

Where one or a few organizations share the same facility, there is also the possibility that the peacetime cadre will be organized as a committee of equals with a chairman rather than in the form of the shelter management organizations shown in Figures 4 and 5. The task of establishing and maintaining operational readiness of the shelter can be accomplished as readily with a committee organization as with the recommended organization. Under wartime conditions, the committee organization would have to be reorganized to a chain-of-command organization.

Orientation of Shelter Managers

Once a shelter manager has been either recruited or appointed for a shelter facility, he too must be oriented on the problem, his responsibilities and duties, and the kind of a cadre he needs to develop. The orientation could be handled by the local civil defense organization for groups of shelter managers within the community. An orientation film would be desirable. It would ensure a uniformity of orientation throughout the country, with all essential points included. The possibility that a single all-purpose orientation film can be developed, should be considered. An alternative is a self-instructional orientation in the form of an OCD-prepared booklet.

Formation of Complete Shelter Cadre

After being oriented, and familiarizing himself with the functions of a peacetime cadre, the shelter manager's first task will be to recruit his cadre. When one organization occupies the shelter facility, he will be recruiting persons from within his own organization. There can be no prescribed way for how this should be done. The policies and past practices of the organization will probably determine how he will proceed to establish his cadre. Where two or more organizations share the shelter facility, the shelter manager should recruit his cadre so as many organizations as possible are represented on the cadre. Each such representation forms a line of communication back to an occupant organization. Again, however, the actual procedure for recruiting the cadre is best left to the shelter manager. It may be that some type of meeting of representatives of each building occupant will be a necessary first step. Such a meeting would have the by-product advantage of informing all organizations within the shelter-containing facility of what is planned.

:)

Follow-Up on Status of Shelter Cadres

The last step of the recommended recruitment approach is a follow-up by the community action committee on the status of shelter cadres. This is nothing more than a simple reporting procedure. When a cadre has been formed, its formation should be reported to the community action committee and/or local civil defense organization. The community action committee may wish to dissolve itself when all shelter facilities have reported the formation of a cadre. It does not have a continuing role in the community civil defense effort. The latter point is important. Many highly positioned and influential people will accept a temporary community responsibility, but turn down a long-standing responsibility. Volunteer heads of a United Fund drive, for example, might be less inclined to volunteer if the period of responsibility went beyond one annual drive.

The above six-step approach to establishing shelter management cadres, while recommended, is certainly not the only workable approach. The key point that must be understood is the resourcefulness of community leaders once they accept a responsibility. Their very qualities of leadership and capability make them much inclined to develop their own approaches to a problem. They need only to know the nature of the problem and the goal. Where other know-how is necessary, they can generally be counted on to tap other persons for the procedural details.

A Problem Related to the Proposed Strategy

The proposed strategy of recruiting cadre members from organizations that occupy buildings and other facilities containing fallout shalters assures that the cadre will be on the premises should attack warning come during normal working hours. In off-working hours, the cadre members will be dispersed to their homes. In urban areas, there is no doubt but that many of the peacetime cadre members will not make it to the shelter for which they have been acting as cadre members in the event of attack warning. Does this fact rule not the proposed strategy? No, it does not. The following arguments apply: (1) A basic goal of the shelter cadre will still be achieved, namely the establishment of operational readiness during peacetime. (2) A large supply of trained shelter cadre members will be available for dual assignments, e.g., one shalter during working hours and another shalter during non-working hours. (3) Each shelter cadre can take specific steps to establish a back-up shelter cadre to cover their non-working hours. Not every facility will need such a back-up cadre. Many will be located in urban industrial or commercial areas that are relatively uninhabited after normal eight to five working hours.

 $_{\text{CHAPTER}}\,VI$

THE SELECTION OF SHELTER MANAGERS AND CADRE STAFFS

Chapter VI Outline

	Page
THE NATURE OF THE SELECTION PROBLEM	77
SELECTING PERSONS FROM WITHIN AN ORGANIZATION	78
SELECTING PERSONS FROM OUTSIDE THE ORGANIZATION	79
Types of Selection Methods	79
Criteria for Selection Tool	79
A RECOMMENDED SELECTION METHOD	81
Selection From Outside of Shelter-Containing Facility	81

VI. THE SELECTION OF SHELTER MANAGERS AND CADRE STAFFS

The Nature of the Selection Problem

The basic assumption underlying the recruitment strategy described in Chapter V is that shelter cadres should be recruited from the organizations which regularly occupy the buildings and other facilities containing fallout shelters. Underlying this assumption is an even more basic one; namely, that the occupant organizations have people with the managerial or administrative experience and capability required for shelter cadre personnel. The combination of these two assumptions has definite implications for the selection problem of getting basically qualified persons on the shelter management cadre staffs. It means that the selection activity would be done with-In the framework of already established organizations with existing management structures. The exception would be those facilities which are occupied by individuals or small groups such as families or private enterprises with relatively few employees. Such facilities include large apartment buildings, general offices tenanted by many small enterprises, and large shopping centers consisting of many small individual retail establishments. For such facilities, it may be necessary to include among the shelter cadre persons who do not regularly occupy the premises. Considering all types of facilities, however, it appears reasonable to assume the great majority of cadre personnel can be recruited from organizations occupying the facilities in which shelters are located.

Thus, the problem of assessing individuals for their capability to assume the responsibilities and duties of a peacetime shelter cadre involves basically two kinds of situations:

- Selecting persons from within an existing organization. For example, a company president may select a management official of the company to serve as the peacetime shelter manager.
- Selecting persons outside an existing organization. For example, a community school may seek to recruit (and select) a resourceful person from the neighboring community to act as the shelter manager.

The process of assessing capability, and the selection tools used as a part of the process, may be quite different in the two kinds of situations.

Selecting Persons From Within an Organization

The assessment of an individual's capabilities and qualifications for shelter cadre positions is tremendously simplified when the selectors and potential selectees are part of an existing management structure. Those who will be making the selection decision will, in most instances, be the organizational superiors of those being considered for selection. They will either know the persons under consideration from their own work relationships with them, or they will have access to third parties who will know the prospective cadre members. In addition, there will be access to organization personnel records.

A further simplication is that the selection will be guided by existing management organization lines. It is not likely that an organization will select a peacetime shelter manager who is the organization subordinate, in his regular position, to other members of his cadre. The converse is most likely to be the case. Indeed, there is good reason to believe that the chain-of-command relationship between people on the cadre staff will parallel the chain-of-command relationship within the already existing organization. This, too, will influence the selection process. People will be selected because of the position they already hold as much as for their leadership qualifications and managerial experience. Fortunately, high position generally correlates with managerial capability.

Under the above circumstances, there is little need for traditional personnel assessment tools, such as depth interviews, psychological tests, biographical application blanks, employer references, and the like. The persons being considered will not be "unknown qualities," and they should not be assessed as if they were.

There is one problem aspect to the situation of selecting persons from within an organization. It has to do with the caliber of person selected. When it comes to extra-curricular responsibilities, such as civil defense many organizations are disinclined to volunteer the services of their best people. Indeed, in some organizations the people who are likely to be assigned such responsibilities are those who have already been placed outside the mainstream of recognized, on-coming management people. The need to select capable people must be emphasized in the initial orientation of organization heads conducted by community action committees.

Selecting Persons from Outside the Organization

When potential cadre personnel must be assessed and selected from outside the organization of the person doing the assessment, the selection problem is more difficult. Some type of selection tool or a combination of such tools is necessary to assess the qualifications of potential cadre members.

The problem can be made concrete with a specific example. Suppose the shelter facility is located in a high-rise office building occupied by a dozen or more companies of various sizes in terms of building occupants. How does one assess the qualifications of the potential shelter management cadre, assuming that a shelter manager has been selected in some mutually agreeable manner?

Types of Selection Methods

There are many methods for assessing individual capabilities in current use. Some of the more commonly used include:

- 1. Psychological Tests
- 2. Employer References
- 3. Police and FBI Checks
- 4. Depth Interviews
- 5. Medical Examinations
- Diagnostic Application Forms
- 7. Written Examinations
- 8. Job Performance Tests

The question is, are any of these methods suitable for assessing potential members of a shelter management cadre? The answer can be derived by considering the criteria for a useful selection tool in such a circumstance.

Criteria for Selection Tool

To maximize efficient results and minimize possible negative effects, a useful selection tool is one that meets the following criteria:

 Easy to use and interpret. The assessment tools will have to be relatively simple to apply and interpret because the users will rarely be persons whose normal occupation involves the regular use of personnel assessment tools.

This criterion rules out the use of psychological tests, depth interviews, written examinations, and job performance tests. These are assessment tools intended for the use of specially trained personnel.

2. Acceptable to persons assessed. The assessment tools should be acceptable to those to whom it will be applied. It must be remembered that they are volunteering their services. Many will be capable people with positions of considerable responsibility. They are not likely to react favorably to a screening procedure which assumes they are unqualified until they prove otherwise.

The criterion also rules out the use of psychological tests, depth interviews, employer references, written examinations, performance tests, and medical examinations. Some such tools are too demanding of the person's time. Others may be interpreted as a personal affront.

- 3. Acceptable to the user. The assessment tool must also be acceptable to the user. Unless the potential user feels the tool is helpful, he will not make use of it. He is not likely to feel the tool is helpful if it is time consuming to apply, technical beyond his ability to handle, embarrassing to the person being assessed, or of questionable assessment value.
- 4. Of relatively low cost. Ideally, the assessment tool should involve little or no out-of-pocket costs for the users or for civil defense organizations. There would be little or no money available for the use of intensive and costly assessment procedures.

This criteria would rule out the use of published psychological tests, written examinations, use of personnel-screening specialists, medical examinations, and other costly procedures.

5. Valid for the assessment purpose. An assessment tool should have an empirically verified validity for the assessment task. Stated differently, it should have a proven capability for differentiating the capable from the non-capable.

There is no evidence that any of the traditional selection tools have a special capability for selecting people who will be successful in carrying out the responsibilities of shelter management cadres. The best predictor of success, under the circumstances, is past performance in other positions of responsibility plus relevant blographical data.

It would appear, then, that the best selection tool is a specially designed, self-administered questionnaire or data blank which provides easy-to-give and easy-to-interpret information about the individual under consideration. Such a tool would be technically simple, of low cost, acceptable to most users and persons assessed, and have no less proven validity than more complicated selection tools.

A Recommended Selection Method

Selection from Within Shelter-Containing Facility

Where the potential selectors are members of organizations jointly occupying the facility which contains the shelter facility, the recommended procedure to assure basically qualified persons involves three steps:

- 1. Communicate the cadre requirements. The appointed shelter manager (or building committee) should request the heads of all or some occupant organizations to nominate persons from within their organization for specified cadre positions. The request should make clear the basic qualifications sought for each cadre position. It should also make clear that one person plus a replacement alternate will be selected from the nominees for each position. For each nominee, a biographical data form similar to the one shown in Figure 6 should be completed and returned to the appointed shelter manager or shelter executive committee.
- 2. Allow organizations to select their nominees. The assessment situation is now similar to selecting from within an organization, described in the previous section. It can be assumed that an organization's knowledge of its own people will result in the selection of a basically qualified person without the need for special personnel assessment tools.
- 3. Review information record and make final selection. The shelter manager or shelter executive committee would next review the shelter management information records, and select one person plus a replacement alternate for each cadre position for which there are nominees. The cadre so selected should include representatives from as many occupant organizations as practical. Occupant organizations should be notified of the final selections.

