

UNCLASSIFIED

AD 410891

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.

410891

STUDY ABSTRACT

The study explored the need for a planned program of in-shelter activities, such as training, recreation, physical fitness, and shelteree services, to aid in the prevention of demoralization and loss of social control. The analysis of the problem concluded that such in-shelter activities would probably be helpful as an auxiliary means of promoting shelteree morale and social control in the event of post-nuclear attack confinement.

The specific potential benefits to be gained from such activities include (1) reduction of negative emotional stress, (2) breakdown of personal barriers, (3) improved responsiveness to shelter leadership, (4) improved control over shelteree behavior, and (5) a sense of faster passage of time.

The following principles should characterize planning, organizing and directing activity programs: (1) Activities selected should facilitate achievement of shelter goals, (2) Activities selected should be compatible with the shelterees, (3) Activities should be compatible with shelter conditions, (4) Activities should reflect shelter priorities and requirements, (5) Activities require pre- and post-entry training, (6) Activities should require little or no stocking of supplies other than guidance materials, (7) Activity leaders require some pre-entry training on planning, organizing, and directing activity programs, (8) Activities must be voluntary, not forced.

The areas in which activities were recommended included (1) training and education, (2) shelteree services, (3) physical fitness, (4) religion, (5) arts and crafts, (6) social activities, (7) entertainments, and (8) self-initiated activities such as reading. With respect to such activities, planner information was developed. The information included (1) potential benefits, (2) potential adverse effects, (3) suitability to different types of people, (4) trained personnel requirements, (5) material and equipment requirements, (6) appropriate time of day for activity, (7) appropriate duration of activity, (8) suitable shelter location for activities, and (9) sources of guidance material. In addition, general planning information was developed for the recommended non-operational activities.

The procedures for planning and organizing shelter activities are described and relate to the following steps: (1) establishing a planning committee, (2) determining readiness, (3) determining the need for activities, (4) determining the need for equipment and materials.

mitations, conclusions, and recommendations are presented.

**PLANNING AND ORGANIZING SHELTER
NON-OPERATIONAL ACTIVITY PROGRAMS**

Contract No. OCD-OS-62-107

Prepared by:

**Frank R. Siroky
Max U. Eninger**

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.

28 June 1963

**AMERICAN INSTITUTE FOR RESEARCH
Pittsburgh, Pennsylvania**

ACKNOWLEDGEMENTS

The authors are indebted to Mr. Lou Coffey and Mr. John R. Fatter of the American Institute for Research for their efforts in collecting, reviewing, and abstracting data on shelter activities; also to Dr. James W. Altman and Mr. Emil Bend for furnishing technical guidance, advice and critical comments at the most opportune moments.

Chaplains Norman Bardsley, Carroll G. Chaphe, and R. F. Karniswicki furnished technical advice regarding religious activities. Members of the University of Pittsburgh School of Social Work, its library and librarians of the City of Pittsburgh contributed source materials and suggestions concerning potential activities.

A special word of appreciation is extended to Mr. Fred Carr, Office of Civil Defense, for his advice and guidance.

TABLE OF CONTENTS

	Page
I. STUDY PURPOSE, METHODS, AND END-PRODUCTS	1
Study Purpose	1
Study Methods	1
Study End-Products	2
II. RATIONALE FOR PLANNED SHELTER ACTIVITY PROGRAMS	4
GOALS OF A CIVIL DEFENSE SHELTER	4
The Ultimate Goal of Survival	4
The Basic Shelter Sub-Goals	4
OPERATIONAL AND NON-OPERATIONAL ACTIVITIES	6
BASIC ASSUMPTIONS REGARDING NON-OPERATIONAL ACTIVITIES	7
The Primary Assumption	7
Related Assumptions	7
THE CATEGORIES OF NON-OPERATIONAL ACTIVITIES	9
THE PRIMARY ROLE OF NON-OPERATIONAL ACTIVITIES	11
Inactivity and Negative Emotional Stress	11
The Case for Planned Activities	12
POTENTIAL BENEFITS FROM NON-OPERATIONAL ACTIVITIES	13
III. PLANNER INFORMATION FOR NON-OPERATIONAL ACTIVITIES	16
A PREVIEW OF ESSENTIAL PLANNER INFORMATION	16
TRAINING AND EDUCATION ACTIVITIES	17
Shelter Management Staff Training	20
Shelteree Training for In-Shelter Living	21
Shelteree Training for Emergencies	22
News and Information Sessions	23
On-Going Educational Activities	24
Post-Shelter Living Training	25
SHELTEREE SERVICE ACTIVITIES	27
Care of Infants and Young Children	28
Care of Ill and Injured	28
Medical Support Activities	28
Psychological Support Activities	29
Shelter Appearance Improvement	30
PHYSICAL FITNESS ACTIVITIES	31
Self-Initiated Physical Exercises	31
Leader-Initiated Group Calisthenics	32
Calisthenics Selection Principles	32
RELIGIOUS ACTIVITIES	32
Non-Denominational Services	33
Denominational Services	33
Self-Initiated Prayer and Meditation	34
ARTS AND CRAFTS ACTIVITIES	34
SOCIAL-RECREATIONAL ACTIVITIES	35
Small Group Games	35
Organized Group Discussions	37
Informal Group Singing	38

	Page
SPECTATOR ENTERTAINMENTS	39
FREE-TIME QUIET ACTIVITIES	39
Reading	40
Other Activities	40
IV. RECOMMENDED PROCEDURES FOR PLANNING AND ORGANIZING SHELTEREE	
ACTIVITIES	41
ACTIVITY PLANNING AND SHELTER PHASES	41
ESTABLISHMENT OF OPERATIONAL READINESS	42
Concept of Operational Readiness	42
Implications of the "Readiness" Concept	42
Selection of Shelter Activity Leader	43
Training of Cadre Activity Leader(s)	45
Assessment of Shelter Characteristics	46
Assessment of Potential Shelter Population	47
Procurement and Stocking of Materials	48
Preparation of a Tentative Activity Program	48
MAINTENANCE OF OPERATIONAL READINESS	49
SHELTER ENTRY AND POST-ATTACK PHASE	51
ROUTINE SHELTER CONFINEMENT PHASE	51
Registration of Shelterees	52
Selection of Essential Activity Staffs	52
Training of Essential Activity Staffs	53
Reassessment of Shelter Conditions	53
Planning and Scheduling Activities	54
PRE-SHELTER EXIT PHASE	54
Assessment of Regional Status	54
Preparation of Training Content	55
V. STUDY LIMITATIONS, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE	
RESEARCH AND DEVELOPMENT	56
REFERENCES	59
APPENDIX	
SECTION I. BIBLIOGRAPHY AND RECOMMENDED ACTIVITY REFERENCES	A- 1
SECTION II. DESIRABLE TYPES OF ACTIVITIES UNDER VARIOUS	
SHELTER CONDITIONS	A-21

LIST OF TABLES AND FIGURES

	Page
Table I. Summary of Activity Planning Information and Potential In-Shelter Non-Operational Activities	18
Table II. Topics for Post-Shelter Living Training	26
Table III. Suggested Morale-Building Songs that are Widely Known . .	38
Table IV. Civilian Occupations from which Deputy of Shelter Services May be Chosen	45
Table V. A Suggested In-Shelter Activity Schedule	49
Table VI. Desirable Types in Relation to Individual and Combined Shelter Conditions	A-22
Figure 1. A Prototype Shelter Management Organization for 1000 Persons	44
Figure 2. Master Activity Schedule	50

CHAPTER I
STUDY PURPOSE,
METHODS, AND END PRODUCTS

CHAPTER I OUTLINE

	<u>Page</u>
STUDY PURPOSE, METHODS, AND END PRODUCTS	
Study Purpose	1
Study Methods	1
1. Literature review	
2. Shelter system analysis	
3. Framework of assumptions	
4. Synthesis of activity data	
5. Verification of recommendations	
Study End Products	2

I. STUDY PURPOSE, METHODS, AND END-PRODUCTS

Study Purpose

The study had several related objectives: (1) to assess the need for some type of planned in-shelter activity program for shelterees during a relatively long shelter confinement; (2) to identify broadly the kinds of activities which would be suitable for planned in-shelter activity programs; (3) to develop generally the concepts, principles, and procedures related to planning in-shelter activity programs; (4) to provide information about different kinds of activities to guide persons responsible for planning such programs. A by-product objective was to prepare the final report in such a way that it might serve as an aid in training activity leaders.

The activities with which the study is concerned are not those related to the essential functions of running a shelter, such as radiological monitoring, or providing medical care, or feeding shelterees. Instead, the study deals with activities in such areas as training and education, recreation, physical fitness, and services shelterees can render to fellow shelterees.

Study Methods

The methods employed during the course of the study were as follows:

1. Literature review. Literature related to behavior of people under stress, boredom, and monotony; shelter habitability; recreational and leisure-time activities; and other broad topics potentially related to the problem of in-shelter activities was reviewed, abstracted, and coded. The literature reviewed is identified in the References section and in the Appendix, Section A.
2. Shelter system analysis. In conjunction with other A-1-R civil defense projects, an analysis was made of a civil defense shelter as a system. The analysis identified the goals, functions, and other tasks of shelter management as well as the kinds of problems which either could or would occur. The analysis proved useful in: (1) assessing the need for a planned shelter activity program, (2) indicating what activities might be suitable, and (3) pointing out the restrictions and limitations under which a shelter activity program would have to operate. See Eninger (47) for an outline of the analysis results.

3. Framework of assumptions. The absence of experimental data bearing directly upon the study problem made certain assumptions relating activities to shelter goals necessary. Additional assumptions were made about the criteria which should characterize planned shelter activities. These assumptions, plus information about activities, provided a basis for rejecting many potential in-shelter activities. Thus, for example, recreation activities involving prolonged and severe physical exertion were not recommended because of the assumed need to conserve body fluids and energy, and to avoid unnecessary increases in shelter temperature.
4. Synthesis of activity data. The activities thought to be related to the goals of shelter management were assessed in terms of potential planner information; e.g., effects upon shelter environment, benefits to participants, material requirements, space requirements, leadership requirements, and similar considerations. A synthesis of all such data made it possible to recommend specific types of activities which planners should consider for inclusion in in-shelter activity programs.
5. Verification of recommendations. The study recommendations took the form of suggestions, concepts, principles, and procedures thought to be useful to in-shelter activity planners. They were subjected to a degree of verification by having knowledgeable persons unrelated to the study review them critically from the standpoint of feasibility, credibility, and comprehensiveness. The reviewers consisted of academic specialists, civil defense personnel, and other appropriate persons. The approach brought a wider range of opinion to bear on the problem of planned in-shelter activities.

Study End-Products

Two end-products resulted from the study: (1) this technical report, prepared for the Office of Civil Defense, and (2) a chapter for inclusion in Bend's (15) manual, Guide to Shelter Organization and Management.

This technical report is addressed primarily to professional civil defense planners, in the Office of Civil Defense under the Department of Defense and in state agencies associated with civil defense. It is hoped that it will also be helpful to those who may have to plan, organize, and direct in-shelter activities of the kind dealt with herein, but that is not the primary extent of this report. It is anticipated that professional civil defense planners will do further work to prepare guidance material for those who must grapple with the problem at the individual shelter level.

The second end-product of the study is a practical, albeit abbreviated guide for civil defense shelter managers confronted with the task of planning and initiating in-shelter activity programs such as described herein. It too assures that additional guidance material will be available for the activity planner.