Selection From Outside of Shelter-Containing Facility

Where all or some of the cadre must be recruited from other than regular occupants of the building or facility containing the shelter, a three-step selection procedure is recommended.

1. Apply a selective recruiting procedure. Only those persons should be approached for recruiting purposes who are likely to have the basic qualifications necessary to function in a cadre. This will necessitate a person-to-person contact

with advance information about the occupational background of potential recruits. Applied selectively in this way, the recruiting procedure is simultaneously a selection procedure.

- 2. Request completion of biographical data form. Those who indicate a willingness to volunteer their services should be requested to complete and submit the biographical data form shown in Figure 6. The request should be explained to the individual volunteer as providing a basis for assessing the experience, know-how, and other qualifications of the cadre volunteers to facilitate placing people correctly on the cadre organization. The possibility that there will be more cadre volunteers than will finally be used should also be mentioned. This will permit, if necessary, selection of the best of the volunteers without giving offense to those who may not be used.
- 3. Assess biographical data and make final selections. When a sufficient number of persons have been recruited to permit some final assessment, the biographical data forms should be evaluated. Where all persons who have volunteered appear to be capable people with managerial, administrative, or supervisory experience, it would be a mistake to reject any. It is better to have a few additional people on the management cadre than called for by the shelter management organization plan than to reject capable volunteers. Indeed, in most cases, the organization plan will not be sufficiently developed to establish the exact number of persons needed.

The above procedure makes recruitment and selection a two-phase operation. In actual practice, it does not necessarily have to follow such a pattern. The procedure may well be to recruit and select a shelter manager and deputy shelter manager. Once these are selected, and have grasped the problem, they may recruit and select in stages as they feel the need to add additional cadre members. This stretched-out process of developing a cadre can be applied even when the cadre is to be selected from regular occupants of the shelter facility. It has the advantage that those already selected and active in the cadre peacetime work can expand their cadre as they feel the need for additional personnel.

HELTER MANAGEMENT INFORMATION RECORD		RD	NOMINEE FOR_		
he information is required to determine how est to use your services in the civil defen- affort. It will be maintained in strict conf		lvil defense			
ME:			HOME PHONE:		
OME ADDRESS:_					
ERSONA L					
	Marital Status Marr;ed Not Married	Number of Dependents	Status of Health (C Excellent Other (See Below	ŕ	
ist any Chron	ic Physical Defects:				
DUCATION	Circle Last	Graduate			
	Year Attended	(Yes or No) De	gree Major	Minor	
	1 2 3 4 5 6 7 8	XX	<u> </u>		
High School	-				
College					
Post-Graduate	1 2 3 4				
			Schools, Correspond	· ·	
CCUPATION					
Present Compa	any or Organization:				
			Phone:		
Address:					
Official Ti	itle or Occupation:_				
Official Ti	itle or Occupation: Outles or Responsibil	ities:			
Official Ti Nature of D Length of S	itle or Occupation:	ition:			

Figure 6. SHELTER MANAGEMENT INFORMATION RECORD. The data is useful for making a final selection decision or for determining how best to use the services of selected volunteers.

	Require Ski	ills, e.g., Woodworking, Radio Build
Associations, Political Organizat tions, Sports, Class, etc.)	ions, Frate:	d or Now Holding (i.e, Professional ernal Organizations, Business Associa-
ILLITARY EXPERIENCE Branch of Service: Highest Rank or Rate: Special Training: OTHER EXPERIENCE OR TRAINING	Length Princi	n of Service: From To
indicate with a check (√) in the appropriate space any experience	e or	If "Yes," in what special capacidid you gain such experience (i. "as Director of local Red Cross,
training in the areas listed be	Yes	not "at school").

CHAPTER ${f VII}$

AN OVERVIEW OF THE SHELTER MANAGEMENT CADRE TRAINING PROBLEM

Chapter VII Outline

	Page
ORIENTATION ON CHAPTER PURPOSE	85
FIVE BASIC TRAINING PROBLEMS	85
The Problem of How Much Training Content	85
The Problem of Training Method	87
The Problem of Whom to Train	88
The Problem of When to Train	90
The Problem of Where to Train	91
OTHER PROBLEMS RELATED TO SHELTER MANAGEMENT TRAINING	92
The Instructor Problem	93
The Training Evaluation Problem	93
The Training Administrative Problem	95

VII. AN OVERVIEW OF THE SHELTER MANAGEMENT CADRE TRAINING PROBLEM

Orientation on Chapter Purpose

The purpose of this chapter is to provide a quick overview of the shelter management cadre training problem. Such questions as the amount of training content to be covered, the methods of training to be employed, the timing of the training, the location of the training, and even who to train cannot be answered without first understanding the alternatives and their positive and negative consequences. Such questions are broadly considered in this chapter, not with the objective of providing definitive answers, but with the objective of examining the principles involved in the alternatives.

Five Basic Training Problems

Any complex training effort runs into the following five training problems:

- 1. What content to include in the training.
- 2. How the training is to be conducted.
- 3. Who should be given the training.
- 4. When should the training be undertaken.
- 5. Where should the training be conducted.

There are some <u>basic</u> alternatives to each of these problems in terms of the training of the shelter management cadres. It is important that the alternatives be fully considered before deciding on a given alternative.

The Problem of How Much Training Content

The problem of what content to include in a training program often becomes a problem of how much content to include. There are three basic alternatives which can become guidelines to the question of how much content to include. They are as follows:

 The absolute minimum concept. According to this concept, only that content which constitutes an absolute minimum is included in the training content. Thus, for example, descriptions of what to do would be included, whereas the details of how or the explanations of why would be excluded on the assumption that the person being trained would either know or be able to determine the how or why. In terms of training a shelter cadre, this approach would emphasize who does what. Essentially, it would be a description of each person's responsibilities and duties. It would leave it to the individuals trained to fill in the details.

The principal advantage is reduced training time, in both preparation and administration. The obvious disadvantage is the risk of inadequate coverage with incomplete understanding and acceptance by the trainees.

2. The more, the better concept. According to this concept, the more information given to the trainee in the form of principles, concepts, and procedures, the more fully will he understand the total complexity of shelter management. It describes not only the what, why, where, when, and how, but also, the background. For example, it might include a discussion of how radioactive fallout is formed, or how radioactive particles cause tissue damage, or why certain symptoms occur only late after radiation sickness has occurred. Such topics provide a background of understanding that is in the category of "nice to know, but not really essential."

There is no question but that this approach develops more complete knowledge and understanding. The practical question, however, is whether much of such understanding is superfluous to the ultimate performance for which the person is being trained. The obvious disadventage of this training concept is the increased training preparation and administration time which may adversely affect the cost of training and the reaction of the trainees when the content gets too academic.

3. The minimal requirement concept. This concept of how much training content to include represents a compromise between the two aforementioned concepts. It includes all training topics which can be directly related to the responsibilities and duties of specific shelter management positions, providing details of what, why, how, when, and where, but avoiding all non-essential background material. In a training discussion of what must or can be done to control shelter humidity, this approach would not, for example, include the topic of why excessive humidity causes people to feel uncomfortable. Such a topic would be considered superfluous to

the intent of the topic of humidity control. On the other hand, it would include a discussion of the possible consequences of failure to control humidity. The critical questions that this concept puts to all potential training topics are: (1) "Does the trainee need to know this to effectively carry out his responsibilities and duties as a member of shelter management?", and (2) "If he does, should it be regarded as a prerequisite knowledge or skill, i.e., one which he can reasonably be expected to have from prior training or experience, or should it be included in the training content?".

Of the three alternatives, the latter is recommended as a guideline for the development and inclusion of training material for shelter cadre training.

The Problem of Training Method

Once the basic training content has been identified, preferably in topical outline form, the question of training method will need to be answered because the method or combination of methods will determine the form in which the training content is prepared. For example, if the method decided upon is programmed instruction, the material will have to be developed accordingly. The point is, the method decision must precede the development of the training materials.

Before a method decision is made, however, there should be an awareness of the following two alternatives:

The single method concept. According to this concept, the problem is one of deciding the best single method of training that will fit the training circumstances and meet the training objectives. What is considered best may be determined by such factors as cost, ease of instruction, active participation of trainees, intrinsic interest for trainees, relation of method to retention, availability of skilled instructors, and suitability of method for the training situation as well as other relevant factors. The criterion of what is the best method is not the issue, however, with this approach. The assumption underlying this concept is that there is a best method, and that it can be determined by assessing the situation with the aid of criteria related to subject matter, type of trainees, type of training facility, and other pertinent factors.

This approach has merit only when the training planner is confronted with a single or repetitive training situation in which all factors are known and constant. Even then it does

not allow for a method change of pace which may help sustain trainee interest or which may be called for by different training topics. In actual practice, however, even a single method approach is rarely that inflexible that it cannot be given an improvised change of pace. Thus, for example, what is planned as instruction by motion picture films can be modified with pre-film instruction and post-film discussion.

The multiple method concept. This concept starts out with the knowledge that critical aspects of the training situation, e.g., people, instructions, environment, etc., will vary from time to time and location to location, and that a single method will not suit all such variations equally well, nor will it suit all training topics equally well. It therefore seeks to assess the actual or potential training factor variations which have implications for method variations, and come up with a multiple method approach. Thus, one portion of the content may be covered by one method of training, and another portion by a different method. Also, alternative methods may be prescribed for the same topic, making the whole training package flexible as to methods of instruction.

The obvious advantage of this approach is that it allows for variation of training method to fit the particular training circumstances. The concept is particularly applicable for the training of shelter management cadre personnel. The cadre training content will have to be instructed in a wide variety of circumstances across the country. Prescription of a single method is not advised because it restricts the flexibility of the training program.

The Problem of Whom to Train

When developing a cadre training program, there needs to be a decision as to whom will be trained via a formal class-type training program. This is necessary from the standpoint of planning both content and methods. When it comes to formal training of a shelter cadre, there are a number of alternatives to the who-will-be-trained question.

The shelter manager only. One approach is to train formally only the shelter manager. This training would be intensive, covering all aspects of shelter management, including the responsibilities and duties of other members of shelter management. The underlying assumption of this approach is that the shelter manager can be so thoroughly trained on all facets of shelter organization and management that he could, in turn, train or direct the training of all other cadre members. He may even be given guidance materials to assist him in conducting

or accomplishing the training of others.

This approach has significant advantages and disadvantages. On the positive side, these points apply: (1) The formal training task is greatly reduced. Assuming there will be about 275,000 to 300,000 shelters in mld-1967, and the median cadre size will number 10 persons, if the policy was to attempt to formally train all cadre members, approximately 2,750,000 to 3,000,000 persons would require some type of formal training conducted by some person not a part of the cadre. If only shelter managers were trained formally, the training problem would be about 2,500,000 less people to train. (2) Requiring the shelter manager to assume the responsibility for training his own cadre may pay a bonus in that the manager himself will learn more than he would if he relied on others to do the training for him. His own training would be more thorough because it would include content concerning other persons' responsibilities and duties. The and result would be to make him more knowledgeable generally about shelter organization and management, with the possibility of greater status as a shelter leader.

The principal disadvantage is that the concept places complete confidence in the shelter manager's ability and/or motivation to assume the burden of training or directing the training of his cadre. Also, unless he is given specially prepared training materials and aids, he is not likely to accomplish a technically competent job of training. It is a mistake to assume capable managers or administrators have the skill to carry out a formal training effort. Some do; most don't. Also, some shelter managers may lack the broad technical background to effectively train technical topics, such as radiation monitoring.

- 2. The manager plus key technicians only. This approach differs from the previous one by recognizing that some cadre responsibilities are so technical that formal training is required. The best cited example would be the role of the Radiological Officer. The technical aspects of monitoring and decontamination may be such that persons assuming this role require specialized training from qualified instructors. A similar case can be argued for the training of a Medical Officer in the event that a physician is not available for inclusion in the cadre.
- 3. All members of the shelter cadre. According to this concept, there should be a degree of formal training, conducted by a person or persons not a part of the cadre, for all key roles in the cadre organization. The reasoning is that if such persons must learn things to effectively carry out their

responsibilities and duties as cadre members of shelter management, they should learn them at the hands of qualified instructors who are experienced with the particular training material.

10

The principal advantage of this concept is that it does ensure a more professional caliber of training to all key members of the management cadre. It does not run the risk of unsatisfactory training as does the approach of relying on shelter managers to do the training. The principal disadvantage is the heavy burden it puts on persons outside the cadre to do the training.

Considering the pros and cons of each approach, plus other relevant factors such as availability of resources and cost, the approach of reserving formal training for shelter managers and deputy shelter managers plus key shelter technicians is the recommended one.

The Problem of When to Train

There is no question but that peacetime shelter management cadre must receive training in peacetime in order to accomplish its initial objective, namely, establishing the operational readiness of the shelter facility. There is a question about the timing of such training in the peacetime period.

- Training cadres as soon as possible. According to this concept, the time to train shelter managers and deputy shelter managers, and in turn to have them train their cadres, is as soon as possible as volunteers are recruited and selected. The arguments for this approach are persuasive. First, it is consistent with the objective of establishing shelter operational readiness as soon as practical. Second, it avoids the mistake of recruiting cadre personnel, and then not training them until a much later period. Without prompt training cadre personnel cannot do what they have volunteered to do. If there is considerable delay in their training, there is a risk that they will lose interest and withdraw.
- 2. Training cadres in time of cold war crises. The writer was informed by persons close to the civil defense effort at the national level that there was a considerable surge of interest in civil defense courses after the Cuban crisis in the Fall of 1962. This raises the interesting question of whether the recruitment and/or training of cadre personnel beyond those identified in Figures 4 and 5 as the minimum should be made to coincide with flare-ups in the cold war. This concept would presumably take advantage of the public's increased interest in civil defense in times of crisis.

The concept is rejected here for several reasons: (1) The spectacle of a rash of civil defense recruiting and training efforts can only alarm large segments of the public. (2) The timing of such activities may alarm a potential enemy into fear-stimulated countermeasures. (3) It is questionable whether recruiting and/or training machinery can be activated so abruptly as to coincide with the rise in international tension, and still be effective. (4) It may be another classic case of "too little, too late" should the crisis terminate in a nuclear war. (5) Prudence dictates that one does not wait until a crisis occurs before attempting to establish the operational readiness of a national system of fallout shelters.

1, *

The Problem of Where to Train

The problem of where to train is related, in part, to the problem of how to train because certain locations imply certain training approaches. A listing of the locational possibilities is given below:

- 1. At established OCD training centers. There are currently three OCD centers federally equipped and staffed to give various types of civil defense training. Even if one adopted the concept of training shelter managers only, it would be impossible to attempt to locate shelter manager training solely at these centers for the simple reason that the magnitude of the task is completely beyond the capability of such centers. Quantitatively, the task is one of training about a minimum of 275,000 shelter managers.
- 2. At higher institutions of learning. The Office of Civil Defense has initiated arrangements with about 50 state universities and colleges for the teaching of shelter manager courses. Such arrangements will no doubt make training more convenient to potential trainees than is currently the case. However, the distances of such institutions from all points within a state will still represent a sarious problem. People of the calibre needed for peacetime shelter managers may find it impractical to attend out-of-town instruction at state universities and colleges.
- 3. At secondary school locations. Virtually every community has or is within short distance of one or more secondary schools. This basic fact suggests the possibility of conducting shelter management and organization courses in evening sessions at secondary school locations as needed. The use of specially trained secondary school male teachers as instructors is feasible from the standpoint of teaching capability. Furthermore, there is the

possibility that secondary school teachers would assume the responsibility on a voluntary basis. Thus, the two essential training ingredients, facilities and instructor personnel, would be readily available.

- 4. At home on a self-study basis. A substantial percentage of the persons who will volunteer or be appointed to act as shelter managers will be high-level managerial or administrative people for whom extended attendance at training sessions will be a burden. The risk is great that many such people will be forced to miss regularly scheduled training sessions because of unforeseen demands on their time. If the basic text material to be used for training shelter managers and cadre personnel is designed for alternate use as a home-study course, the flexibility of training materials will be increased. Given the alternative, there will be some people who prefer a home-study or self-instruction method because it does not tie them to any particular time schedule.
- 5. At the shelter location. The possibility of formal instruction of shelter cadres, including the shelter manager, at shelter locations is another alternative. There are many reasons, however, why this would be an impractical approach: (1) it would require a formidable number of traveling instructors. Even if such instructors were to be recruited on a voluntary basis from the local community, the prospects of being required to travel to different shelter locations would discourage many capable would-be instructors. (2) The facilities for training at shelter locations will vary from excellent to poor. Instructors will not know in advance the type of facility in which they would have to instruct.

Of the five location possibilities, the secondary school location with the alternative of electing a home-study approach would appear to have the greatest advantage.

Other Problems Related to Shelter Management Training

In planning a national effort to train shelter management cadre personnel, there will be problems other than those related to the content, methods, subjects, timing, and location of such training. Three problems that are of particular concern to the training planner are: (1) the development of instructors, (2) the use of training evaluation tools, and (3) the administrative control over the training effort. Each of these problem areas is discussed broadly in the following sections.

The Instructor Problem

Allowing for the possibility that training aids, such as films, slides, or charts, may be developed which will reduce the need for highly skilled instructors who are knowledgeable in all aspects of the training material, it is unlikely that the need for qualified and trained instructors can be eliminated entirely. That being so, there is a problem of recruiting and training instructors for the national training task. There are two broad alternatives:

1.

- 1. Use of full-time professional instructors. The possibility of hiring and training a core of full-time instructors within each state to service community needs within the state will no doubt be given consideration. This alternative has doubtful merit for the following reasons: (1) The number of instructors required would be prohibitive from a cost and personnel availability standpoint. (2) It would require an administrative staff of no small dimension to direct, coordinate, and control the instructor corps. (3) It is questionable whether one could get basically qualified people to apply for positions which are in a large measure self-liquiating.
- 2. Use of qualified volunteers from local communities. This alternative would recruit and train the number of instructors required by each community from among the basically qualified persons within the community. Basically qualified personnel would include secondary school teachers, college instructors, industrial training personnel, and other occupations which involve a heavy training responsibility. The advantages of this approach are impressive: (1) The concept of civil defense activities by citizens on a voluntary basis is extended. The citizen's participation can do much to spread favorable attitudes toward civil defense in general. (2) The cost of the national training effort would be greatly reduced. The costs of hired full-time instructors plus their administrative support would be avoided. This should make the whole effort more palatable to the tax-paying public. (3) The volunteer local citizen's approach has a local flavor. The kind of people who need to be recruited as shelter managers are the very kind of people, in general, who will take exception to a highly centralized state or federal government-directed training effort. The same can be said for the community leaders and heads of industrial, commercial, financial, and other organizations whose support will be needed to recruit shelter management cadres.

The Training Evaluation Problem

Any nationwide training effort of the magnitude and importance of training shelter managers and other key shelter management personnel should

be accompanied by some means of evaluating the effectiveness of the training effort. Three types of evaluative techniques warrant consideration.

1. Trainee opinion evaluation. Training is often evaluated by determining the attitudes of trainees toward various aspects of the total training situation, i.e., nature of content, quality of instruction, suitability of training facilities, and other relevant factors. This type of evaluation is particularly useful where there is a repetitive training situation which permits modification of the training approach in accordance with opinionnaire results. There is also an underlying assumption, admittedly inadequately supported by research findings, that the direction of opinions toward the favorable or unfavorable poles is related to the degree of learning. In other words, the assumption is if people react favorably to training, they have learned; if they react unfavorably, they have learned less.

The use of a trainee opinion evaluation tool is definitely recommended for the following reasons: (1) It will playback information that may be useful in up-grading the quality of the total training effort. (2) It will indicate regional, state, and community differences in reaction to the civil defense training, and thereby indicate potential problem areas. (3) Application of the tool tends to diminish emotional intensity of negative attitudes. An exercise of an invitation to criticize often results in the would-be critic realizing more fully the favorable aspects of a training effort. It has a tendency to force points of dissatisfaction into a proper perspective.

2. Trainee learning evaluation. A more precise way to evaluate the effectiveness of a training effort is to measure what trainees have learned. The traditional method used is some type of examination designed to tap what has been learned. Examinations or quizzes have several advantages over training evaluation by opinion-seeking: (1) Properly constructed, they will measure what has been learned (or, at least, what is known by the trainee). (2) Awareness that quizzes will accompany instruction serves to motivate most learners. People tend to study more when they know there will be some type of test of what they have learned. (3) Tests enable instructors to detect and clarify areas of misunderstanding among trainees which may be attributable to the instruction or the instructional materials.

The most suitable type of examinations would be standardized, objective examinations which require no writing and can be scored mechanically or with a hand-scoring templete. Such examinations

have the additional advantage of being able to sample more broadly the contents of the training, thereby giving a better basis for evaluating how much has been learned. The use of standardized objective quizzes, covering specific units or lessons of the total training content, also acts as a control on the instructors. Instructors are more likely to stick to the subject when standardized objective examinations are used.

The principal disadvantage of using training examinations with adults in their middle and later years is the problem of acceptance by the trainees. The problem tends to diminish, however, when the tests are well-designed. Many large industrial organizations today use objective quizzes to accompany training of all levels of management personnel. Where the tests are well constructed, and designed to reinforce learning, group reaction is almost always favorable. For that reason, and for the advantages mentioned earlier, the use of standardized, short objective examinations to accompany instruction is recommended.

3. Trainee performance evaluation. A third method of evaluating training is some type of check on the quality of the performance as a cadre member which presumably will be affected by the training. The performance of shelter managers most readily susceptible to evaluation is their performance in establishing the operational readiness of a shelter. Various aspects of operational readiness, e.g., operation plans and procedures, equipment usage skills, provisions for storage security, etc., are subject to evaluation and rating. It would appear feasible to establish an audit procedure to assess to what degree a shelter was truly operationally ready in terms of personnel, materials, plans and procedures, and reasonable shelter modifications.

The use of this form of training evaluation is not recommended at this time because of the relative complexity of administration. What is perhaps needed instead is research and development work to prepare both internal and external audit tools for evaluating shelter operational readiness.

A point worth emphasizing is that the concept of training evaluation should <u>not</u> be ignored in a nationwide effort to train shelter managers. Merely counting and reporting the number of people who have completed such training <u>is no indication that there exists a national resource of skilled and knowledgeable shelter managers.</u>

The Training Administrative Problem

Even though shelter management training may be conducted in a local environment by local volunteers, there is need for a centralized administrative control to facilitate communication from local through state to

national level and the converse. There will be a need, for example, to know the status of such training throughout the country at periodic intervals.