CHAPTER **II**

A RATIONALE FOR PLANNED SHELTER ACTIVITY PROGRAMS

CHAPTER II OUTLINE

	<u>Page</u>
THE GOALS OF A CIVIL DEFENSE SHELTER	4
The Ultimate Goal of Survival	4
The Basic Shelter Sub-Goals	4
OPERATIONAL AND NON-OPERATIONAL ACTIVITIES	6
BASIC ASSUMPTIONS REGARDING NON-OPERATIONAL ACTIVITIES	7
The Primary Assumption	7
The Related Assumptions	7
THE CATEGORIES OF NON-OPERATIONAL ACTIVITIES	9
Orientation, Training, and Education	9
Shelter Services	10
Physical Fitness Activities	10
Religious and Meditational Activities	10
Arts and Crafts	10
Small Groups Games	10
Discussions and Socializing Activities	10
Spectator Entertainment Activities	10
Individual Reading Activity	10
Quiet Hours	10
THE PRIMARY ROLE OF NON-OPERATIONAL ACTIVITIES	11
Inactivity and Negative Emotional States	11
The Case for Planned Activities	12
POTENTIAL BENEFITS FROM NON-OPERATIONAL ACTIVITIES	13

II. RATIONALE FOR PLANNED SHELTER ACTIVITY PROGRAMS

Goals of a Civil Defense Shelter

A brief discussion of civil defense shelter goals will serve to set the stage for the rationale of planned in-shelter activity programs.

A shelter that is adequately stocked, staffed by trained management personnel, and occupied by shelterees under wartime conditions can be regarded as a system with specific goals to accomplish. The concept of the shelter as a goal-oriented system is basic to the problem of planning shelter activities. It will be the task of shelter management to organize in-shelter activities to achieve shelter goals.

From a shelter management standpoint, there are two kinds of shelter goals: (1) the ultimate goals of shelteree survival, and (2) the sub-goals which are the means to the end-goal. They are discussed below.

The Ultimate Goal of Survival

The ultimate goal of a civil defense shelter is to return shelterees to the post-attack world physically and mentally capable and ready to assume a responsible role in the reconstruction of their community. Thus stated, the goal of the shelter is more than merely providing protection against radioactive fallout. It implies a concern for the total individual, including his state of morale. It also implies that shelter management must plan, organize, and direct in-shelter activities from the standpoint of more than simply physical survival.

The Basic Shelter Sub-Goals

How successfully shelter management achieves the ultimate goal depends upon how effectively the major secondary goals are achieved. Let's consider briefly the nature of these goals and their implications for in-shelter activities.

1. Protection against environmental threat. It is axiomatic that a fallout shelter must provide minimally adequate protection against radioactive fallout. Not so obvious are the other kinds of environmental threats against which shelterees must be given some degree of protection. Excessively high shelter temperatures, insufficiency of oxygen, shelter fires, hazardous structural damage from

blast, shelter flooding, chemical warfare agents--all these are possible threats to shelterees for which shelter management should have some measure of protective capability.

2. Provision for biological needs. The likely duration of confinement to the shelter makes it imperative that provisions must be made for food, water, sleep, toilet facilities, medical care, and other essential needs of shelterees. Shelter management must at least provide the minimum requirements. However, the more such provisions can be upgraded from the absolute minimum, the easier will be the psychological adjustment of the shelterees.

3. Development and maintenance of morale. The shelterees will have to be welded into a cohesive, goal-oriented organization. Morale refers to their willingness to cooperate and share the routine tasks of running the shelter, to work together, to help each other. It means a persistent, organized, cooperative effort to do what has to be done for survival.

Demoralization means the opposite. It is evidenced by apathy and indifference, resistance to leadership, scapegoating and rumor spreading, reluctance to cooperate with others, a low threshold for mass panic, and other symptoms of lack of unity. The development of shelteree morale is an essential prerequisite for the ultimate goal of survival.

4. Maintenance of social control. Social control is the process of maintaining compliance with shelter management prescribed policies, procedures, and rules. The maintenance of social control is essential because widespread loss of social control will tend to demoralize the shelter population and disrupt the basic shelter functions.

The deviant behaviors which social control seeks to prevent range from minor shelter rule violations, such as loud talk during sleep periods to criminal behaviors, such as thefts and acts of violence.

5. Preparation of shelterees for post-shelter conditions. It would be questionable to bring shelterees safely to the point of leaving the shelter, only to turn them loose wholly ignorant and unprepared for the serious hazards which may be present in the post-nuclear attack environment. Shelter management must assist the shelterees on the potential hazards of the post-attack environment, and instruct them on the necessary precautions and safe practices. In order to do so, shelter management must either assess or get an assessment of the post-nuclear attack conditions which exist in the shelter region.

6. Development of a capable management team. The sub-goals of protection against environmental threat, provision for biological needs, development of morale, maintenance of social control, preparation for post-nuclear attack conditions--all these major sub-goals imply another basic sub-goal, namely a capable shelter management team. One of the first goals of those who comprise the nucleus of shelter management must be to complete the staffing of the shelter management organization plan. This means recruiting basically qualified people from the shelterees, and training them quickly to assume management responsibilities and duties.

The above sub-goals of shelter management are not necessarily the only ones which warrant being made explicit. They do include, however, those which must be recognized by shelter management.

Operational and Non-Operational Activities

The basic sub-goals of shelter management imply quite clearly the need for planning, organizing, and implementing a great many diverse activities. Not all such activities fall within the scope of the present study. Therefore, to delimit the scope of the study, two broad types of activities can be distinguished: (1) operational activities, and (2) non-operational activities.

Operational activities are those directly related to the essential functions of the shelter. Included in this category are such activities as radiological monitoring, feeding shelterees, providing medical care, regulating air flow and temperature, maintaining sanitary conditions, and similar essential activities.

Non-operational activities are those indirectly related to sub-goal achievement. Included in this category are activities that have to do with education, recreation, religion, physical fitness, and "socializing." The study is concerned only with the latter kind of activities.

Two points about the distinction must be made clear: (1) the distinction does not imply all operational activities are necessarily more important to the achievement of the shelter sub-goals than the non-operational activities. Some routine operational activities, such as keeping toilet facilities clean, may be less important from an over-all goal achievement viewpoint than those non-operational activities which greatly influence morale and social control; (2) the distinction is a practical one, for the purpose of delimiting the activities dealt with in the study rather than for sound theoretical reasons. In the broad sense, all activities that are planned, organized, and directed by shelter management are operational.

Basic Assumptions Regarding Non-Operational Activities

The recommendations made in this report relative to the planning, organizing, and implementation of non-operational activity programs are based upon the assumptions described below.

The Primary Assumption

The concept of a passive shelter population that does nothing but wait until shelter exit time is categorically rejected on the grounds that both social control and morale are in jeopardy under such circumstances. The primary assumption of this study is the concept of an active, task-oriented shelter population. It is shelter management's responsibility to engage shelterees in meaningful activities.

Related Assumptions

The following assumptions are related to the primary assumption:

1. Activities should facilitate achievement of shelter goals. Other things equal, the more a particular activity facilitates, either directly or indirectly, the achievement of basic shelter goals, the more acceptable is the activity. At a minimum, an activity should not conflict with shelter goals. Social dancing, for example, may be recreational to some, but to others, it may seem wholly inappropriate under the circumstances. It could be a source of friction between shelterees. Thus, each potential activity must be evaluated in terms of whether, on the whole, it reduces or increases potential problems for shelter management.
2. Activities should be compatible with shelterees. Not all activities will be suitable to all shelterees. Activity planners should make allowances for individual differences in interests, abilities, personalities, age, physical characteristics, beliefs, and attitudes. In practice that means: (1) planning for a variety of activities to allow

¹ The term "meaningful activity" is used at several points in this report. It has reference to activities which are regarded as purposeful, useful, practical, sensible, or enjoyable to the persons asked to engage in the activity. Activity merely for the sake of activity, can appear meaningless to those asked to engage in such activities. An example would be asking people to clean an already clean floor. Such activity for activity's sake is apt to be resented.

for individual preferences; (2) planning suitable activities for special problem shelterees, e.g., children, the aged, and the ill and injured; and (3) allowing for self-initiated activities.

3. Activities should be compatible with shelter conditions. Some shelters may be plagued with problems of inadequate space, high temperatures, excessive humidity, high noise levels, poor illumination, and other unfavorable environmental conditions. Activities selected should not add to such problems or create them where they do not already exist. For example, where high effective temperature is a problem, recreation involving prolonged vigorous exertion, should not be permitted. Such exertion would liberate unnecessary heat into the shelter area, thus aggravating the high temperature problem.
4. Activities should reflect shelter priorities and requirements. Not all potential shelter activities are of equal importance for in-shelter and post-shelter survival. Some yield more benefits than others. Moreover, consideration must be given to shelter priorities and requirements. Essential training activities take precedence over recreational activities. Service activities, such as caring for the ill and injured, come before leisure-time activities. Activity planners must acknowledge the principle of first things first.
5. Activities require pre- and post-entry planning. Shelter leaders cannot expect shelterees to engage in the right kind of activities spontaneously. They must plan and organize the right kind of activities. For maximal effectiveness, much of the required planning should take place before wartime shelter entry, when conditions are more favorable to careful planning and preparation. Some planning and organizing will necessarily have to take place after shelter entry following attack warning. In brief, shelter management must not adopt a laissez-faire attitude toward activity planning. Too much is at stake.
6. Activities should require little or no stocking of supplies. Shelter space will be at a premium. Space will be needed not only for the occupants, but also for such vital supplies as food and water, sanitation kits, and other stocked materials. Therefore, activities which require anything but printed materials are probably unsuitable for inclusion in an activity program. This does not preclude the possibility that planners for given shelters may (1) advise the potential shelter population to bring along certain supplies at attack-warning time and (2) where space permits, stock on their own

initiative supplies requiring little space or expense. The possibility of voluntary contributions of reading materials, for example, should be explored at the local level.

7. Activity planners require some peacetime training. The planning, organization, and direction of non-operational activity programs are of sufficient importance and complexity to warrant peacetime training of at least one member of each shelter's peacetime management cadre. Such training need not deal intensely with the details of individual activities, except where such details are not likely to be found among the shelterees. Instead, the training should emphasize: (1) the importance of such activities for morale and social control, (2) the benefits to be derived from such activities, and (3) the recommended principles and procedures for planning, organizing, and implementing such activity programs.
8. Activities must be voluntary, not forced. Participation in a non-operational activity program should not be forced. That would counteract the very purposes of such activities, namely to enhance group morale and social control. It is shelter management's responsibility to provide for such activities and to encourage shelterees to participate. Beyond that, the wishes of individuals must be respected. There will be times when shelterees may want to withdraw psychologically from others. At such times, participation in planned activities will have little appeal. Such withdrawal needs should be recognized as normal rather than symptoms of low morale (7).

The Categories of Non-Operational Activities

The recommended non-operational activities can be classified in the following categories:

1. Orientation, training, and educational activities. Includes such specific activities as (1) orientation of shelterees in shelter rules and procedures, (2) training of additional shelter staff members, (3) educational activities related to post-shelter living, (4) on-going educational activities for school-age children, and (5) training shelterees in what to do given certain shelter emergencies.

2. Shelteree service activities. Includes such organized services as (1) non-medical care of the ill and injured, (2) care of infants and young children, (3) upgrading the livability of the shelter, (4) providing psychological support to persons in need, and (5) other simple "help-out" services as requested by shelter managers and/or other staff members.
3. Physical fitness activities. Includes such activities as (1) self-initiated exercises, (2) group calisthenics, and (3) physically active games intended to maintain physical fitness.
4. Religious activities. Includes such inspirational activities as (1) denominational services, (2) non-denominational services, (3) hymn-singing, (4) individual and group bible reading, and (5) silent periods for meditation.
5. Arts and crafts activities. Includes such activities as (1) art activities, e.g., pencil sketching, finger painting, wire sculpturing, etc., and (2) craft activities, e.g., poster making, sign painting, wood carving, and model building.
6. Small group games. Includes such activities as (1) board games, e.g., chess, checkers, etc.; (2) guessing games, e.g., "button, button, who has the button," etc.; (3) acting games, e.g., charades, "statues," etc.; (4) action games, e.g., "Simon says," "bean bag, keep away," etc.; and (5) card games, e.g., bridge, pinochle, hearts, etc.
7. Discussions and informal socializing. Includes such activities as (1) planned discussions, (2) informal "bull sessions," and (3) self-initiated "socializing" such as visits with compatible shelterees.
8. Spectator entertainment. Includes individual and group performances such as (1) humorous skits, (2) songs, (3) readings, (4) story-telling, (5) musical instrument renditions, (6) slight-of-hand and other "magical" tricks, (7) pageants, and (8) similar activities conducted for the entertainment of an audience.
9. Reading activity. Includes self-initiated as well as assigned reading of books, periodicals, and newspapers.
10. Quiet hours. Quiet hours are time periods set aside by shelter management which call for quiet and no shelter management planned activities. They are intended as planned efforts to relieve shelterees from noise, activities, and each other.