Beyond recognizing the need for some type of administrative control, this report shall add nothing further to the problem area. It is beyond the scope of the project report to deal with the problem of federal administrative controls.

!!

 $_{\rm CHAPTER} VIII$

A CORE CONTENT FOR SHELTER CADRE TRAINING

Chapter VIII Outline

	<u>Page</u>
CORE AND SPECIALIZED CONTENT	97
Definition of Core Content	97
Definition of Specialized Content	97
The Reason for the Distinction	97
OUTLINE OF RECOMMENDED CORE CONTENT	98
RECOMMENDED METHODS OF CORE CONTENT TRAINING	102
Instruction by Local Personnel	102
Training by Self-Instruction	103
Training by Television	104

VIII. A CORE CONTENT FOR SHELTER CADRE TRAINING

Core and Specialized Content

This chapter presents in outline form the core content of a shelter management cadre training program. In order to understand why certain training topics have <u>not</u> been included, the distinction between core and specialized content must be understood. The reason for making the distinction follows the two definitions given below.

Definition of Care Content

The core content consists of those training topics which provide information that should be known by <u>all</u> members of a shelter management cadre. It includes a broad background of concepts, principles, and factual information which will serve to properly orient the cadre members on the relevant aspects of the total problem. Core content, then, is what every cadre member should know about civil defense.

Definition of Specialized Content

The specialized content consists of those training topics, that is, knowledges and skills which are more or less uniquely related to the responsibilities and duties of <u>specific</u> cadre roles. Thus, there is a <u>specialized</u> content for each cadre position. No two cadre roles will have the same specialized content. Where a cadre position combines two roles, as in the case of a Maintenance and Supply Officer, the specialized content for both roles would be combined for training a person to assure the dual role position.

The Reason for the Distinction

The distinction between core and specialized content is made because it provides a basis for better organization, development, and training of needed knowledges and skills. It avoids an unnecessary repetition of training topics in the curriculum proposed for individual members of shelter management. Also, the core content provides a basis for the initial orientation of key cadre positions.

Outline of Recommended Core Content

PART I. ORIENTATION ON NUCLEAR WAR

I. NUCLEAR WEAPON EFFECTS

- A. Thermal Effects and Ranges

 - The firebail
 Thermal radiation
 The fire storm
- B. Blast Effects and Ranges
 - 1. The blast wave
 - 2. The suction wave
 - 3. The ground tremor effects
 - 4. The wind effects
- C. Radiation Effects and Ranges
 - 1. Initial nuclear radiation
 - 2. The fallout phenomena

! 1. SECONDARY NUCLEAR WEAPON EFFECTS

- A. Casualties from Thermal Effects
 - 1. Relationship between distance and casualties
 - 2. Principles of protection
- B. Casualties from Blast Effects
 - 1. Relationship between distance and casualties
 - 2. Principles of protection
- C. Casualties from Radiation Effects
 - 1. Radiation dosage effects
 - 2. Principles of protection
 - (a) barrier shielding
 - (b) geometric shielding (c) radioactive decay
- D. Casualties With and Without Protection

PART II. ORIENTATION ON CIVIL DEFENSE

- I. THE NATIONAL FALLOUT SHELTER CAPABILITY PROGRAM
 - A. Goal of the Shelter Capability Program
 - B. Objectives of the Shelter Capability Program
 - 1. Identification of shelter spaces
 - 2. Marking of shelter facilities
 - 3. Stocking of shelter facilities
 - Cadre staffing of shelter facilities
 - 5. Nationwide shelter operational readiness
 - C. Status of the Shelter Capability Program
 - 1. Accomplishment to date
 - 2. Yet to be accomplished
 - D. Relation of Federal to State and Local Civil Dafense

PART III. THE SHELTER SYSTEM

- I. THE GOALS OF A SHELTER SYSTEM
 - A. The Concept of a Shelter as a System
 - B. The Primary Goal of the Shelter System
 - C. The Sub-Goals of the Shelter System
 - 1. Radiation protection
 - 2. Blast and thermal effects protection
 - Fire and flood protection
 - 4. Hazardous atmospheric conditions protection
 - 5. Temperature extreme protection
 - 6. Provisions for food and water
 - 7. Provisions for sleep
 - 8. Provisions for medical care
 - 9. Provisions for shelter sanitation
 - 10. Maintenance of social control
 - 11, Maintenance of Shelteree morale
 - 12. Provisions for religious needs
 - 13. Provisions for recreational activities14. Provisions for training and education

 - 15. Provisions for support services

- D. General Implications of Shelter Goals
 - 1. Need for peacetime planning
 - 2. Need for peacetime implementation
 - Need for peacetime cadre
 - 4. Need for wartime management organization

II. THE BASIC ACTIVITIES OF SHELTER MANAGEMENT

- A. The Temporal Phases of the Shelter System
 - Establishment of operational readiness
 - Maintenance of operational readiness 2.
 - 3. Warning, shelter entry, and post entry
 - 4. Period of extended confinement
 - 5. Preparation for exit

B. Essential Management Activities by Goal and Phase

- 1. Radiation protection activities
- 2. Blast and thermal protection activities
- 3. Fire and flood protection activities
- 4. Hazardous atmospheric condition protection activities

: }

- Temperature extreme protection activities
 Food and water provision activities
- Sieep provision activities
- 8. Medical care provision activities
- 9. Shelter sanitation activities
- 10. Shelteree social control activities
- 11. Shelteree morale development activities
- 12. Religious needs activities
- 13. Recreational needs activities
- 14. Training and educational activities
- 15. Support services activities

C. implications for Shelter Management Organization

- 1. Need for trained management
- 2. Need for effective organization
- 3. Need for peacetime planning and implementation

PART IV. SHELTER MANAGEMENT AND ORGANIZATION

1. THE ORGANIZATION OF SHELTER MANAGEMENT

- A. Alternative Forms of Shelter Management Organization
 - 1. Organization in large shelters
 - 2. Organization in intermediate shelters
 - 3. Organization in small shelters

- B. Organization in Peacetime and Wartime
 - 1. Concept of the peacetime cadre
 - 2. Objectives of the peacetime cadre
 - a. Attainment of operational readiness
 - b. Maintenance of operational readiness

.

- 3. Concept of the wartime staff
- Objectives of the wartime staff
- C. The Development of a Peacetime Cadre
 - 1. Alternative methods of recruitment
 - 2. Alternative methods of selection
 - Alternative methods of training
 - 4. Value of periodic self-audits

SHELTER MANAGEMENT RESPONSIBILITIES AND DUTIES 11.

- A. The Concept of Minimal Requirements
- B. Position Responsibilities
 - 1. Shelter manager and deputies
 - 2. Medical head
 - 3. Radiological head
 - 4. Communications head
 - 5. Maintenance and supply head
 - 6. Mess operation head
 - 7. Fire, safety, and rescue head
 - 8. Sanitation head
 - 9. Training and education head
 - 10. Recreational activities head
 - 11. Religious services head
 - Support services head
 Security head

 - 14. Division, section, and unit heads

PART V. ORIENTATION ON LEADERSHIP

- ALTERNATIVE CONCEPTS OF LEADERSHIP
 - A. Authoritarian Leadership
 - 1. Advantages and limitations
 - 2. Circumstances when appropriate

- B. Democratic Leadership
 - 1. Advantages and limitations
 - 2. Circumstances when appropriate
- C. Laissez-Faire Leadership
 - 1. Why inappropriate in a shelter

11. ELEMENTS OF SUCCESSFUL LEADERSHIP

- A. Thorough Knowledge of Shelter Problems
- B. Pre-Planning of Procedures and Controls
- C. Delegation of Responsibility and Authority
- D. Adequate Communication to and from Shelterees
- E. Responsiveness to Shelteree Needs
- F. Exercise of Personal Example
- G. Adaptibility to Changes in Situation
- H. Sensitivity to Individual Differences
- I. Ability to Deal with Problem Shelterees
- J. Ability to Project Self-Confidence

111. PSYCHOLOGY OF SHELTEREES UNDER STRESS

- A. Responsiveness to Competent Leadership
- B. Reactions to Prolonged Stress
- C. Methods of Alleviating Stress Reactions

Recommended Methods of Core Content Training

In Chapter VII, it was recommended that the shelter cadres of a community be trained locally. On the assumption that local training will be the approach, these methods of instruction warrant consideration. They are: (1) training conducted by a trained local person, (2) training conducted on a self-instruction basis, and (3) training conducted via the medium of television.

Instruction by Local Personnel

If local personnel are to conduct the training of core content, they will first require training in such content themselves. Such training is probably

best conducted at universities and colleges under contract to OCD to provide such services.

Once trained, the local instructors will require a standardized training aid. The best all-purpose standardized training aid is a well designed text. A text manual has many advantages: (1) it can be given to cadre personnel for study and future reference. (2) it ensures that all cadre will get a standard orientation. (3) it gives instructors a text on which to base their preparation. (4) it provides the instructors of the community instructors with a basis for instructions. (5) it encourages the local instructors to "stick to the text" rather than permit their instruction to stray from the recommended topics. (6) it frees the instructor from the necessity of covering factual material which can be learned as readily by reading text material. He can, therefore, devote more time to the discussion aspects of the training content.

The instructors will also require some type of instructor's guide. A good instructor's guide will describe how to handle the instruction of the text content. Such an instructor's guide will further assure a necessary amount of uniformity of instruction across the country. It will also put OCD on record, so to speak, as to how it recommends that the instruction of cadres take place.

A third valuable training aid that should be given serious consideration is an orientation film covering part, not necessarily all, of the core content. The general nature of the core content lends itself to a film treatment. The use of a properly developed training film could convert the role of the local trainer from instructor to discussion leader. This too, has advantages. For one, the time required to train the local trainers would be greatly reduced. It would largely be a matter of instructing the trainers in how to use the film and text materials to conduct active discussion sessions on topics covered in those two media.

It is entirely possible that local instructors can be done away with entirely if film, text, and conference leader's guide are so developed that shelter managers can conduct their own cadre orientation. This possibility should be considered for field testing. The potential for cost savings is high when one considers what it would otherwise cost to train local trainers at regional training centers.

Training by Self-Instruction

An alternative to group training sessions is to prepare the text material for self-instruction. Programmed instruction of the core content is <u>not</u> recommended because the text material should be suitable for both reading assignments in connection with group instruction and self-instruction without group instruction. The advantage of preparing the text material in this way is the

greater flexibility achieved. It permits individual members of a cadre group to elect self-instruction in preference to group instruction. Where cadre members are scattered after working hours, and would have to commute considerable distances for training sessions in evening hours, the prospect of home-study has real advantages. Short objective-type examinations could be developed for use in conjunction with home study text.

Training by Television

The possibility of using the medium of television to conduct nation-wide civil defense instruction should be explored. In the fall of 1963, the Federal Communication's Commission will allocate UHF channels to applicants from private enterprises. There are only a limited number of such channels. The Office of Civil Defense should consider the possibility of having such a channel allocated to it for possible educational purposes in the future.

Orientation and core training of cadres by television would greatly reduce the costs of the total training effort. Such instruction would not eliminate desirable discussion among trainees. On the contrary, a discussion supplement, conducted by local shelter managers for the benefit of their cadre members, could be planned as part of the total training approach. The television presentation would essentially be a more commercial version of a training film used locally.

CHAPTER IX

SPECIALIZED CONTENT FOR SHELTER CADRE TRAINING

Chapter IX Outline

	<u>Page</u>
SHELTER MANAGER AND DEPUTIES	105
MEDICAL HEAD	105
Restatement of Major Responsibility	105
Recommended Specialized Training	106
RADIOLOGICAL HEAD	107
Restatement of Major Responsibility	107
Recommended Specialized Training	107
COMMUNICATIONS HEAD	109
Restatement of Major Responsibility	109
Recommended Specialized Training	109
MAINTENANCE AND SUPPLY HEAD	111
Restatement of Major Responsibility	111
Recommended Specialized Training	111
MESS OPERATION HEAD	114
Restatement of Major Responsibility	114
Recommended Specialized Training	114
FIRE, SAFETY, AND RESCUE HEAD	117
Restatement of Major Responsibility	117
Recommended Specialized Training	117
SANITATION SERVICES HEAD	119
Restatement of Major Responsibility	119
Recommended Specialized Training	119
TRAINING AND EDUCATION HEAD	121
Restatement of Major Responsibility	121
Recommended Specialized Training	121
RECREATION SERVICES HEAD	122
Restatement of Major Responsibility	122
Recommended Specialized Training	123
RELIGIOUS SERVICES HEAD	124
Restatement of Major Responsibility	124
Recommended Specialized Training	124
SUPPORT SERVICES HEAD	125
Restatement of Major Responsibility	129
Recommended Specialized Training	125
SECURITY SERVICES HEAD	127
Restatement of Major Responsibility	127
Recommended Specialized Training	12; 12
RECOMMENDED METHOD FOR TRAINING SPECIALIZED CONTENT	12

IX. SPECIALIZED CONTENT FOR SHELTER CADRE TRAINING

The specialized training content for the cadre positions is described under the heading of each cadre position. A restatement of the general responsibility of each cadre staff head position precedes the recommended training outline.

Shelter Manager and Deputies

The shelter manager and the deputies who may succeed him are the executive level of the shelter management organization. Together, they have the responsibility for training, directing, coordinating, and supervising the activities of the staff unit heads. For this reason, the position is taken herein that the shelter manager and his deputies must have a knowledge of the same specialized training content planned for their staff unit heads. The merit of this principle can be seen in a situation where a replacement for a staff unit head must be recruited and trained. The situation may occur in peacetime or in wartime when reasons remove an incumbent staff head. In either case, who but the shelter manager and/or his deputies will be available to train the newly recruited staff head. The principle can also be defended on grounds other than training capability. The status of the leader in a crisis situation is very much related to his knowledge of what the situation requires. The more shalter managers know of the specialized trainings planned for their staff heads, the better equipped they will be for their executive role in the shelter management organization.

In addition to the core content and the specialized content designed for their staff heads, shelter managers and their deputies should receive training in the recruitment, selection, and training of staff personnel.

Medical Head

Restatement of Major Responsibility

The medical unit head has primary responsibility for developing in peacetime the nucleus of a shelter medical capability; i.e., plans, procedures, supplies, etc., and for directing the use of that capability under wartime shelter habitation. For details of duties, consult p. 29.

Recommended Specialized Training

- 1. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BASIC SHELTER MEDICAL AID KNOWLEDGE
 - A. Potential In-Shelter Medical Problems
 - 1. Radiation caused medical problems
 - 2. Blast and thermal effects medical problems
 - 3. Shelter confinement caused medical problems
 - 4. Other types of medical problems
 - B. Diagnoses and Minimal Aid Treatment
 - 1. Radiation effects
 - 2. Blast and thermal effects
 - 3. Shelter confinement effects
 - 4. Other medical problems

III. ESTABLISHING A SHELTER MEDICAL CAPABILITY

- A. Procurement of Medical Supplies
 - 1. Community shelter medical kit
 - 2. Supplies for up-grading medical capability
- B. Storage of Medical Supplies
 - 1. Security against theft
 - 2. Security against damage or spoilage
- C. Location of Medical Treatment Center
 - 1. Criteria for area selection
 - 2. Up-grading medical treatment center
- D. Planning of Medical Unit Staff Organization
 - 1. Factors determining organization plan
 - 2. Recording and stocking organization plan
- E. Developing Medical Unit Plan of Operations

- 1. Plans for dally sick call operation
- 2. Plans for in-shelter hospital operation
- 3. Plans for mass emergency medical treatment
- 4. Plans for treatment away from medical center
- 5. Miscellaneous planning considerations
 - a. Control of medical supplies
 - b. Maintenance of medical records
 - c. Replenishment of medical supplies
 - d. Priorities for medical treatment
 - e. Measures of preventive medicine
- 6. Recording and stocking a plan of operation

Radiological Head

Restatement of Major Responsibility

The radiological protection head has primary responsibility for the peacetime development of a protection, monitoring, and decontamination capability, i.e., plans, rules, procedures, equipment, supplies, and personnel; and for the wartime direction of that capability. For details of duties, consult p. 30.

Recommended Specialized Training

- 1. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BASIC RADIOLOGICAL PROTECTION KNOWLEDGE
 - A. Assessment of Structural Protective Factor
 - 1. Concept of radiation protection factor
 - 2. Factors determining protection factor
 - 3. Assessment of protection factor
 - B. Methods of Increasing Radiation Protection
 - 1. Use of sealing materials
 - 2. Use of barrier materials

- 3. Use of geometric shielding principle
- 4. Permanent vs. temporary modifications
- C. In-Shelter Radiological Monitoring
 - 1. Definition and purpose of monitoring
 - 2. Types of monitoring equipment
 - a. Ratemeters
 - b. Dosimeters
 - 3. Operation, use, and care of monitoring equipment
 - a. Ratemeter use
 - b. Dosimeter use
 - 4. Establishing a shelter monitoring program
 - a. initiation of readings
 - b. Location of readings
 - c. Frequency of readings
 - d. Recording of readings
 - e. Reporting of readings
 - 5. Calculation of shelter exit time
 - 6. Special-purpose monitoring tasks
- D. Methods for Radiological Decontamination
 - 1. Personnel decontamination methods
 - 2. Large-area decontamination methods
 - 3. Small-area decontamination methods
 - 4. Food and water decontamination methods
- III. BASIC BLAST AND THERMAL PROTECTION KNOWLEDGE
 - A. Methods for Increasing Blast and Thermal Protection
 - 1. Use of barrier materials
 - 2. Use of core area protection
 - 3. Removal of potential missiles

- 4. Assumption of prone position
- 5. Taking maximal protective coverage

IV. ESTABLISHING A RADIOLOGICAL PROTECTION CAPABILITY

- A. Procurement of Required Equipment
 - 1. Monitoring equipment
 - 2. Decontamination equipment:
- B. Storage of Monitoring and Decontamination Equipment
 - 1. Security against damage or deterioration
 - 2. Periodic inspection of equipment
- C. Developing a Radiological Unit Plan of Operation
 - 1. Plan for increasing radiological protection
 - 2. Plan for monitoring shelter areas
 - 3. Plan for decontamination activities
 - 4. Recording and stocking operation plans
- D. Developing a Radiological Unit Organization Plan
 - i. Factors determining organization plan
 - 2. Recording and stocking organization plan

Communications Head

Restatement of Major Responsibility

The communications head has primary responsibility for the peacetime development of an internal and external shelter communications capability; i.e., plans, rules, procedures, equipment, supplies, and personnel; and for the wartime direction of that capability. For details of duties, consult p. 31.

Recommended Specialized Training

- I. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BASIC COMMUNICATIONS SERVICES KNOWLEDGE

- A. Function of the Shelter Communication Center
 - 1. Related to external communications
 - 2. Related to internal communications
- B. Type and Use of Communications Equipment
 - 1. For external communications
 - a. Normally available equipment
 - b. Special-purpose equipment
 - 2. For internal communications
 - a. Normally available equipment
 - b. Special-purpose equipment
- C. External Sources of Information
 - 1. Local civil defense organization
 - 2. Local civil authority
 - 3. Emergency Broadcast System (EBS)
- D. Censorship of Information
- III. ESTABLISHING AND MAINTAINING A COMMUNICATIONS CAPABILITY
 - A. Assessment and Procurement of Communications Equipment
 - 1. Minimum requirements of communications capability
 - 2. Assessment of available communications equipment
 - 3. Procurement of equipment to up-grade capability
 - B. Storage of Communications Equipment and Supplies
 - 1. Protective measures against damage
 - 2. Other storage precautions
 - C. Location for Communications Center
 - 1. Criteria for area selection
 - D. Developing Communications Center Operation Plan

- i. External communication plans and procedures
- 2. Internal communication plans and procedures
- 3. Miscellaneous planning considerations
 - a. Care and maintenance of equipment
 - b. Maintenance of communications log
- 4. Recording and stocking plan of operation
- E. Developing a Communications Center Staff Plan
 - 1. Factors influencing staff organization
 - 2. Recording and stocking staff organization plan

Maintenance and Supply Head

Restatement of Major Responsibility

The maintenance and supply head has primary responsibility for the peacetime procurement and storage of sheiter equipment and supplies and for the development of a repair and maintenance capability relevant to critical sheiter equipment. In wartime, he is responsible for the security of supplies, and their disbursement to staff heads. He is also responsible for the direction of the repair and maintenance capability. For details of duties, consult pp. 32 and 34.

- I. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BACKGROUND INFORMATION FOR MAINTENANCE CAPABILITY
 - A. Concept of Critical Equipment
 - 1. Implications for maintenance capability
 - a. Personnel
 - b. Spare parts
 - c. Procedures
 - d. Maintenance tools and equipment

- B. Concept of Non-Critical Equipment
 - 1. Implications for maintenance capability
 - a. Personnel

III. DEVELOPING A CRITICAL EQUIPMENT MAINTENANCE CAPABILITY

- A. Assessing the Criticality of Shelter Equipment
 - 1. Ventilating equipment
 - 2. Air cooling equipment
 - 3. Air filtration equipment
 - 4. Auxiliary power equipment
 - 5. Other potentially critical equipment
- B. Developing Equipment Operation Capability
 - 1. Stocking operating instructions
 - 2. Developing cadre capability for operation
- C. Developing Equipment Maintenance Capability
 - 1. Stocking preventive maintenance instructions
 - 2. Stocking recommended spare part supplies
 - 3. Stocking spare part replacement procedures
 - 4. Developing cadre capability for spare part replacement
- D. Miscellaneous Maintenance Capability Considerations
 - 1. Maintenance for non-critical equipment
 - 2. Use of stand-by technical personnel
 - 3. Stocking operation and organization plans
- IV. DEVELOPING A SUPPLY SERVICES CAPABILITY
 - A. Assessing Material and Supply Needs
 - 1. Coordination with other staff heads
 - 2. Distinction between essential and non-essential supplies
 - B. Procurement of Supplies

- 1. OCD stocks
- 2. Community-provided supplies
- 3. Special-purchase supplies
- 4. Supplies from shelter-containing structure
- 5. Supplies brought in by shelterees
- C. Determining Storage Areas and Methods
 - 1. Criteria for storage area selection
 - a. Peacetime storage areas
 - b. Wartime storage areas
 - 2. Criteria for storage methods
- D. Planning Wartime Supply Management
 - 1. Determining basic supply management approach
 - a. Factors favoring the centralized approach
 - b. Factors favoring the decentralized approach
 - 2. Developing and stocking plans
 - a. The operation plan
 - b. The organization plan
- E. Conducting Periodic Supply Inspections
 - 1. Alternate approaches to inspection
 - a. Supply head inspection
 - b. Staff head inspection
 - c. Joint supply head-staff head inspections
 - d. Spare parts
 - e. Procedures
 - f. Maintenance tools and equipment
- V. BACKGROUND INFORMATION FOR SUPPLY CAPABILITY
 - A. Functions of Supply Management

- 1. Procurement
- 2. Storage
- 3. Inspection
- 4. Inventory
- 5. Distribution
- 6. Security
- 7. Record Control
- B. Alternative Approaches to Supply Management
 - 1. Centralized supply management
 - a. Concept of centralized supply management

į *

- b. Advantages and disadvantages
- c. Recommended procedures
- 2. Decentralized supply management
 - a. Concept of decentralized supply management
 - b. Advantages and disadvantages
 - c. Recommended procedures

Mess Operation Head

Restatement of Major Responsibility

The mess operation head has primary responsibility for the peacetime development of the nucleus for a shelteree food and water provisioning capability, and for the wartime direction of that capability. For details of duties, consult p. 33.