The planning details related to the above activities will be dealt with elsewhere in this report.

The Primary Role of Non-Operational Activities

The primary role of non-operational activities, from a shelter management standpoint, is the assistance such activities provide in the difficult task of maintaining morale and social control. The fundamental assumption of this study is that such activities will help management maintain shelteree morale and social control. Research findings which have a bearing on this assumption are discussed briefly below.

Inactivity and Negative Emotional States

The study uncovered no studies that directly related activity or inactivity to morale and social control as defined herein. Instead, studies related inactivity to such negative emotional states as fear, worry, boredom, anxiety, excitability, depression, and apathy. Since such emotional states are detrimental to morale and social control, the studies cited below have a bearing on the problem.

Janis (67) reports, "It is a generally accepted principle that people who face danger tend to be less fearful if they engage in some useful overt activity. Perhaps because the principle is so banal, there is little data on the effects of various types of assigned tasks and other overt activities in reactions to air raids." Landon-Davies (75) reports that, in the widespread terror of the air raids on Barcelona in the Spanish Civil War, people who continued working at their jobs tended to bear up better initially than others. Gillispie (57), writing about World War II air raids, reports there may be a critical period in which having an assigned occupation is extremely effective in avoiding anxiety symptoms. He writes, "If there is extensive opportunity for rumination in this period, neurotic symptoms are more likely to develop." Shaffer (105), in a study of fear in aerial combat, reports that, next to having confidence in equipment, crew, and leaders, the most notable prerequisite for fear reduction was "effective activity." The most frequently reported cause of intense fear by bomber crews, was enforced idleness in situations which permitted no counteraction against the threat. (It seems) "even activities that merely kept a man busy, although they were not very effective in avoiding the real danger, tended to decrease fear."² Glavis (58) reports bombing pilots losing feelings of anxiety while engaged

² Shaffer also reported after effects of intense fear which are of special interest to the shelter situation; e.g., extreme fatigue, restlessness, emotional depression, over-reaction to noise, loss of appetite, nightmares, and obsessive thoughts. The symptoms are exactly those found in psycho-neurotic anxiety states.

In recreational activities on the ground; also, their being more at ease when acting as pilots during a bombing run than when acting more passively as co-pilots.

There are also several theoretical interpretations which relate activity to fear and anxiety. Kluckhohn (74) interprets ritualistic behaviors in primitive cultures as responses to anxiety which cannot be coped with by rational means. The activity of the rituals apparently reduces anxiety. Dollard and Miller (42) emphasize the stimulus value of higher mental process responses, particularly for evoking fear and anxiety reactions. One implication of their theory is that any mental activity which can successfully compete with the fear-evoking mental activity will diminish experiences of fear and anxiousness. Their theory accounts very well for clinical observations that many people escape their fears and anxieties by engaging compulsively in activities. For some, work activities serve to reduce fears and anxieties; for others, leisure-time activities have the same effect.

In addition to the above research findings and theoretical accounts, activity is linked to anxiety reduction by many clinical observations. It has long been observed that many people escape their fears and anxieties by engaging in activities. Also, the value of occupational and recreational activities for mental patients is well established. Such activities absorb concentration and attention away from fears, anxieties, and inner conflicts. Then, too, it is almost commonplace that people who have inactivity forced upon them suffer various degrees of mental depression, self-dissatisfaction, and low morale. The purposelessness of inactivity is apparently intolerable to many.

Inactivity may also effect group morale and social control through the mechanism of boredom and apathy. Boredom has been associated with pessimistic meditation (79), increased irritability (77), increased worrying (56), emotional fears (56), mental dullness (56), poor work performance (56, 94), general apathy (102), and other reactions incompatible with morale. That boredom may be a common reaction to the shelter situation after the first several days is reasonable. Thouless (118) cites examples of widespread apathetic attitudes and lack of spontaneous activity in World War II air raid shelters. He pointed out that such reactions diminished under the influence of forceful leadership. Gillispie (57), also drawing on World War II observations, claims that unless shelter life is well organized, there may be mass apathy arising from boredom.

In conclusion, this can be said: There is no research or other evidence to suggest inactivity is conducive to morale or social control. What indirect evidence there is suggests general inactivity will be detrimental to morale and social control in the shelter.

The Case for Planned Activities

The fact that inactivity can be related to such destroyers of morale and social control as fears, anxieties, frustration, boredom, irritability, and

even psychoneurotic symptoms does not necessarily lead to the conclusions that shelter managers must plan and organize shelteree activities. It can be argued that shelterees, left to their own devices, will engage in self-initiated activities. Undoubtedly, many would do so. However, there are also good reasons for believing shelter managers should not rely on self-initiated activities to keep shelterees occupied. It is, for example, an almost commonplace observation that people under the stress of worry, fear, or anxiety lose their normal interests and motivation (18, 23, 75, 81, 110). The intense emotional shock which is likely to characterize people in the event of a nuclear attack is unlikely to leave them thinking of how they will occupy themselves during their stay in the shelter. The case is more likely that they will be stunned into a progressive state of inactivity, under the pressure of emotional shock, generalized anxiety, and self-feeding fears.

Admittedly, there is no certain prediction as to how people will react in the shelter under and after nuclear attack. However, for the shelter planner certainty is not necessary. It is only necessary that he know what might occur that could result in demoralization and loss of social control. Massive inactivity, apathy, and helplessness, as described above, is a real possibility. That being so, shelter managers must plan to counteract and minimize the psychological factors detrimental to morale and social control. One way to do so is with a program of planned activities, based on the principle of voluntary, albeit encouraged participation.

Potential Benefits from Non-Operational Activities

To consolidate the case for planned in-shelter, non-operational activity programs, the potential benefits are discussed briefly below:

1. Reduction of negative emotional states. By negative emotional states, we mean such mental states as fear, worry, grief, depression, anxiousness, nervous agitation, irritability, hostility, and privately kept grievances. Such states can often be dissipated or reduced to tolerable limits by essentially incompatible and pleasurable activities which focus the affected person's attention elsewhere. The reduction of such emotional states is very much a prerequisite for developing group morale and maintaining social control.
2. Quicker breakdown of interpersonal barriers. While it is to be expected that interpersonal barriers will, to some degree, be broken down by the common circumstances of shelter living, the breakdown process will be more quickly and favorably achieved when pleasurable, mutually beneficial, interaction opportunities are created. The

breakdown of interpersonal barriers tending to increase resentment, uncooperativeness, and even active hostility is another essential prerequisite to group morale. It is next to impossible to get teamwork out of people separated by walls of their own making.

3. Improved readiness to respond to shelter leadership. Participation in shelter-management planned and organized activities from which the participants feel they have gained "benefits," leaves the participants with a greater readiness to respond cooperatively with the shelter leaders. There is likely to be an increased confidence that shelter management knows what it is doing, that things have been thought out in advance.
4. Better control over shelteree behavior. Planned activities of the kind described earlier provide shelter managers with better control over shelter environmental conditions. Left to their own devices, shelterees may create a multitude of problems for shelter management. Gambling, for example, may lead to quarreling. Aimless milling about may rob needed space and interfere with operational activities. Unorganized activities by minority groups may be resented by other shelterees. Noise producing activities may raise the noise level to intolerable limits for some shelterees. Such problem behaviors are much less likely to occur when management controls activities by planning them. A habitability study conducted by Strobe (111) demonstrated the importance of planned activities for controlling the behavior of children.
5. A sense of faster time passage. Regardless of what takes place in the shelter, one can safely assume the shelterees will be looking forward to the time for leaving the shelter. Left to their own devices, many shelterees are likely to experience time passing as a slow, depressing drag after the first few days in the shelter. Such feelings invariably accumulate tensions and other undesirable mental states. Planned recreational activities and other meaningful types of in-shelter activities may help greatly in making time pass more quickly.

In addition to the above benefits which are general to all of the non-operational activities, there are some which are more specific to certain of the activities. These include:

6. A sense of contributing to the common good. Participation in service-type activities makes many people feel a sense of having contributed something worthwhile. Often the very people who get no tension relief from so-called recreational activities, do so from work or service activities. Thus, not only are there the benefits of specific services

rendered, e.g., children cared for, injured and ill attended, the anxious and worried given comfort, etc., but the morale of those who render the services is increased.

7. A general increase of useful or necessary information.
This benefit is obviously related to orientation, training, and educational activities. Such activities cannot be ignored. The need to know and to be kept informed is directly related to group morale and social control. Orientation and training activities under shelter conditions also have many bonus benefits. People are kept in controlled, orderly groups. General activity level decreases, thereby resulting in less noise and heat. The passive, listening role is likely to be a welcome change of pace for many.
8. A restoration of "inner strength" and spiritual resources.
The strength-giving value of religious faith in situations of great human stress has been demonstrated beyond question. It would be remiss of shelter management not to stimulate religious and spiritual feelings in shelterees. The stresses will be intense for many. Religious activities will undoubtedly be a source of comfort and strength to many (36, 85).

The foregoing discussion of the potential benefits to be derived from planned, non-operational activities of the kind herein identified makes clear that both shelter management and the individual shelterees stand to benefit from such activities. The practical problem concerns the question of how are such activities best planned, organized, and directed.

CHAPTER **III**

PLANNER INFORMATION FOR NON-OPERATIONAL ACTIVITIES

CHAPTER III OUTLINE

	<u>Page</u>
A PREVIEW OF ESSENTIAL PLANNING INFORMATION	16
TRAINING AND EDUCATIONAL ACTIVITIES	17
Shelter Management Staff Training	20
Shelteree Training for In-Shelter Living	21
Shelteree Training for Emergencies	22
News and Information Sessions	23
On-Going Educational Activities	24
Shelteree Training for Post-Shelter Living	25
SHELTEREE SERVICE ACTIVITIES	27
Care of Infants and Young Children	28
Non-Medical Care of Ill and Injured	28
Medical Support Activities	28
Psychological Support Activities	29
Shelter Appearance Improvement Activities	30
PHYSICAL FITNESS ACTIVITIES	31
Self-Initiated Physical Exercises	31
Leader-Initiated Group Calisthenics	32
Calisthenics Selection Principles	32
RELIGIOUS ACTIVITIES	32
Non-Denominational Services	33
Denominational Services	33
Self-Initiated Prayer and Meditation	34
ARTS AND CRAFTS ACTIVITIES	34
SOCIAL-RECREATIONAL ACTIVITIES	35
Small Group Games	35
Organized Group Discussions	37
Informal Group Singing	38
SPECTATOR ENTERTAINMENTS	39
FREE-TIME QUIET ACTIVITIES	39
Reading	40
Other Activities	40

III. PLANNER INFORMATION FOR NON-OPERATIONAL ACTIVITIES

A Preview of Essential Planner Information

It is a fundamental assumption of this study that non-operational activities should be planned for each shelter by a shelter management cadre during peacetime. Such plans should then be detailed, recorded, and stocked so that they are available as guidance material for those directing such shelter activities in the event of nuclear attack.

This chapter deals with planning information about different kinds of non-operational activities. It is designed to help those who have assumed the responsibility for planning in-shelter activity programs for specific shelter facilities.

The non-operational activity planners need to know specific kinds of activities within each basic category of non-operational activity which are potentially suitable. In addition, such planners should know the following about the activities recommended for their consideration:

1. Potential benefits. Different activities will yield different benefits for both shelterees and the shelter management. For example, recreational activities are more likely to reduce tension than training activities.
2. Potential adverse effects. Under certain shelter conditions, some activities may have adverse effects. For example, strenuous activities will generate heat which may be a problem where heat control is already difficult.
3. Suitability for types of shelterees. Some activities are more suitable for specific age groups, educational levels, sexes, and other specific shelteree characteristics. For example, games interesting to teen-agers are not necessarily interesting to younger children or adults.
4. Trained personnel requirements. Some activities require leadership by trained and/or experienced personnel. Others do not. Most training activities, for example, must be led by a trained instructor.
5. Material and equipment requirements. Some activities require or benefit from the availability of certain equipment, materials, or supplies. Board games, such as chess, checkers, or backgammon require equipment. Many other games do not.

6. Optimal time of day. Some activities are better conducted at one time of the day than other times. Physical fitness exercises, for example, are better conducted early in the day than late in the day.
7. Optimal duration of activity. Most activities have an optimal duration from the standpoint of participant interest, fatigue, and comfort. For example, more than ten minutes of organized calisthenics per session is likely to be excessively fatiguing for the average adult.
8. Suitable in-shelter locations. Where the situation permits, some activities should be scheduled for certain types of locations within the shelter. For example, denominational religious services should be held where there is reasonable privacy from non-participants.
9. Guidance material references. Activity planners may want to know more about the different types of activities recommended as suitable. Reference material is cited in the Appendix.

The above kinds of planning information are discussed in the following sections only when applicable to the activities recommended. In addition, some planning information is summarized in Table 1, pp. 18 and 19.

Training and Education Activities

Training and education activities not only provide a realistic and useful way to absorb shelteree idle time, but also enlarge the capability of shelterees for in- and post-shelter living. It is therefore recommended that shelter activity planners give priority emphasis to such activities. The following six kinds of training and educational activities are recommended:

1. Management staff personnel training. Has reference to training volunteers selected from the general shelter population in the duties and responsibilities of various shelter management positions.
2. Shelteree training for in-shelter living. Has reference to orienting shelterees on shelter policies, procedures, and rules governing in-shelter living.
3. Shelteree training for emergencies. Has reference to training shelterees on what to do when emergencies occur, such as outbreak of fire, breakdown of ventilation, massive penetration of radiation, shelter flooding, psychotic episodes, and other threatening contingencies.

TABLE 1. SUMMARY OF NON-OPERATIONAL ACTIVITY PLANNING INFORMATION.

The abbreviated questions are related to the side headings at their left. For questions are concerned with whether or not each listed activity at the top of the page is a specific shelter goal. The answer is provided in the small boxes by a code designated

POTENTIAL ACTIVITIES TO BE CONSIDERED BY THE SHELTER ACTIVITY PLANNER IN DEVELOPING SHELTER INFORMATION ACTIVITIES PROGRAM WHICH SHOULD BE CONSIDERED IN THE SELECTION OF SPECIFIC ACTIVITIES FOR INCLUSION IN A SHELTER ACTIVITY PROGRAM		TRAINING EDUCATION						SHELTER
		Management Staff Personnel Training	Shelteree Training for In-Shelter Living	Shelteree Training for Emergencies	News and Orientation Sessions	On-Going Education for Children	Post-Shelter Living Training	Care of Infants and Children
RELATION TO THE SHELTER GOALS	1. Environmental Threat Protection?	N	N	Y	N	N	N	N
	2. Provision for Biological Needs?	N	N	N	N	N	N	Y
	3. Development of Group Morale?	N	Y	Y	Y	Y	Y	Y
	4. Maintenance of Social Control?	N	Y	Y	Y	Y	Y	Y
	5. Development of Shelter Staff?	Y	N	N	N	N	N	N
	6. Preparation for Post-Shelter Living?	N	N	N	Y	N	Y	N
SPECIFIC BENEFITS TO INDIVIDUALS	7. Increased Survival Potential?	Y	Y	Y	Y	N	Y	N
	8. Avoidance of Boredom?	N	Y	Y	Y	Y	Y	Y
	9. Reduction of Fear-Anxiety	Y	Y	Y	?	Y	Y	Y
	10. Sense of Participation?	Y	Y	Y	N	Y	Y	Y
	11. Increased "Inner Strength?"	N	N	?	N	Y	Y	Y
	12. Increased Knowledge and Skill?	Y	Y	Y	Y	N	Y	N
	13. Improved Physical Condition	N	N	N	N	N	N	N
ENVIRONMENTAL EFFECTS	14. Increased Noise?	N	N	N	N	N	N	N
	15. Decreased Air Supply?	N	N	N	N	N	N	N
	16. Increased Temperature?	N	N	N	N	N	N	N
	17. Increased Humidity?	N	N	N	N	N	N	N
	18. Increased Personnel Movement?	N	N	N	N	N	N	N
	19. Increased Commotion?	N	N	N	N	N	N	N
ENVIRONMENTAL REQUIREMENTS	20. Relative Quiet	Y	Y	Y	Y	Y	Y	N
	21. Adequate Ventilation?	N	N	N	N	N	N	N
	22. Adequate Illumination?	?	N	?	N	Y	?	?
	23. Relative Low Temperature?	N	N	N	N	N	N	N
	24. Adequate Space?	N	N	N	N	Y	N	Y
	25. Relative Low Humidity?	N	N	N	N	N	N	N

1

e headings at their left. For example, the first six
ed activity at the top of the page is related to a
small boxes by a code designated. See code for Interpretation.

N ⇒ No

? = Can

? = Cannot be determined at present.

2

Table 1. (CONTINUED)

TABLE 1. SUMMARY OF NON-OPERATIONAL PLANNING INFORMATION. (CONTINUED)

CODE:

Note: References refer to the documents listed in the Appendix, Section 1.

POTENTIAL ACTIVITIES TO BE CONSIDERED BY THE SHELTER ACTIVITY PLANNER IN DEVELOPING SHELTER INFORMATION ACTIVITIES PROGRAM CONSIDERED IN THE SELECTION OF SPECIFIC ACTIVITIES FOR INCLUSION IN A SHELTER ACTIVITY PROGRAM		TRAINING EDUCATION						SHEL
		Management Staff Personnel Training	Shelteree Training for In-Shelter Living	Shelteree Training for Emergencies	News and Orientation Sessions	On-Going Education for Children	Post-Shelter Living Training	Care of Infants and Children
ACTIVITY SUITABLE PARTICIPANTS	26. School Children?	N	N	N	N	Y	N	Y
	27. Adult Males (Normal)?	Y	Y	Y	Y	N	Y	N
	28. Adult Females (Normal)?	Y	Y	Y	Y	N	Y	Y
	29. Aged Adults (Either Sex)?	?	Y	Y	Y	N	Y	?
	30. Ill or Injured?	N	Y	Y	Y	N	Y	N
	31. Emotional Problem Adults?	N	Y	N	Y	N	Y	N
PARTICIPANT QUALIFICATIONS	32. Normal Physical Fitness?	Y	N	N	N	Y	N	Y
	33. Special Skills or Know-How?	N	N	N	N	N	N	N
	34. Special Knowledges?	N	N	N	N	N	N	N
	35. Personal Interests?	N	N	N	N	N	N	N
	36. Sex Qualification?	N	N	N	N	N	N	N
	37. Age Qualification?	Y	N	N	N	Y	N	N
ACTIVITY LEADER QUALIFICATIONS	38. Physical Characteristics?	N	N	N	N	N	N	N
	39. Occupational Experience?	Y	N	Y	N	Y	N	N
	40. Educational Characteristics?	N	Y	N	N	N	Y	N
	41. Leadership Characteristics?	Y	Y	Y	Y	N	Y	N
	42. Experience in Activity?	Y	Y	Y	N	Y	Y	Y
RECOMMENDED MATERIALS	43. Printed Guidance Materials?	Y	Y	Y	Y	Y	Y	Y
	44. Pre-Stocked Activity Materials?	N	N	N	Y	?	Y	N
	45. Improvised Activity Materials?	N	N	N	N	Y	N	Y
	46. Brought-In Activity Materials?	N	N	N	Y	Y	N	Y
MISCEL- LANEOUS	47. Best Time of Day for Activity	M	M	M	R	M,A	M	R
	48. Optimal Duration (Hrs.) for 1 Session	<1	<1	<1	v	>1	1-2	v
	49. References Related to Activities	26						

1

FORMATION. (CONTINUED)

CODE: Y = Yes
N = No
? = Cannot be
determined at
present

M = Morning
A = Afternoon
E = Evening

< = Less Than
> = More Than

R = As Required or Desired
V = Minor Variations Helpful
to Maintain Interest.

ts
1.

TRAINING EDUCATION					SHELTEREE SERVICES					PHYSICAL FITNESS		RELIGION			ARTS AND CRAFTS		SOCIAL RECREATIONAL			ENTER-TAINMENT	QUIET ACTIVITIES		
Shelteree Training for In-Shelter Living	Shelteree Training for Emergencies	News and Orientation Sessions	On-Going Education for Children	Post-Shelter Living Training	Care of Infants and Children	Non-Medical Care of Ill and Injured	Medical Support Activities	Psychological Support Activities	Activities to Improve Shelter Appearance	Self-Initiated Physical Exercises	Leader-Initiated Group Calisthenics	Non-Denominational Services	Denominational Services	Self-Initiated Prayer and Meditation	Art Activities	Craft Activities	Small Group Games	Organized Group Discussions	Informal Group Singing	Spectator Entertainment	Reading	Other Quite-Time Activities	
N	N	N	Y	N	Y	N	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	
Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Y	Y	Y	N	Y	?	?	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Y	Y	Y	N	Y	N	N	N	?	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Y	N	Y	N	Y	N	N	N	N	N	N	?	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	
N	N	N	Y	N	Y	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	N	N	N	N	N	N	
N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	Y	Y	N	N	
N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	N	N	
N	N	N	N	N	N	Y	N	N	N	N	N	Y	Y	Y	Y	Y	N	N	N	N	Y	N	
N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
N	N	N	Y	N	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	
N	Y	N	Y	N	N	Y	Y	N	N	N	N	Y	Y	N	Y	Y	N	N	Y	Y	N	N	
Y	N	N	N	Y	N	N	N	N	N	N	N	Y	Y	N	Y	Y	N	N	N	N	N	N	
Y	Y	Y	N	Y	N	N	N	N	Y	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	
Y	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	
Y	Y	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	N	N	N	N	Y	Y	N	N	
N	N	Y	?	Y	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	Y	N	
N	N	N	Y	N	Y	N	N	N	N	N	N	N	N	N	Y	Y	N	N	Y	Y	N	N	
N	N	Y	Y	N	Y	N	N	N	Y	N	N	N	Y	N	Y	Y	N	N	Y	Y	Y	N	
M	M	R	M,A	M	R	R	R	R	M,E	E	E	E,R	E,R	R	A,E	A,E	A,E	A,E	E	E	R	A,E	
<1	<1	>1	>1	1-2	>1	1	1	1	1	<1/2	<1/2	<1	<1	<1	>1	>1	1	1	1	1	>1	1	
26					22, 23, 25, 26, 28 37, 38, 98					159, 161 162		123			55, 58, 62, 72, 73		137, 140, 141, 142, 36, 110, 117			90, 139, 146, 151		109, 119 125	

4. News and orientation sessions. Has reference to keeping shelterees informed about developments in and outside the shelter, particularly information about the outcome of the nuclear attack and the status of hostilities.
5. On-going education for children. Has reference to a limited attempt to continue the education of school-age youngsters, particularly as a means of social control.
6. Post-shelter living training. Has reference to training shelterees on how to cope with the problems likely to be encountered in the first several weeks after leaving the shelter; e.g., rationing of food supplies, purification of water, first aid and medical care, and other topics related to post-shelter survival.

Each of the foregoing activities is a special problem, and requires discussion in some detail.

Shelter Management Staff Training

The staffing of the shelter management organization plan by recruiting and training qualified personnel will be of paramount importance. Additional staff personnel will need to be trained to (1) replace peacetime cadre members who failed to make it to the shelter, and (2) expand the cadre staff to a full management organization.