- 1. REVIEW OF RESPONSIBILITIES AND DUTIES
- 11. BASIC MESS OPERATION KNOWLEDGE
 - A. Shelteree food and water requirements

- 1. Normal adults
- 2. Ill, Injured, and aged
- 3. Infants and children
- B. Effects of Food and Water Deprivation
 - 1. Physiological effects
 - 2. Psychological effects
- C. Types of Undesirable Foods
 - 1. High-protein foods
 - 2. Quick-spollage foods
 - 3. Highly seasoned foods

111. ESTABLISHING AND OPERATING A MESS UNIT CAPABILITY

- A. Procurement of Food and Water Supplies
 - 1. Type of supplies
 - a. Recommended types of supplies
 - b. Procedures for obtaining supplies
 - 2. Procedures for up-grading supplies
 - e. Bring-in food supplies
 - b. Community-donated supplies
 - 3. Readying of water supplies
- B. Storage of Food and Water Supplies
 - 1. Security against theft, damage, and spoilage
 - 2. Security against personnel accidents
 - 3. Storage for efficiency of use
 - 4. Periodic inspection for deterioration or damage
- C. Location of Mess Operation Center(s)
 - 1. Criteria for selection of location(s)
 - 2. Up-grading mess operation center

- D. Developing the Mess Operation Plan
 - 1. Deciding basic feeding capability
 - a. Survival rations only
 - b. Survival rations plus additives
 - c. Survival rations plus augmented stocks
 - d. Normal meals
 - 2. Planning food preparation procedures
 - a. Survival rations only
 - b. Survival rations plus additives
 - c. Survival rations plus augmented stocks
 - d. Normal meals
 - 3. Planning food and water distribution procedures
 - a. Method of fixed-point distribution
 - b. Method of moving-point distribution
 - 4. Planning clean-up and waste disposal procedures
 - 5. Miscellaneous planning considerations
 - a. Preparation and distribution equipment
 - b. Eating and drinking utensils
 - c. Control of food and water supplies
 - d. Replenishment of food and water supplies
 - e. Methods of ration reduction
 - 6. Recording and stocking a plan of operation
- E. Planning of Mess Unit Organization Plan
 - 1. Relation of shelter capacity to organization plan
 - 2. Relation of shelter structure to organization plan
 - 3. Recording and stocking organization plan

Fire, Safety, and Rescue Head

Restatement of Major Responsibility

The fire, safety, and rescue head has primary responsibility for the peacetime development of a shelter capability for fire prevention and control, in-shelter accident prevention, and emergency rescue operations; such capabilities to include plans, rules, procedures, equipment, supplies, and personnel. He is also responsible for the wartime direction of such capabilities. For details of duties, consult p. 35.

- I. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BASIC FIRE, SAFETY, AND RESCUE INFORMATION
 - A. Basic Principles of Fire Prevention and Control
 - 1. Elimination or control of fuel
 - 2. Elimination or control of ignition sources
 - B. Shelter Measures for Fire Prevention
 - 1. Peacetime elimination of fire hazards
 - 2. Post-shelter entry inspection for fire hazards
 - 3. Adoption of fire prevention rules
 - 4. Training and enforcement of rules
 - 5. Daily inspection of shelter for fire hazards
 - C. Shelter Measures for Fire Detection
 - 1. Use of detection equipment
 - 2. Use of fire-watch observers
 - D. Shelter Measures for Fire Suppression
 - 1. Selection and use of fire-fighting equipment
 - 2. Strategic location of fire-suppression equipment
 - 3. Training of shelteree fire brigades
 - 4. Control of shelterees in event of fire

- E. Shelter Measures for Shelteree Accident Prevention
 - 1. Control of common environmental hazards
 - 2. Adoption and enforcement of shelter safety rules

Υİ

- F. Shelter Measures for Rescue Operations
 - 1. Types of rescue operations
 - 2. Basic precautions in rescue work
 - 3. Impromptu volunteers vs. trained teams

III. ESTABLISHING AND MAINTAINING A FIRE PREVENTION AND CONTROL CAPABILITY

- A. Procurement and Installation of Equipment
 - 1. Fire-detection equipment
 - 2. Fire-suppression equipment
- B. Developing a Fire-Unit Plan of Operation
 - 1. Planning fire prevention activities
 - a. Posting fire-prevention rules
 - b. Orienting shelterees and staff
 - c. Conducting daily fire inspections
 - d. Posting fire watches
 - e, Other activities
 - 2. Developing fire-suppression capability
 - a. Training cadre staff
 - b. Training post-attack staff
 - c. Training shelteree fire brigades
- C. Planning Fire-Unit Organization Plan
 - 1. Factors influencing organization plan
 - a. Nature and size of shelter
 - b. Fire-suppression equipment available
 - 2. Recording and stocking organization plan

IV. ESTABLISHING AND MAINTAINING A SAFETY AND RESCUE CAPABILITY

- A. Developing an In-Shelter Safety Program
 - 1. Inspecting and correcting in-shelter hazards
 - a. Peacetime inspection
 - b. Wartime inspection
 - 2. Developing and posting safety rules
 - 3. Observing for unsafe practices
- B. Developing a Rescue Operation Capability
 - 1. Training a rescue operation team
 - 2. Conducting rescue operation exercises
 - 3. Using personal protective equipment

Sanitation Services Head

Restatement of Major Responsibility

The sanitation service head has primary responsibility for the peacetime development of a shelter capability for maintaining sanitary shelter conditions under habitation, and for the wartime direction of that capability. For details of duties, consult p. 36.

- I. REVIEW OF RESPONSIBILITIES AND DUTIES
- 11. BASIC SANITATION SERVICES KNOWLEDGE
 - A. Shelter Sanitation and Hyglene Problems and Methods
 - 1. Human waste disposal
 - a. Potential problem of inadequate disposal
 - b. Methods of human waste disposal
 - 2. Garbage and trash disposal

- a. Potential problems of inadequate disposal
- b. Methods of garbage and trash disposal
- 3. General shelter cleanliness
 - a. Potential problems of inadequate cleanliness
 - b. Methods of maintaining shelter cleanliness
- 4. Personal and feminine hygiene
 - a. Personal hygiene problems
 - b. Methods of providing for personal cleanliness
- 5. Disposal of dead
 - a. Methods of disposal
- 6. Rodents, vermin, and insects
 - a. Methods of eradication
- B. Functions of Sanitation Staff Unit
 - 1. Set-up of equipment
 - 2. Inspection of facilities
 - 3. Direction of sanitation squads
 - 4. Control of sanitary supplies

111. ESTABLISHING AND MAINTAINING A SANITATION CAPABILITY

- A. Procurement of Sanitary Equipment and Supplies
 - 1. Minimal requirements of equipment and supplies
 - 2. Procurement of OCD sanitary supplies
 - 3. Procurement of other sanitary supplies
- B. Storage of Sanitary Equipment and Supplies
 - 1. Security against damage or deterioration
 - 2. Periodic inspection and replacement
- C. Developing a Sanitation Unit Operation Plan
 - 1. Establishing procedures for:

- a. Human waste disposal
- b. Garbage and waste disposal
- c. General shelter cleanliness
- d. Personal hygiene
- e. Disposal of dead
- f. Rodent, vermin, and insect control
- 2. Other planning considerations
 - a. Control of supplies
 - b. Inspection of facilities
- 3. Recording and stocking unit operation plan
- D. Developing a Sanitation Unit Organization Plan
 - 1. Factors influencing organization plan
 - 2. Recording and stocking organization plan

Training and Education Head

Restatement of Major Responsibility

The training and education head has primary responsibility for the peacetime development of a shelteree orientation, training, and education capability, said capability to include plans, procedures, equipment, supplies, and personnel. He is also responsible for the wartime direction of that capability. For details of duties, consult p. 37.

- I. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BASIC TRAINING AND EDUCATION SERVICES KNOWLEDGE
 - A. Need for Training and Educational Services
 - 1. Relation to shelteree morale
 - 2. Relation to social control
 - 3. Relation to shelter efficiency

- B. Recommended Kinds of Training and Educational Services
 - 1. New staff personnel training
 - 2. Shelteree training for in-shelter living
 - 3. Shelteree training for emergencies
 - 4. News and orientation sessions
 - 5. On-going education for children
 - 6. Training for post-shelter living

III. DEVELOPING A TRAINING AND EDUCATION SERVICES CAPABILITY

- A. Developing a Training and Education Operation Plan
 - 1. Plans for staff training
 - 2. Plans for shelteree in-shelter living training
 - 3. Plans for shelteree training for emergencies
 - 4. Plans for news and orientation services
 - 5. Plans for non-adult on-going education
 - 6. Plans for post-shelter living training
 - 7. Miscellaneous planning consideration
 - a. Stocking of materials and supplies
 - b. Scheduling of training activities
 - 8. Recording and stocking operation plan
- B. Developing a Training and Education Organization Plan
 - 1. Factors influencing organization
 - 2. Recording and stocking organization plan

Recreation Services Head

Restatement of Major Responsibility

The recreation services head has primary responsibility for the peacetime development of a shelteree recreational activity capability, said capability to include plans, procedures, supplies, and personnel. He is also responsible for the wartime direction of that capability. For details of duties, consult p. 38.

Recommended Specialized Training

- 1. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BASIC RECREATION SERVICES KNOWLEDGE
 - A. Need for Recreational Services
 - 1. Recreation and shelteree morale
 - 2. Recreation and social control
 - B. Suitable Kinds of Recreational Activities
 - 1. Small-group games
 - 2. Organized group discussions
 - 3. Informal group singing
 - 4. Arts and crafts activities
 - 5. Spectator entertainments
 - 6. Reading and other "quiet" activities
 - C. Factors influencing Recreational Activities
 - 1. Shelter characteristics
 - 2. Shelteree characteristics
 - 3. Availability of materials
 - 4. Availability of experienced personnel

III. ESTABLISHING AND OPERATING A RECREATIONAL CAPABILITY

- A. Developing a Recreation Unit Plan of Operation
 - 1. Assessment of shelter characteristics
 - 2. Assessment of potential shelterees
 - 3. Procurement and stocking of materials
 - 4. Preparation of recreation program and schedule
 - 5. Recording and stocking operation plan

- B. Developing a Recreation Unit Organization Plan
 - 1. Factors influencing organization plan
 - 2. Recording and stocking organization plan

Religious Services Head

Restatement of Major Responsibility

The religious services head has primary responsibility for the peacetime development of a religious services capability, said capability to include plans, procedures, and supplies. He is also responsible for the wartime direction of that capability. For details of duties, consult p. 39.