1. Purpose and benefits. The primary purpose of such training is to develop a knowledgeable and reasonably skillful management team, complete with necessary replacements. A side benefit is that such training increases the leadership capability in the shelter. Moreover, much of what may be learned in such training will be useful in the post-shelter adjustment and reconstruction period.

Indirectly, such training will contribute to social control and morale in several ways: (1) more people will know what must be done for survival in the shelter, (2) those trained will assume a measure of responsibility for the control of other shelterees, and (3) the increased efficiency of shelter management will generate more confidence in shelter management.

2. Recommended training content. The content of such training, aside from a general orientation applicable to all members of the management team, will vary with the positions for which people are being trained. In general, the training should include the what, why, and how of pre-determined responsibilities and duties. For outlines of recommended training context, consult Eninger (47).

3. Recommended training method. Where there are no or insufficient peacetime cadre personnel to do the training, the method of training will have to be self-instruction. This will require the stocking of specially prepared materials designed for self-instruction.

Where sufficient management cadre are available, the most practical methods are (1) individual instruction, and (2) small-group instruction and discussion. Even such instruction can be supplemented by making self-instructional materials available. For a more complete discussion of training methods, consult Bend (15), Eninger (47), and Willis (127).

4. Miscellaneous planning information. Such training should start as soon as possible, perhaps immediately after the hazard of blast damage is past. The only circumstance that should be permitted to delay such training is a shelter emergency situation demanding the full attention of whatever management nucleus exists.

The duration of such training is no issue. Because of the urgency for having a completely staffed and trained shelter management organization, training should proceed with the minimum of interruption until completed. For a summary of planning information about management staff training, consult Table I.

Shelteree Training for In-Shelter Living

After the expanded shelter management organization has been recruited, oriented, and given the minimum of training to undertake the operation of the shelter, the next most urgent orientation and training task is to acquaint the shelterees with the facts of in-shelter living.

1. Purpose and benefits. The primary purpose of in-shelter living instruction is to acquaint shelterees with the policies, procedures, and rules governing their stay in the shelter. The end-result will be a more efficient shelter operation. Indirectly, such training will be an immediate aid to morale because shelterees will quickly realize shelter management does have shelter operations planned and organized.
2. Recommended training content. The training content should cover the following:
 - * protection offered by shelter
 - * shelter policies effecting shelterees
 - * shelter rules and regulations
 - * shelter procedures for essential function

- * shelter organization and management
- * shelter means of communication
- * handling of complaints and grievances
- * shelter non-operational activities

For additional information on content, consult Bend (15).

3. Recommended training method. Simple instruction with opportunity for questions is the recommended method. In small shelters (<100), the shelter manager and/or the deputy manager should handle the training. In large shelters, training is best handled by group and unit leaders (see Figure 1, p. 44) who have been briefed by the various staff heads under the supervision of their deputy supervisors.
4. Miscellaneous planning information. Training should start as soon as possible after shelter management is organized to instruct the shelterees. If possible, key information, such as shelter rules and regulations, should be posted at strategic points throughout the shelter.

A one-hour general orientation session should suffice. Instruction on procedures, such as feeding, toiletry, sleeping, etc., should immediately precede such activities. In that way, understanding will be reinforced by doing. For a summary of planning information about this activity, consult Table 1.

Shelteree Training for Emergencies

Once shelterees have been oriented on the wartime aspects of in-shelter living, they will need additional instruction on what to do in the event of different kinds of shelter emergencies. For example, the shelterees must know in advance what they are expected to do if a fire should break out in the shelter.

1. Purpose and benefits. The primary purpose is to develop the shelterees capability for handling threatening emergencies. A secondary, but important, side benefit is that shelteree fears are likely to be lessened when they realize that shelter management has definite procedures in mind for all likely contingencies. In addition, such training will involve virtually all adults, thereby absorbing considerable shelteree idle time. The opportunity can also be used to bolster the confidence of the shelterees by emphasizing (1) how unlikely such emergencies are, and (2) in what ways management is prepared to cope with them in the unlikely event that they do occur.

2. Recommended training content. The following list is suggestive of the topics which may be included in such training:

- a. outbreak of fire
- b. shelter flooding
- c. outbreak of panic
- d. failure of power supply
- e. infiltration of fallout
- f. excessive shelter temperature
- g. depletion of food and water
- h. outbreak of epidemic disease
- i. mass injury or illness
- j. infiltration of CB warfare agents
- k. excessive shelter over-capacity

The primary emphasis of such training should be on what the general shelter population should do to avoid interference with emergency teams. It is essential that shelter management have a plan of action ready for such emergency. For details of such plans, consult Bend (15).

3. Recommended training method. Two methods are feasible: (1) a team of specially qualified instructors, selected from the shelter management staff, can assemble shelterees at different locations for such orientation and training; (2) shelteree group or unit leaders can be instructed to orient and train members of their groups. The latter method has the advantage of reinforcing the authority and responsibility of the group leaders.
4. Miscellaneous planning information. The emergency training should be covered in three to four half-hour sessions, with the topics sequenced so that the more important ones are covered early.

Instructors should be made aware of the possibility that talk about threatening emergency conditions can arouse considerable fear and anxiety in an already apprehensive shelter population. Care should be taken to stress the unlikelihood of such emergencies, and the advantages of having definite plans to cope with them should they occur. For a summary of planning information about this activity, consult Table I.

News and Information Sessions

The shelterees will want news information about the outside world. They will also need to be given information from time to time on in-shelter problems. Such news and information should be communicated at regular intervals, perhaps morning, noon, and evening, during the day.

1. Purpose and benefits. The main purpose of news sessions is to satisfy the demand for news. In addition, shelter management will have a regular time for making announcements or requesting cooperation on shelter problems. Such regular information-giving will also combat the spread of rumors.
2. Recommended method. In accordance with the size of the shelter, appropriate members of line management should verbally communicate the news, after briefing from the communications head. If possible, typed or hand-printed summaries of news should be posted at key locations. A third alternative is the town-crier principle: One person gives verbal accounts of the news in as many shelter areas as necessary to reach the entire shelter population.
3. Miscellaneous planning information. The shelter managers and/or deputy shelter manager should review and approve all news and information releases. The prerogative of censoring news for morale reasons should be exercised by the shelter manager.

Where appropriate facilities exist, consideration should be given to a daily one-sheet "newspaper." The equipment requirements are a typewriter and some type of office reproduction machine.

On-Going Educational Activities

A significant number of school-aged children in a shelter will represent a control problem. One way to minimize the problem is to involve them in an abbreviated schedule of educational activities.

1. Purpose and benefits. The primary purpose is to control the activities of school-aged children by absorbing their attention in an in-shelter educational program. There are several likely side benefits: (1) shelter noise and heat are likely to be less than if children are left to their own devices; (2) the children will be less likely to interfere with routine shelter activities; (3) morale may be boosted by a sign of continuity with peacetime activities--such educational activities imply a confidence in the future; (4) children can be instructed in the do's and don'ts of shelter living.
2. Recommended content. Excepting topics related to in- and post-shelter living, no specific content is recommended. Volunteer teachers should establish the interests of their groups, and select activities accordingly. In general, it

will be better to engage the children in more pleasurable kinds of educational activities; e.g., educational games, arts and crafts, singing, stories, skits, and other participative activities. Serious teaching of traditional school subjects is best avoided. Shelter conditions are not likely to be conducive to such teaching.

3. Recommended methods. The methods employed in such educational activities will be determined by the specific activities. Consideration should be given to grouping the school-age children in age groups; e.g., 5-6, 7-9, 10-12, and 13-15. Age grouping will permit volunteer teachers to plan such activities to fit group interests and capabilities.
4. Miscellaneous planning considerations. Pre-shelter entry planning of this activity is especially important where a large number of school children are anticipated in the event of a "take-shelter" alarm. It may even be desirable to inform parents and school teachers of the kinds of materials and supplies school children might take with them to the shelter, if the opportunity permits. For a summary of planning information about this activity, consult Table I.

Post-Shelter Living Training

Within two to three days of the time when shelterees will be leaving the shelter, shelter management should make an intensive effort to train the shelterees on various aspects of post-shelter living, particularly the hazards they are likely to encounter and the precautions required.

1. Purpose and benefits. The primary purpose is to get shelterees ready for the potential hazards and problems of post-shelter living. Such training will also serve to eliminate unrealistic apprehensions about post-shelter living. Moreover, it will usefully occupy the time of the shelterees during much of their last several days in the shelter, a period when tension is likely to mount because of concern with what lies ahead.
2. Recommended content. Table II indicates topics which may be suitable for post-shelter survival training. Much of the content cannot be determined in advance. It will depend upon the conditions which characterize the region around the shelter. Extensive blast damage may mean the disruption of utilities, transportation, and communication. Under such circumstances, the shelter population must be instructed in what to do and what precautions to take until civil authority is re-established. If, on the other hand,

Table II. Topics for Post-Shelter Living Training

I. MEDICAL AND SANITATION

1. Basic Principles of First Aid
2. Common Remedies for Common Illnesses
3. Precautions for Illness Prevention
4. Symptoms and Care of Radiation Sickness
5. Area Emergency Medical Facilities
6. Disposal of Refuse
7. Disposal of Human Waste
8. Burial of Dead

IV. SAFETY AND RESCUE

1. Electrical Hazards
2. Fire Hazards
3. Structural Hazards
4. Rescue Operations
5. Cleaning Debris Safely
6. General Safe Practices

II. RADIOLOGICAL PROTECTION

1. Likely Sources of Radiation Hazards
2. Detection of Radiation Hazards
3. Reporting Radiation Hazards
4. Marking Radiation Hazards
5. Decontaminating Radiation Hazards

V. COMMUNITY ORGANIZATION

1. Emergency Organization of Community
2. Role of Citizens in Reconstruction
3. The Citizens and Martial Law
4. Shelter as a Social Control Unit
5. Authority of Deputized Civilians
6. Community Services in Emergency

III. FOOD AND WATER

1. Community Sources of Food
2. Safe and Unsafe Edible Plants
3. Food Spoilage and Water Contamination
4. Purification of Food and Water
5. Budgeting Food and Water Supplies
6. Collection and Use of Rainwater
7. Preserving Water Supplies
8. Planting Survival Gardens
9. General Safe Practices

VI. MISCELLANEOUS TOPICS

1. Evacuation Plans and Procedures
2. Volunteering Needed Skills
3. Care for the Homeless
4. Reporting Missing Persons
5. Use of Improvised Heating Devices
6. Care of Mentally Disturbed
7. Cleaning Without Soaps or Detergents
8. Clothing Donation for the Community
9. The Will to Survive
10. Government Plans for Reconstruction

the region has suffered only light fallout, the post-shelter problems may be relatively minor, and the training content would be expected to reflect the condition of the region.

3. Recommended method. Once shelter management has decided what to cover in such training, based upon an assessment of the conditions characterizing the surrounding region, a team of instructors should be trained on what topics to cover. A question and answer method of instruction is applicable. The instructor raises a question, answers it himself, then gives the group a chance to ask related questions. The chief advantage of this method is that it is informal and easy to handle by people relatively inexperienced at training others. For a more complete discussion of this method, consult Eninger (47).
4. Miscellaneous planning considerations. The time required for such training will depend upon what needs to be covered in view of the conditions of the surrounding region. The training sessions can be several hours long, with breaks, because the topics are likely to be of high interest to the shelterees. For a summary of planning information about this activity, see Table 1.

Shelteree Service Activities

While the primary purpose of in-shelter service activities, such as care of infants and children, is to render a needed service, such activities can be organized so as to absorb much idle shelteree time. They involve realistic, service-providing tasks which give people a sense of contributing to the common good of the shelter. Hence, the activity planner should plan and organize such activities to involve large numbers of people for short time periods rather than a small number of people for long time periods.

The principal service activities are:

1. Care of infants and children.
2. Non-medical care of ill and injured.
3. Medical support activities.
4. Psychological support activities.
5. Improvement of shelter appearance activities.