- I. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BASIC RELIGIOUS SERVICES KNOWLEDGE
 - A. Need for Religious Services
 - 1. Religious services and shelteree morale
 - 2. Religious services and social control
 - B. Types of Religious Services
 - 1. Denominational services
 - 2. Non-denominational services
 - 3. Group prayer and hymn singing
 - 4. Silent periods for individual prayer
 - 5. Last-rites services
 - C. Factors influencing Religious Services
 - 1. Shelter characteristics
 - 2. Shelteree characteristics
 - 3. Availability of religious leaders
 - 4. Other factors

III. ESTABLISHING AND OPERATING A RELIGIOUS SERVICES CAPABILITY

- A. Developing a Religious Services Unit Plan of Operation
 - 1. Assessment of shelter characteristics
 - 2. Assessment of potential shelterees
 - 3. Plans for conducting group services
 - 4. Procurement and stocking of materials
 - 5. Miscellaneous planning considerations
 - a. Last-rite services
 - b. Religious aid and comfort
 - 6. Recording and stocking operation plan
- B. Developing a Religious Services Unit Organization Plan
 - 1. Factors influencing organization plan
 - 2. Recording and stocking organization plan

Support Services Head

Restatement of Major Responsibility

The support services head has primary responsibility for peacetime development of program of in-shelter support services, e.g., care and control of children, non-medical care of ill, injured, and infirm shelterees, improvement of shelter environment, and other useful support services. In wartime, the support services head works with other staff heads to implement and coordinate the planned program. For details of duties, consult p. 40.

- 1. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. SUPPORT SERVICES BACKGROUND INFORMATION
 - A. Elements of Child Care and Control

- 1. Care of infants and pre-schoolers
- 2. Care of the ages six to ten
- 3. Care of age ten and upward
- B. Elements of Care for Ill and injured
 - 1. Providing psychological aid and comfort
 - 2. Providing recreational outlets
 - 3. Providing modical support care
- C. Methods of Shelter Environment improvement
 - 1. Maintaining shelter cleanliness
 - 2. Providing makeshift furniture
 - 3. Using posters and artwork
 - 4. Improving shelter illumination
- D. Other Types of Support Services
 - 1. Providing personnel for special tasks
- III. DEVELOPING AND DIRECTING A SUPPORT SERVICES CAPABILITY
 - A. Peacetime Development of Support Services Capability
 - 1. Developing a child care and control capability
 - a. Salecting an activity area
 - b. Planning an activity program
 - c. Stocking useful activity supplies
 - 2. Developing a hospital patient support capability
 - a. Planning recreational activities
 - b. Planning emotional support services
 - c. Stocking useful activity supplies
 - 3. Developing an environment improvement program
 - a. Applying environment improvement in peacetime
 - b. Planning environment improvement for wartime
 - c. Stocking useful materials and supplies

- 4. Miscellaneous planning considerations
 - a. Stocking a support services operation plan
 - b. Stocking a support services organization plan
- B. Wartime Direction of Support Services Capability
 - 1. Recruitment of support services personnel
 - 2. Training of support services personnel
 - 3. Application of support services plans

Security Services Head

Restatement of Major Responsibility

The security head has primary responsibility for the peacetime development of a security services capability. The basic security service will be the handling of shelterees that constitute a social control problem beyond the normal handling capability of division, section, and unit heads. In wartime, the security head would direct such a capability when there is a need. For details of duties, consult p. 41.

The limited responsibility of the security services head suggests the possibility that this role could best be assumed by the deputy shelter manager. A separate security services head in the shelter management organization is not necessarily required. What is required is that some one person assume the responsibilities and duties of the role. The deputy manager is the logical person since the line supervisions (division, section, and unit heads) who are responsible for social control report to the deputy shelter manager.

- I. REVIEW OF RESPONSIBILITIES AND DUTIES
- II. BACKGROUND INFORMATION FOR SECURITY SERVICES
 - A. Concept of In-Shelter Social Control
 - 1. Definition of social control
 - 2. Responsibility for social control
 - 3. Potential consequences of social control breakdown

- B. Basic Measures to Prevent Social Control Problems
 - 1. Division of social control responsibility
 - 2. Communication of in-shelter rules and procedures
 - 3. Communication of violation consequences
 - 4. Maximal elimination of idle time
 - 5. Elimination of sources of provocation
 - 6. Provision of normal tension outlets
- C. Basic Measures to Handle Social Control Problems
 - 1. Reinstruction and friendly persuasion
 - 2. Provision of additional responsibility
 - 3. Interviews with higher shelter management
 - 4. Physical restraint and/or restriction
 - 5. Measures for dealing with violent persons
- D. Types of Potential Social Control Problems
- III. DEVELOPMENT AND DIRECTION OF SECURITY CAPABILITY
 - A. Peacetime Development of a Security Capability
 - 1. Establish procedures for corrective discipline
 - 2. Train all cadre in established procedures
 - 3. Procure equipment for physical restraint
 - 4. Develop skill in handling cases of violence
 - 5. Stock planned preventive and corrective measures
 - B. Wartime Direction of Security Capability
 - 1. Application of preventive measures
 - a. Communication program
 - b. Activity program
 - c, Responsibility program
 - d. Security measures program
 - 2. Application of corrective measures
 - a. At unit head level
 - b. At section head level

- c. At division head level
- d. At shelter manager level

Recommended Method for Training Specialized Content

The method recommended for training key cadre positions in their respective specialized training content is a combination self-study combined with discussion sessions with other cadre members. In order to apply this method, the training outlines will have to be converted into self-instructional text material. It is suggested that such a text bookiet be developed for each of the key cadre roles discussed in this chapter. The series of booklets would constitute a complete training package for a shelter cadre organization. The booklets could be used for self-instruction, as recommended, or for group instruction by trained instructors. The same booklets could also be used for the shelter manager instructor courses currently conducted at OCD training centers.

REFERENCES

- Allen, F. C. <u>Control of shelter environment</u>. Engineering Research, Research Memorandum. Battle Creek: Office of Civil Defense Mobilization, Fobruary 10, 1960.
- Altman, J. W., Smith, R. W., Meyers, Rheda L., McKenna, F. S., & Bryson, Sara. <u>Appendices for psychological and social adjust-ment in a simulated shelter</u>. Pittsburgh: American Institute for Research, 1960.
- 3. Altman, J. W., Smith, R. W., Meyers, Rheda L., McKenna, F. S., & Bryson, Sara. <u>Psychological and social adjustment in a simulated shelter</u>. Pittsburgh: American Institute for Research, 1960.
- 4. American Institute for Research. Manual of civil defense information.
 Pittsburgh: Author, 1960.
- American Institute for Research. Operational capabilities of community shelter facilities. San Mateo, California: Author, 12 March 1962.
- American Medical Association. Report on national emergency medical care. Chicago: Author, 1959.
- American Vocational Association. <u>Civil defense and vocational aducation</u>. Washington: Author, 1 March 1957.
- 8. Baker, R. C., & Siegel, A. I. <u>Training requirements for civil defense</u>

 <u>administrators and leaders. The administration course.</u> Wayne,

 Pennsylvania: Applied Psychological Services, November 1958.
- 9. Baker, R. C., Siegel, A. I., & Benson, S. D. <u>Training requirements</u>
 for civil defense administrators and leaders. The evacuation course. Wayne, Pennsylvania: Applied Psychologica: Services, January 1959.
- 10. Baker, R. C., Siegel, A. I., & Benson, S. D. <u>Training requirements</u>

 for civil defense administrators and leaders. The operations

 course. Wayne, Pennsylvania: Applied Psychological Services,
 March 1959.
- 11. Bass, B. M. <u>Leadership</u>, psychology, and organizational behavior. New York: Harper Brothers, 1960.
- 12. Bellows, R., Bellows, Carol S., Estep, M. F., Rush, C. H., Jr., School, C. E., Jr., & Wilson, R. F. Workbook in Industrial psychology and personnel management. Dubuque, Iowa: William C. Brown Company, 1957.

- Bend, E., Erskine, Janice, & Shively, Aliza. <u>Manageable group sizes in shelters</u>. Pittsburgh: American Institute for Research, 1963.
- 14. Bend, E., Griffard, C. D., Schaner, Ada, Shively, Aliza, & Hudak, Vivian.

 <u>Guide to shelter organization and management</u>. Pittsburgh: American Institute for Research, 1963.
- 15. Berlo, D. K., Bettinghaus, E. P., Costley, D., & Van Dam, R. The fallout protection booklet: (1) A report of public attitudes toward and information about civil defense. East Lansing, Michigan: Michigan State University, 1963.
- 16. Berlo, D. K. The fallout protection booklet: (II) A comparison among four groups of differing levels of interest in shelter construction.

 East Lansing, Michigan: Michigan State University, 1963.
- 17. Berlo, D. K. The <u>public's opinions of existing or potential federal faliout shelter programs</u>. East Lansing, Michigan: Michigan State U., Colleges of Communication Arts, September 1962.
- 18. Berry, L. E. How to prepare a plan for survival. In <u>Business management</u>.

 January 1962, pp. 36-42.
- 19. <u>Blueprint for industrial security</u>. Standard Oil Company of New Jersey, 17 June 1960.
- 20. Brooks, F. C., Callahan, E. D., Clarke, E. T., Batter, J. F., & Kaplan,
 A. L. Radiological defense planning guide. Part I. Planning
 analysis and data. Part II. Model radiological defense plans.
 Burlington, Massachusetts: Technical Operations, Inc., July 31,
 1958.
- 21. Callahan, C. D., Rosenblum, L., & Coombe, J. R. Shelter from fallout.
 Burlington, Massachusetts: Technical Operations, Inc., 7 April
 1961.
- 22. Cannell, R. S. <u>Live--A handbook of survival in nuclear attack</u>. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1962.
- 23. Cannell, R. S. We can live through nuclear attack...and recover. In Air Force and Space Olgest, February 1960.
- City of Livermore, California City Council. <u>Community shelter report</u>. Livermore, California: Disaster Office, April 1962.

- 25. Committee on Government Operation. National fallout shelter program.
 Sixteenth Report. Washington: Government Printing Office,
 21 May 1962.
- 26. Couch, V. L. Disaster management training. <u>Journal of American society</u> of training directors, September 1961, <u>15</u>, (9), 3-8.
- 27. Couch, V. L. What companies are doing to survive nuclear attack. In Business management, January 1962, 36-42.
- 28. Covert, L. W. Blast and fallout protection for an industrial plant.

 Plant engineering reprint. Philadelphia: Rohm & Haas Company,
 December 1961.
- 29. Davis, K. Human Society. New York: Macmillan, 1957.
- 30. DeCharms, R., & Bridgemen, Winnie. <u>Leadership compliance and group behavior</u>. St. Louis: Washington University, August 1961.
- 31. Department of the Army. Accessory equipment for protective shelters. Washington: Author, 21 November 1958.
- 32. Department of the Army. Design and review of structures for protection from fallout germa radiation. Ft. Belvoir, Virginia: Author, October, 1961.
- 33. Department of Commerce. <u>Defense against agents of mass destruction</u>. Washington: Office of Tachnical Services, 30 October 1959.
- 34. Department of Defense. Analysis of the fallout shelter provisioning program. Washington: Author, February 28, 1963.
- 35. Department of Defense. Annual report of the office of civil defense.