Each of the above activities is discussed generally in the following sections. For a summary of planning information related to these activities, consult Table 1.

Care of Infants and Young Children

Once the routine plane of shelter living has been reached, parents are likely to be more willing to turn over their children to the care of others for short periods of several hours. It may, in fact, be necessary for them to do so in order to perform other needed shelter tasks. For most parents, the temporary relief of responsibility will be welcome.

The selection of volunteers to take care of very young children is an important factor bearing on the willingness of parents to turn over their children. Female adults, preferably ones with children of their own, are recommended. Teen-age females are not recommended for supervising groups of children, although they may be used to assist an adult supervisor.

When mothers object to their children leaving their own care, or when children object strenuously to being placed under a strange person's supervision, it will be best to leave the child with the mother.

Consideration should be given to (1) the place in the shelter where the children will be located, (2) a regular schedule for placing children under a supervisor's care, (3) the time interval they will be away from their parents, (4) the activities children will engage in while under supervision, and (5) the presence of parents whose pre-school children need reassurance until they adjust to the novel situation.

Care of Ill and Injured

Non-ambulatory ill or injured persons who need regular attention will have to be serviced by volunteer shelterees. Where possible, cases requiring routine, unskilled care should be taken care of by adult family members. The assumption is that separation of such patients from their family members may create more of a morale problem than it solves.

When soliciting volunteers for such service work, preference should be given to those who have had experience in taking care of ill or injured persons. This does not, of course, include physicians and nurses. The latter would not be used for routine care which unskilled persons could do just as well. Also, following the principle of maximal use of shelterees in service activities, it is better to have a large number of such volunteers working relatively short shifts, say two hours at the most, than to have a few volunteers work long hours.

For a more detailed account of this service, see Bend (15).

Medical Support Activities

Physicians, nurses, and their functional equivalents will need various kinds of supporting services other than routine care of ill and injured. Included, for example, may be such services as preparing and rolling bandages,

changing bandages, sterilizing medical and surgical instruments, cleaning and sanitizing the sick-call area, moving non-ambulatory patients, and similar medical support activities.

The activity planner, working with the shelter medical officer, can assign volunteers to such support tasks as needed. The simplest procedure from the standpoint of supervision is to develop a roster of volunteers to report on schedule to the shelter medical officer for his assignment and supervision. The principle of maximal use of shelterees should be taken into account when scheduling such volunteers. People who are capable of such activities are likely to derive considerable personal satisfaction from them, because of their relative importance as service activities.

From the standpoint of shelter morale, it is essential that such volunteers be instructed on what not to relate to other shelterees. Loose talk about disease symptoms, inadequate medical supplies, lack of professional medical skills, and other such matters can cause doubts about the competence of shelter management and the ultimate shelter outcome.

Psychological Support Activities

Depending upon the severity of circumstances, there may be few or many emotionally disturbed persons. The mildest of these will be those who merely need the psychological support that quickly trained laymen can give. It is for such people that psychological support services should be planned. Those more seriously disturbed should receive professional attention, if such is available, or be referred to the attention of the shelter manager.

A psychological support group should be recruited and trained. The persons recruited for such work should have good emotional control, and if possible, experience upon which they can draw for the task of giving psychological support. Basically speaking, teachers, counselors, psychologists, welfare case workers, and others who must often assume a counseling role because of the nature of their work, should be given preference when recruiting such a group. The functions of the psychological support group are twofold: (1) train unit leaders in the elements of psychological support, and (2) render psychological support when a unit leader feels he cannot handle a case. If the member of the psychological support group feels, in turn, he cannot handle the problem, he should report the case to higher shelter management.

Training of lay persons in psychological support activities should include: (1) early detection of psychologically disturbed persons, (2) recognition of signs which call for professional attention, and (3) methods of providing simple psychological support. With respect to the latter, the following points should be covered:

1. Encourage the disturbed person to talk about his fears and anxieties. Listen. Keep the other person talking. For many, having someone to talk to is all the treatment needed.

2. If the person is at odds with other shelterees, consider relocation to another group in another part of the shelter.
3. If the disturbed person's condition permits, try to involve him in either a recreational or service activity. Activity has therapeutic value to people suffering from mild emotional problems.
4. Do not belittle a person's fears or anxieties. They are real to the person who has them. He may resent being told his fears are silly, unwarranted, or of no consequence.
5. Do not admonish the person to control himself. It is not helpful to tell a person he must get a grip on himself. It merely increases his burden.
6. Seek the maximum possible privacy when talking to a disturbed person. Take him or her away from the curious eyes of the onlookers. Privacy will reduce the strain on both of you.

The above points were expressed in the way they should be instructed. Instruction of lay persons in psychological support should not use psychological jargon or textbook expressions of principles. For further details on psychological support, consult Bend (15).

Shelter Appearance Improvement

Many shelters will be physically unattractive because of the nature of their use as a peacetime facility. For example, some will be relatively dark, dusty basement areas, cluttered with stored items and debris. Such shelters provide a basis for another type of service activity; namely, doing something to improve the appearance of the shelter area. That could include such things as cleaning up the shelter, developing a better storage arrangement, improvising shelter furniture from available materials, posting exhibits of art work or magazine cutouts--in short, whatever seems reasonable to improve shelter appearance.

Older teenagers and young adults make good volunteers for such work. A shelter may be divided into areas for several teams devoted to such work. The spirit of competition is easily aroused in young people, and several teams are better than one because more people will be doing something worthwhile.

Since the imagination of young people often outruns their sense of what is practical, major changes should require the approval of shelter management before implementation.

Physical Fitness Activities

Two types of specific physical fitness activities appear appropriate in a shelter: (1) self-initiated calisthenics, and (2) group calisthenics led by unit leaders. Games which promote physical fitness as a by-product are not recommended because (1) interest varies greatly with age and sex, (2) control is lacking over the amount of energy expended, (3) they can be hazardous to others in congested areas, (4) they are not as easily terminated as are calisthenics, and (5) they may result in demands for still other games, some of which may be objectionable from the standpoint of noise, heat, safety, and interference with others. The recreational benefits of such physical games can be obtained with fewer problems from other types of recreation. (The foregoing does not rule out physical activity games for young children as a means of recreation and social control.)

There are both arguments for and against physical fitness activities in a shelter. The following can be said for such activities: (1) They will counteract the slight lowering of muscle tone and physical capability likely to result from physical inactivity; (2) they will "condition" shelterees for more vigorous physical exertion after leaving the shelter; (3) they tend to counteract mental sluggishness and moodiness that often accompanies prolonged inactivity; and (4) they serve to release "nervous tension" for many persons. Against such activities are the following: (1) The shelterees will need to conserve their body energy and fluids because of rationed food and water; and (2) vigorous physical activity will liberate unwanted heat into the shelter area.

The viewpoint taken here is that the activity planner should plan such activities within the limits suggested by shelter conditions. When shelter temperature approaches the intolerable, physical fitness activities should be abandoned. Similarly, if food and water is severely rationed, such activities should be reduced, if not abandoned altogether.

Self-Initiated Physical Exercises

Shelterees should be instructed and encouraged to follow a schedule of mild exercises for short periods several times daily. They should be shown what kinds of exercises are recommended, and advised to stop exercises at first signs of labored breathing or perspiration. Mild exercises will improve muscle tone with little generation of body heat or loss of body fluids. Group leaders should stop exercises which involve violent or abrupt movements. Such exercises are likely to be hazardous in congested areas in addition to adding to the shelter heat problem.

Leader-Initiated Group Calisthenics

Calisthenics led by group leaders are probably the most practical way to encourage and control physical fitness activities. Many people who will not self-initiate physical exercises in public will participate in group calisthenics.

Group leaders should be instructed in a specific program of small group calisthenics. To minimize release of heat and humidity, groups can be assigned different times of the day for such exercises. Two ten-minute sessions per day should suffice.

Calisthenics Selection Principles

The following principles should guide the selection of calisthenics:

1. Avoid calisthenics which require persons to lay or sit on the floor. Such exercises will unnecessarily dirty clothes and hands.
2. Select some calisthenics which increase blood circulation more than develop muscle tone. Such calisthenics stimulate mental alertness and counteract the sluggish feeling which often accompanies inactivity.
3. Avoid exercises which require extreme physical exertion. Mild exercises are preferable because they are more suitable to all ages.
4. Avoid exercises which are hazardous to others nearby. Running, jumping, and kicking are somewhat less readily controlled once underway.
5. Select some muscle-firming exercises for arms, legs, and back. These are the parts of the body used regularly in work activities, and strengthening them will benefit the individual quickly.

Religious Activities

There is considerable evidence (36, 74) that people, in general, turn to religious beliefs and activities under severe stress. Nottingham (85) explains the phenomenon as "one of man's most important means of adjusting to stress circumstances over which he has little or no control." It is for this reason principally that religious activities should be included in a shelter activity program. Such activities help people control their fears and anxieties.

Depending upon circumstances, three kinds of religious activities seem appropriate for the shelter situation: (1) Non-denominational services, (2) denominational services, and (3) self-initiated prayer and meditation. Each is described below for the benefit of the activity planner. For a summary of planning information related to these activities, consult Table 1.

Non-Denominational Services

When formal religious leaders; i.e., priests, ministers, and rabbis are not available to conduct denominational services for the religious denominations represented in the shelter population, non-denominational services are the practical solution. Under the circumstances, virtually all religious faiths sanction participation in non-denominational services.

Such services may incorporate non-denominational prayers, inspirational talks by a layman or religious leader, periods of silent meditation, and the singing of non-denominational hymns. Most religious leaders are capable of conducting a non-denominational service. The type of service conducted in the U. S. military services is an excellent guide to what will be acceptable in the shelter (123).

A brief, quarter-hour daily service is recommended, with the possibility of a longer service on one day of the week. Attendance should be voluntary. Early morning is considered the best time of the day because there will be fewer competing activities. In large shelters, it may be necessary to hold several daily services in different shelter locations.

Denominational Services

Denominational services are preferred because they are more likely to stimulate religious feelings in people who have strong ties to their customary religious service. Therefore, when recognized religious leaders are present, they should be invited to conduct their denominational service. Indeed, the shelter activity leader would do well to utilize the services of available religious leaders as advisors in providing for the religious needs of the shelterees.

If at all possible, denominational services should be conducted privately so that participants are not subject to the stares of non-participants. A separate room or semi-enclosed space would be suitable.

The scheduling of denominational services should be worked out with the shelter manager or his deputy. With limited private facilities, it may be desirable to schedule such services at different hours of the same day or on different days of the week.

Self-Initiated Prayer and Meditation

Self-initiated prayer and meditation can not be planned and organized as can religious services. However, with the use of planned "quiet" hours, there would be ample opportunity for such religious activity. One way such self-initiated activity can be stimulated is by providing prayer or retreat chapels in different shelter locations. A small room, for example, might be set aside for this purpose, providing the space is not more urgently needed for other shelter purposes.

Arts and Crafts Activities

Improvised arts and crafts activities have many advantages as a form of in-shelter recreation. Such activities (1) appeal to school-age children, (2) generate little heat or noise, (3) require little physical exertion, (4) sustain interests for relatively long time periods, and (5) produce products which can be shown, admired, and complimented.

The emphasis must be upon arts and crafts activities which make use of available materials. Such activities include: (1) pencil sketching, (2) cutting designs from paper, (3) folding paper into figures, (4) building paperboard models, (5) constructing wire figures, (6) making mobiles, (7) making ink-blot designs, (8) cutting silhouettes, (9) wood carving, (10) making miniature panoramas, (11) making board games, such as checkers and chess, and (12) making simple puzzles. In any large group of shelterees, there will be many people who can recall specific arts and crafts activities of the above general kind. The activity leaders should ask shelterees for such ideas. In quick order, he would have dozens of simple arts and crafts activities of interest to all children age levels.

The activity planner is also advised to solicit adult volunteers with some experience in arts and crafts to instruct and supervise such activities. Grade school teachers are ideal for this purpose. A shelter area should be set aside for a given time period for such recreation. Supervision of a group of participants will ensure effective participation, conservation of materials, minimal interference with other shelterees, and clean-up of the area after the activity period.

While arts and crafts activities are more likely to appeal to children and teenagers than to adults, such activities should not be planned exclusively for non-adults. Activity planners should attempt to arouse adult interest and participation. Some will be interested, and whatever their number, that will mean more people occupied in tension-reducing activity.

Social-Recreational Activities

Once the routine phase of shelter habitation is reached, assuming the shelterees are confronted with no serious and immediate threat to survival, most shelterees will be ready to "socialize" with others of their own choosing. The activity planner should capitalize on this readiness to socialize, and turn it to his advantage by providing ready means for breaking down social barriers and inhibitors, particularly those between shelterees with different socio-economic backgrounds.

The right kind of social activities will yield many benefits. People will be drawn closer together. Negative emotional states are likely to be lessened. The prerequisites for cooperation and sharing are likely to be established as people get to know each other better. Worries and fears are likely to be verbalized and thereby reduced in intensity. However, the wrong kind of social activities may create problems. Gambling, for example, runs the risk of arguments, violence, and resentment by non-participants, who feel gambling is inappropriate under the circumstances. Similarly, social dancing may create friction between shelterees. Undoubtedly, some would resent social dancing as immoral under the tragic circumstances of a nuclear war. The activity planner should identify social activities which are apt to be provocative and create social control problems. These should be prohibited by general shelter rules.

The social-recreational activities suitable for the shelter are (1) small group games, (2) organized group discussions, and (3) informal group singing. These are discussed from a planner's viewpoint in the sections that follow. For a summary of planning information relevant to these activities, consult Table I.

Small Group Games

Small group games are excellent for satisfying both social and recreational needs. Dozens of such games will be known to the shelterees, so there will be little or no problem for the activity planner in terms of stocking guidance material on such games. To illustrate the kinds of games which are suitable, some game descriptions are offered below.

1. A recommended "activity" game. A group of 12 or more persons sit in a close circle. One person is "it" in the center. The members of the circle try to throw an improvised "bean bag" to each other. The person in the center tries to intercept the bag. All persons are seated. When the bag is intercepted, the thrower becomes "it."

2. A recommended "acting" game. A group of six or more players form a line. The leaders stand to the side or in front of the group. A pose such as "You are a cowboy who has lost the draw," or "pedantic professor posturing" is mentioned to the players. Players should be encouraged to relax and "let themselves go," and strike the best pose in keeping with the command. A series of eliminations are held to see who is the best actor.
3. A recommended "finding" game. A group of ten or more players form a circle with a person who is "it" in the center. Members in the circle pass an improvised "bean bag" to each other behind their backs and out of sight of the person who is "it." At one point they stop, and the person who is "it" tries to guess who has the bag. (When members are just "learning" this game they may wish to pass the "bean bag" while the person who is "it" has his eyes closed. After skill at passing the bag back and forth increases, he may have his eyes open.) If the person who is "it" guesses the location of the "bean bag," the person holding the bag becomes "it."
4. A recommended "quessing" game. Six to a dozen players are seated in a circle. A cue letter is announced to start the game. In turn, each player adds a letter to the one letter, always avoiding a letter that will complete the game and adding a letter toward the completion of a word without indicating what the word is. The person who adds a letter that completes a word has one "strike" against him. Three strikes, and the person is eliminated from the game. The game proceeds until all but one person are eliminated. That player is the winner.
5. A recommended "skill" game. An inverted hat or some other receptacle is placed about six feet from a line of players. The players, in turn, try to toss a sock rolled up into a ball into the hat. A point is scored for each hit. The game ends when a player scores 21.
6. A recommended "follow-the-leader" game. The following is a very popular game with children. A leader is chosen for a group of up to 12 children. The group forms a circle. The leader gives commands to the group such as "stretch," "touch your toes," "wiggle your fingers," etc. If the command is preceded by the words "Simon says," the members of the group should act-out the command. If not, they should remain still. Players are eliminated from competition when they obey the command which was not preceded by "Simon says" or, by not acting out one which had the proper preparatory statement.

Games requiring equipment that can be made serve a double purpose. Volunteers can be put to work making the required equipment. Checker boards, for example, can be made from sections of paperboard. The checker pieces can be cut out of cardboard, or improvised with buttons or coins. Materials permitting, the activity planner should have commonly-played board games made and distributed to shelter unit leaders for use by their group.

Games which require six or more people usually need someone to stimulate participation. Unit leaders should be advised or given guidance material on how to get group games going in their shelter groups at appropriately scheduled times. Active participation should not be forced. Many people will participate passively as interested on-lookers. For example, some will enjoy watching others play charades, but would not wish to participate actively.

Organized Group Discussions

Planned and organized group discussions are an excellent form of recreation for some people, especially those who regard themselves as intellectually inclined. (The latter, in particular, may find social games not to their liking.)

The activity planner can achieve several purposes with such discussions, quite apart from the obvious benefit of engaging people in enjoyable activity. For one, he can get a group of people to face the realities of post-shelter living by focusing discussion on different aspects of the post-shelter world. For another, he can get group solutions for certain in-shelter problems. For still another, he can use the discussions to detect heretofore unvoiced complaints and criticisms of shelter management.

The activity planner should seek capable volunteers to be discussion moderators or leaders. People with experience at handling conferences or discussion groups are not a rarity, and should be found in any large shelter group. Even with experienced persons, however, a brief orientation to the do's and don'ts of being a discussion leader is advisable.

One aspect of planned group discussions warrants special mention. Controversial discussion topics, such as religion, sex, or politics, should be avoided. Normally, discussion planners select controversial topics to ensure that there will be a lively discussion. This would seem inadvisable in a shelter situation. First, people will be under tension and controversial issues run the risk of opening a Pandora's box of emotions. Secondly, the discussants are not likely to be as homogeneous with respect to education, knowledge, thinking ability, attitudes and beliefs as they are in peacetime social situations. Such differences make controversial topics inadvisable for planned discussion sessions. What people choose to discuss informally among themselves in self-initiated "bull sessions" is another matter entirely, and not of the activity planner's concern.

Informal Group Singing

The therapeutic, emotion-relieving value of group singing has been long recognized. Through the ages men have reflected their sorrows, joys, and troubles in song. For this, and other reasons, group singing is a compatible form of social-recreational activity in the shelter. Such singing is an excellent mechanism for developing a spirit of comradeship, for providing an emotional outlet, and for providing a source of spiritual uplift, particularly when songs are chosen for such effects.

The activity planner should seek out and consult with shelterees experienced in leading group singing. Such consultation should develop a list of appealing and easy-to-sing songs, and also the methods for "seeding" group singing among different groups of shelterees. Consideration should be given to controlling the time, duration, and volume of group singing to avoid interference with the activities of non-participating shelterees. It may even be desirable to schedule group singing for suitable locations within the shelter. A list of suggested morale-building songs is shown in Table III.

Table III
Suggested Morale-Building Songs That Are Widely Known

<u>Patriotic Songs</u>	<u>Songs to be Sung to or by Children</u>
Star Spangled Banner	Three Blind Mice
America	Rock-a-Bye Baby
America the Beautiful	Nursery Rhymes, as:
Dixie	Little Bo Peep
Battle Hymn of the Republic	Little Jack Horner
<u>Folk Songs or Popular Songs</u>	<u>Religious or Spirituals</u>
Oh Dear What Can the Matter Be	Deep River
My Old Kentucky Home	Go Down Moses
I've Been Working on the Railroad	Nobody Knows the Trouble I've Seen
Old Black Joe	Joy to the World
Old Folks at Home	Abide with Me
Camptown Races	Faith of Our Fathers
Old Smokey	Holy, Holy, Holy
Home on the Range	Swing Low Sweet Chariot

Spectator Entertainments

When professional or amateur entertainers; e.g., singers, dancers, instrument players, magicians, etc., are available, the activity planner should make full use of their talents to provide entertainment. The armed services have long recognized the morale value of providing entertainment for troops. Spectator entertainments provide the on-lookers an opportunity to get their minds off what preoccupies them, and thereby, give a measure of relief from worry and tension.

In addition to solo entertainers, the activity planner will do well to solicit volunteers who can develop and put on plays, skits, recreation, or chorus arrangements. The latter kinds of activities are doubly effective because they involve numbers of people in preparation and creative expression, as well as provide entertainment.

Spectator entertainments are best timed for the evening, preferably after the evening food and water ration has been distributed and consumed. The evening is likely to be a period when most shelterees will feel the accumulated fatigue of their day's activities, when spirits are generally lower, and when the need for some non-active entertainment is the greatest.

When planning spectator entertainments, consideration should be given to the location of such entertainment in the shelter facility. It may be undesirable or impossible to crowd the shelterees into one large viewing area. If that is the case, the entertainers may have to circulate in the shelter facility, putting on two or three "shows" per evening. Consideration should also be given to the problems of people who may not wish to be unwilling spectators. It may be feasible to designate a "quiet" area in the shelter for those who would like quieter types of leisure activities.

When people are drawn away from the regular place in the shelter to view entertainments, there may be a problem of leaving valuables behind that may be stolen. Shelterees should be alerted to take their valuables with them in such circumstances. The feasibility of posting area guards should also be considered.

Free-Time Quiet Activities

Periods of no organized activity and maximum quiet are essential for a number of reasons. People need to have relief from organized activities and each other in a shelter environment. Altman's shelter habitability study (5, 7) demonstrated that some people develop retreat-like behaviors as a reaction to the congestion and close contact characterizing the shelter. Such periods also reduce the shelter noise level and commotion, thereby

providing an atmosphere more conducive to rest. They are particularly helpful at nap-time periods scheduled for young children.

At least one, and possibly two, quiet periods should be scheduled each day at a regular period of the day. The hour from 1 to 2 p.m. is recommended because it follows the lunch period, and is a natural time for inactivity.

Reading

Reading is an excellent withdrawal activity, and at the same time, pleasurable and tension-escaping for those with the reading habit.

The shelter activity planner can best meet the need for reading by either (1) stocking community contributions of suitable reading material, or (2) educating the potential shelterees to bring reading material with them in the event of attack warning. The former is preferred because it is more certain.

A reading shelf should be established at one or more locations in the shelter. Shelterees should be permitted to take only one book, magazine, or paperback at a time to avoid hoarding of such items. Also, shelterees should be required to return what they have read before being given another reading unit.

Other Activities

Many of the arts and crafts activities mentioned earlier are suitable for free-time quiet activities. Adult volunteers may spend such periods making games, puzzles, and toys for the children in the shelter.

It should also be recognized that many adults will want to nap or simply lie down with their own thoughts. The activity planner and his staff personnel should respect the wishes of those who seek this type of withdrawal from other shelterees and from shelter activities. People do not want to be active all the time.

CHAPTER IV

RECOMMENDED PROCEDURES FOR PLANNING AND ORGANIZING NON-OPERATIONAL ACTIVITIES

CHAPTER IV OUTLINE

	<u>Page</u>
ACTIVITY PLANNING AND SHELTER PHASES	41
ESTABLISHMENT OF OPERATIONAL READINESS	42
Concept of Operational Readiness	42
Implications of Readiness Concept	42
Selection of Shelter Activity Leaders	43
Training of Shelter Activity Leaders	45
Assessment of Shelter Characteristics	46
Assessment of Potential Shelter Population	47
Procurement and Stocking of Materials	48
Preparation of Tentative Activity Program	48
MAINTENANCE OF OPERATIONAL READINESS	49
SHELTER ENTRY AND IMMEDIATE POST-ATTACK PHASE	51
ROUTINE SHELTER CONFINEMENT PHASE	51
Registration of Shelterees	52
Expansion of Activity Staffs	52
Training of Activity Staffs	53
Reassessment of Shelter Conditions	53
Planning and Organizing Activities	54
PRE-SHELTER EXIST PHASE	54
Assessment of Regional Status	54
Preparation of Post-Shelter Survival Training	55

IV. RECOMMENDED PROCEDURES FOR PLANNING AND ORGANIZING SHELTEREE ACTIVITIES

Activity Planning and Shelter Phases

For purposes of planning and organizing, it is helpful to recognize five distinct phases of civil defense shelters. They are as follows:

1. Establishment of operational readiness phase. Has reference to the time period which starts when a facility is identified and marked as a civil defense shelter and ends when the facility is operationally ready to function as a shelter.
2. Maintenance of operational readiness phase. Has reference to the time period which starts when a shelter reaches operational readiness and ends when attack warning sends people streaming into the shelter.
3. Shelter entry and immediate post-attack phase. Has reference to the time period which starts with people entering the shelter after attack warning and ends at various times depending upon what effect the attack has had on the shelter.
4. Routine shelter confinement phase. Has reference to the time period which starts with routine shelter living after post-attack problems have been overcome and ends several days before the shelterees will leave the shelter.
5. Pre-shelter exit phase. Has reference to the time period which starts when it is safe for shelter management members to leave the shelter for short time periods to assess the area surrounding the shelter and ends when all shelterees may leave permanently.