 For fiscal year 1962. Washington: U. S. Government Printing
 Office, 1962.
- 36. Department of Defense. Department of defense fact sheet on the civil defense program. Washington: Government Printing Office, December 14, 1961.
- 37. Department of Defense. <u>Information builtelin</u>, March 19, 1963, (60).
- 38. Department of Defense. Information hulletin, June 17, 1963, (70).

- 39. Department of Defense. <u>Selected statistics on the fallout shelter program</u>. Washington: Author, February 15, 1963.
- 40. Department of Health, Education, and Welfare. The care of infants and children in community fallout shelters, Project 1502. Washington:
 Author, July 1962.
- 41. Department of the Navy. Shelter design and habitability study.
 Washington: Naval Research Reviews, April 1962.
- 42. Devaney, J. F. Operations in fallout. Battle Creek: Office of Civil Defense Mobilization, June 1961.
- 43. Devaney, J. F. <u>Some operational implications of fallout</u>. Battle Creek:
 Office of Civil Defense Mobilization, Executive Office of the
 President, December 8, 1959.
- 44. Disaster Research Group. Appendices for an analysis of several surveys relative to problems of shelter habitability. Washington: National Academy of Sciences National Research Council, January 1960.
- 45. Donaldson, J., Magnuson, Karen, L., Niner, R., Watt, Frances, & Zink, A.

 An examination of psychological problems during shelter confinement
 following an thermonuclear attack. Operations Research Office:

 Johns Hopkins University, March 1958.
- 46. Dunlap and Associates, Inc. <u>Procedures for managing large fallout shelters</u>. Stamford, Connecticut: Author, April 1960.
- 47. Dunlap and Associates, Inc. The use of existing structures as fallout shalters. Stamford, Connecticut, Author, 1960.
- 48. Executive Office of the President. <u>Basic civil defense</u>. Washington: Government Printing Office, January 1959.
- 49. Executive Office of the President. Federal contributions for civil defense equipment. Battle Creek, Michigan: Office of Civil Defense Mobilization, July 1959.
- 50. Federal Civil Defense Administration. A brief review of salient findings on morale and human behavior under disaster conditions. Washington, Author, April 18, 1958.
- 51. Franklin, Adele. <u>Home play and play equipment for young children.</u>
 Washington: U. S. Children's Bureau of Publications, 1959.
- Gardner, Ella. <u>Handbook for recreation leaders</u>. Washington: U. S. Children's Bureau of Publications, 1959.

- General Services Administration. <u>Building organization for self</u> protection. Washington: Author, September 14, 1959.
- 54. Gh. selli, E. E., & Brown, C. W. <u>Personnel and industrial psychology</u>.
 New York: McGraw-Hill, 1948.
- 55. Gillispie, R. D. <u>Psychological effects of war on citizen and soldier</u>.
 New York: W. W. Norton, 1942.
- 56. Glasstone, S. (Ed.). The effects of nuclear weapons. Washington:
 Department of Defense, April 1962.
- 57. Glavis, C. R., Jr., Bombing mission number fifteen. <u>J. Abnor. Soc.</u>
 Psychol., 1946, 41, 189-198.
- 58. Guskin, S. L. <u>Social and psychological aspects of shelter living</u>
 <u>following nuclear attack</u>. (Second draft). Washington: Disaster
 Research Group, November 1958.
- 59. Hamblin, R. L., Miller, K., & Wiggins, J. A. Group morale and competence of the leader. <u>Sociometry</u>, September 1961, 24, 3.
- 60. Hemphill, J. K <u>Leader behavior descriptions</u>. Columbus: The Ohio State University Personnel Research, 1950.
- 61. Hemphill, J. K., Pepinsky, Pauline, N., Shevitz, R. N., Jayness, W. E.

 8 Christner, Charlotte A. Leadership acts: 1. An investigation
 of the relation between possession of task relevant information
 and attempts to lead. Columbus: Ohio State University, Research
 Foundation, 1954.
- 62. Ikle, F. C., Rayner, Jeannette F., Quarantelli, E. L., & Whitney, S. B.

 Withdrawal behavior in disasters: Escape, flight, and evacuation
 movements. Washington: National Academy of Sciences National
 Research Council, April 1957.
- 63. <u>industrial defense manual</u>. Pittsburgh: Jones & Laughlin Steel Corporation, 1 March 1960.
- 64. Janis, I. L. <u>Air war and emotional stress</u>. New York: McGraw-Hill, 1951.
- 65. Lewinsky, H. Boredom. Brit. J. Educ. Psychol., 1943, 13, 147-152.
- 66. Logan, L., Killian, L. M., & Marrs, W. A study of the effect of catastrophe on social disorganization. Chevy Chase, Maryland: Operations Research Office, 23 December 1960.

- 67. Lybrand, W. A. Outline of an analytic approach to predicting societal system recovery from an air attack. Arlington, Virginia: Human Sciences Research, Inc., March 1961.
- Mayo, E. Revery and industrial fatigue. <u>J. Person. Research</u>, 1924, 3, 273,281.
- Nottingham, Elizabeth K. <u>Religion and society</u>. New York: Random House, 1954.
- Office of Civil Defense Mobilization. A planning guide for developing an operations plan.
- 71. Office of Civil Defense Mobilization. First aid--emergency kit-emergency action. Washington, 1959.
- 72. Office of Civil Defense. <u>Guide for community frilout shelter management</u>. Washington: Author, June, 1962.
- 73. Office of Civil Defense Mobilization. Guide for shelter reserve food supply.
- Office of Civil Defense Mobilization. <u>Handbook for emergencies</u>. Washington, 1958.
- 75. Office of Civil Defense. National fallout shelter survey. Phase II.

 Special Summaries: Analysis and use of Phase II. printout data.

 Washington: Department of Defense, June II, 1963.
- 76. Office of Civil Defense. National fallout shelter survey. Phase II.

 Special Summaries: Selected statistics. Washington: Department of Defense, June 11, 1963.
- 77. Office of Civil Defense. National fallout shelter survey, marking and stocking program. Washington: Government Printing Office, February 15, 1962.
- Office of Civil Defense Mobilization. <u>Radiological Instruments for civil defense</u>. Battle Creek: Government Printing Office, September 1955.
- Office of Civil Defense Mobilization. <u>Rescue and techniques</u>. Washington, Author, Revised, June 1959.
- Olson, R. L., Ferrel, R. E., Juilly, Marcel E., Kaufman, V. F., & Taylor, Eleanor C. <u>Food supply for fallout shelters</u>. Battle Creek: Office of Civil Defense, November 1960.

- 81. Petrullo, L., & Bass, B. M. (Eds.) <u>Leadership and interpersonal behavior</u>.

 New York: Hart Rinehart and Waston, Inc., 1961.
- 82. Ramsay, R. W. The nature of work, in Gilmer, B., Von H. <u>industrial</u>

 <u>Psychology</u>. New York: McGraw-Hill, 1961.
- 83. Rockefeller Center Inc. Fallout folder. Procedures and informations.
- 84. Schachter, S. The psychology of affiliation. Stanford, California:
 Stanford University Press, 1959.
- 85. Salls, S. B. Military small group performance under isolation and stress an annotated bibliography. I. Basic psychology of group behavior.

 Ft. Wainwright, Alaska: Arctic Aeromedical Laboratory, October 1961.
- 86. Sells, S. B. Military small group performance under isolation and stress an annotated bibliography. II. Dimensions of group structure and group behavior. Ft. Wainwright, Alaska: Arctic Aeromedical Laboratory, October 1961.
- 87. Sells, S. B. Military small group performance under isolation and stress an annotated bibliography. III. Environmental stress and behavior ecology. Ft. Wainwright, Alaska: Arctic Aeromedical Laboratory, October 1961.
- 88. Sells, S. B. Military small group performance under isolat on and stress an annotated bibliography. IV. Organizational staffing. Ft. Wainwright, Alaska: Arctic Aeromedical Laboratory, October 1961.
- 89. Sells, S. B. Military small group performance under isolation and stress an annotated bibliography. V. Organizational management and leader-ship. Ft. Weinwright, Alaska: Arctic Aeromedical Laboratory, October 1961.
- 90. Sells, S. B. <u>Military small group performance under isolation and stress</u>

 an annotated bibliography. VI. Leadership in formal groups. Ft.

 Walnwright, Alaska: Arctic Aeromedical Laboratory, October 1961.
- 91. Shaffer, L. F. Fear and courage in aerial combat. <u>J. Consult. Psychol.</u>, 1947, <u>11</u>, 137-143.
- 92. Shartle, C. L. Leadership and executive performance. <u>Personnel</u>, 1949, 25, 370-380.
- 93. Shartle, C. L. Organization structure in current trends in industrial psychology. Pittsburgh: University of Pittsburgh Press, 1949.

94. Shartle, C. L. Studies in naval leadership. Part 11. In Guetzkow, H. (Ed.) Group leadership and man. Pittsburgh: Carnegie Press, 1951.

[.] . .

- 95. Siroky, F. R., & Eninger, M. U. Planning and organizing shelter nonoperational activity programs. Pittsburgh: American institute for Research, 1963.
- 96. Smith, R. W., & Lasky, Mary Ann. <u>Planning guides for dual-purpose shelters</u>.

 Pittsburgh: American Institute for Research, 1963.
- 97. Stanford Research Institute. <u>Live (Three plans for survival in a nuclear attack)</u>. Menio Park, California: Division of Economics Research (Author), June 16, 1960.
- 98. Stogdill, R. M. Leadership, membership and organization. <u>Psychol. Bull.</u>, 1950, 47, 1-47.
- 99. Stogdill, R. M. Personal factors associated with leadership: A survey of literature. J. of Psychol., 1948, 25.
- 100. Stogdill, R. M. Studies in naval leadership. Part II. In Guetzkow, H. (Ed.) Group leadership and men. Pittsburgh: Carnegie Press, 1951.
- 101. Strope, W. E. <u>Performance specifications for a sound national shelter system.</u> San Francisco, California: Naval Radiological Defense Laboratory, February 13, 1957.
- 102. Strope, W. E., Etter, H. S., Schultze, D. A., & Pond, J. I. The family occupancy test 4-6 November 1960. San Francisco: U. S. Naval Radiological Defense Laboratory, August 1962.
- 103. Strope, W. E., Schultze, D. P., & Pond, J. I. <u>Preliminary report on the shelter occupancy test of 25-29 July 1960</u>. San Francisco: Naval Radiological Defense Laboratory, 21 March 1961.
- 104. Thouless, R. H. Psychological effects of air raids. Nature, 1941, 148, 183-185.
- 105. Torrance, E. P. The behavior of small groups under the stress conditions of "survival." Amer. Socio. Review. December 1954, 19, 751-755.
- 106. Tyhurst, J. S. <u>Behavior under stress</u>. Ottawa: Defense Research Board of Canada, 1950.
- 107. U. S. Government Printing Office.

 defense for fiscal year 1962.

 Defense, 1962.

 Annual report of the office of civil Washington: Department of
- 108. Wallace, A. F. C. <u>Human behavior in extreme situations</u>. Washington: National Academy of Sciences National Research Council.

109. Willis, M. P., Markowitz, Eileen M., & Nagin, Edythe F. Requirements and methods for improving civil defense training. Pittsburgh:

American institute for Research, 1963.