Each of the five phases defined above has implications for planning and organizing non-operational shelter activities. These implications are discussed generally in the sections that follow. In the absence of detailed instruction, shelter activity planners may find the following sections useful as a guide to what needs to be done in each shelter phase.

Establishment of Operational Readiness

Before discussing what must be done to plan and organize for an in-shelter activity program, the concept of operational readiness needs definition. The concept is critical to much of what follows.

Concept of Operational Readiness

A civil defense 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 the plans and procedures which will characterize its operation in the event of a nuclear attack. The definition is admittedly arbitrary. Nevertheless, it is the opinion of this report that this concept of operational readiness is essential to the achievement of the shelter goals defined in Chapter I. In this respect, 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.

Implications of the "Readiness" Concept

The concept of shelter operational readiness has several implications relative to the shelter spaces which have been identified, marked, and stocked under the current OCD shelter capability program. First, a basically qualified shelter management cadre must be recruited for each such shelter space. Second, the shelter management cadre must be oriented and trained to establish operational readiness. Third, the shelter management cadre must do what has to be done to establish shelter's operational readiness.

For the purpose of discussing how to plan and organize an in-shelter activity program, this report assumes that a volunteer, part-time shelter manager has been recruited and trained to bring the shelter to operational readiness. The discussion which follows concerns non-operational activities only.

The following six steps are recommended for establishing the operational readiness of a shelter activity program: (1) Selection of a shelter activity leader, (2) training of the shelter activity leader, (3) assessment of shelter conditions, (4) assessment of potential shelter population, (5) procurement of guidance materials, and (6) development of a tentative activity schedule. The six steps are discussed below.

Selection of Shelter Activity Leader

In a small shelter (<100), the shelter manager may himself plan the shelter's non-operational activities. Generally, this will not be practical where the shelter capacity exceeds 100 persons because of the additional problems confronting the shelter manager. He will have to recruit someone to whom he can delegate the responsibility of planning the shelter activity programs.

Figure 1 shows a prototype shelter management organization chart. The position of Deputy, Special Services is in charge of planning, organizing, and directing non-operational activities. He has four principal assistants, one each for the areas of (1) training and education, (2) recreation, (3) religious services, and (4) general shelteree services. For a shelter with a capacity between 100 and 300, the Deputy, Special Services may be the sole person responsible for peacetime planning of non-operational activities. For larger shelters, it would be desirable to recruit the additional four assistants, if necessary on a temporary basis, to assist in the necessary planning.

The type of person selected for the position of Deputy, Special Services should take into account the staff organization the position will head. In a small shelter, the Deputy operates without the four section heads indicated on the organization chart in Figure 1. He may directly assume the responsibilities involved, both in peacetime and wartime conditions. In a large shelter, he may have to work with four such section heads in peacetime, and a much expanded staff in wartime. In a large shelter, therefore, the Deputy should be someone with managerial skills and experience commensurate with the position's responsibilities and duties under wartime conditions.

When selecting the Deputy, preference should be given to persons whose regular occupation is compatible with taking charge of non-operational activities. Table IV lists occupational titles which are likely to provide qualified personnel. The list is illustrative rather than definitive. Any mature, resourceful person with managerial or administrative experience is basically qualified. Naturally, someone who has a professional acquaintance with training, education, or recreation is preferred.

For more complete details on how to recruit and select members of a shelter management cadre, see Eninger (47), The Recruitment, Selection, and Training of Shelter Management.

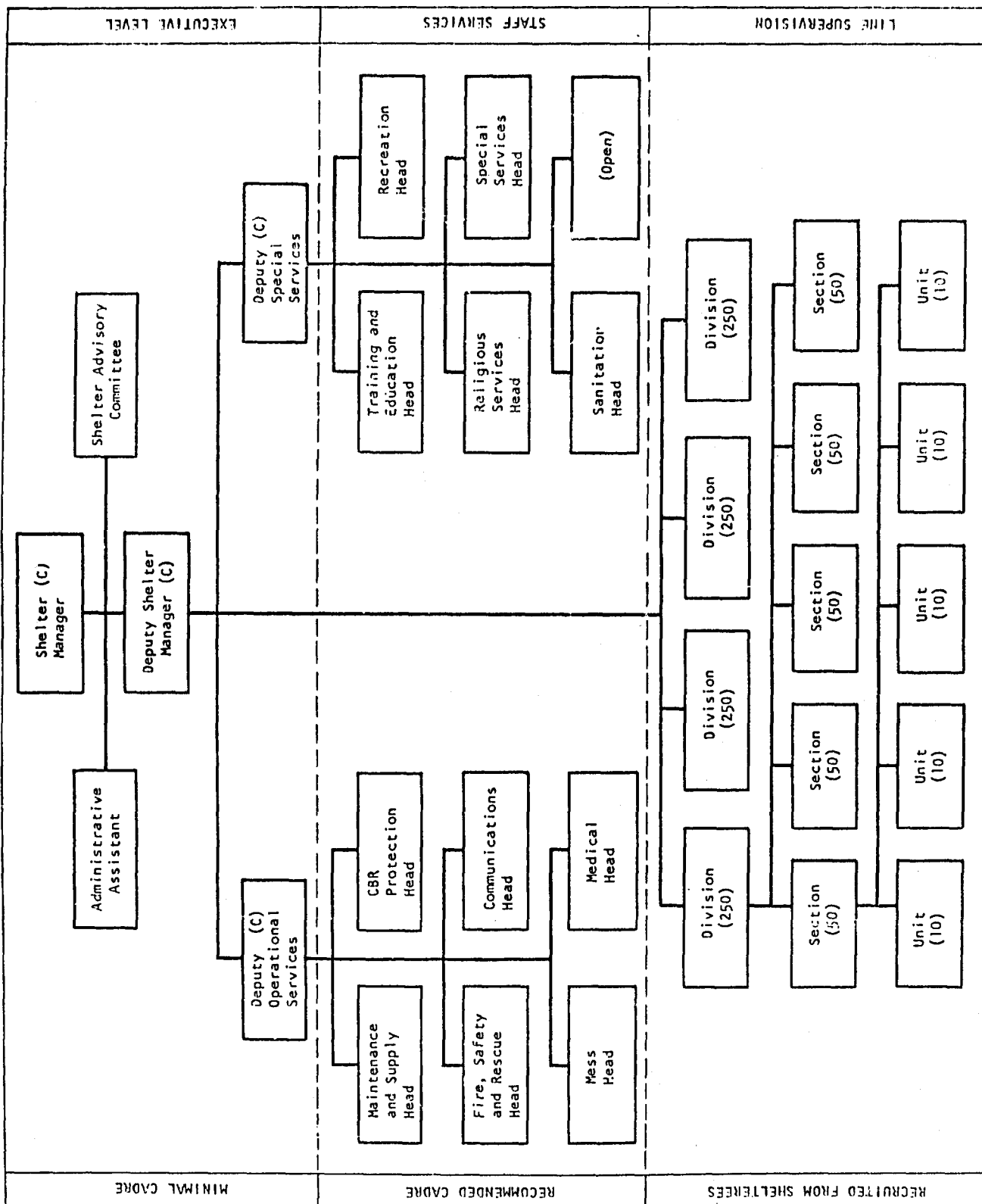


Figure 1. A PROTOTYPE SHELTER MANAGEMENT ORGANIZATION FOR 1000 PERSONS. The same basic organization would be suitable for smaller or larger shelters by reducing or increasing the number of divisions, sections, and units. Boxes marked "C" indicate minimum cadre.

Table IV
Civilian Occupations From Which
Deputy of Shelter Services May be Chosen

For Large Shelters	For Small Shelters
Director, Volunteer Services	Teacher, Public School
Director, Youth Camp	Supervisor, Playground
Director, Community Center	Supervisor, Youth Center
Director, Community Welfare	Counselor, Camp
Director, Social Services	Instructor, Physical Education
Principal, Public School	Supervisor, Hospital Recreation
Director, YMCA	Psychiatric Social Worker
Personnel Manager	Church Youth Leader
Director, Employee Services	Scout Leader

Training of Cadre Activity Leader(s)

Depending upon the size and planned management organization of the shelter, there should be one to five persons (see Figure 1) in the peacetime shelter management cadre. Even though such persons have been soundly selected so that their normal occupational backgrounds are compatible with their shelter responsibilities, they will require training.

The minimal training should cover the following broad topics: (1) The importance of non-operational activities in maintaining morale and social control, (2) the basic types of non-operational activities, (3) the relation of non-operational activities to operational activities, (4) the basic steps for planning, organizing, and directing such activities, and (5) the essential planner information related to the different types of activities. It would also be desirable for such cadre personnel to acquaint themselves with detail of specific kinds of activities, especially where their occupational background did not require such knowledge. For example, a recreation head who has had little or no prior experience as a recreation leader should develop some knowledge of recreational activities.

It is recommended that a self-sufficient unit of training material be developed by the Office of Civil Defense for the purpose of orienting and training activity leaders. Material should cover the minimal topics indicated above, and provide, in addition, descriptions of specific activities related to education, religion, recreation, shelter services, and physical fitness. Moreover, the materials should be designed for either individual self-instruction or group instruction.

In the absence of such guidance material, this report may be used as cadre training material. It does cover the recommended minimum topics

described above. Except for a limited number of examples, however, it does not describe the details of specific activities; e.g., games, exercises, services, etc., that fall in the major non-operational activity categories. The Appendix provides references which can be consulted for such details.

Assessment of Shelter Characteristics

In Chapter II, it was pointed out that the physical characteristics of the shelter facility should have some bearing on the kinds of activities planned for shelterees. The activity planner should assess the physical characteristics of his shelter early. Particular consideration should be given to the following factors:

1. Personnel capacity of the shelter. The capacity of the shelter will provide the activity planner with a basis for (1) estimating the magnitude of the activity program which must be planned, and (2) recognizing the implications for activity space, staff personnel, and possibly, stocking of materials.

As a rule, the larger the shelter capacity, the more elaborate must be shelter management capability to initiate, organize, and control the activity program. Therefore, taking shelter capacity into account, the activity planner should develop, on paper, the kind of staff organization he will need to carry out his planned activity program.

2. Physical division of shelter facility. A floor plan of the shelter facility should be prepared if one is not available. It should be consulted after deciding where to locate specific types of activities. For example, activities likely to be noisy should be assigned to a remote, preferably closed area. Activities requiring quiet should be assigned to areas away from the main shelter area. Activities generating heat from physical exertion should be assigned, if possible, to upper floors to reduce the spread of heat through the shelter.
3. Adequacy of shelter ventilation. The kinds of activities planned should take into account the adequacy of shelter ventilation. Where there is total reliance on minimally adequate natural ventilation, activities likely to generate heat should be held to a minimum or eliminated altogether. The same applies to facilities dependent upon forced air for ventilation when no auxiliary power equipment exists. For planning purposes, it is safest to assume the normal power source will not be available.

4. Availability of materials for activities. The equipment, materials, and supplies normally found in the shelter area should be assessed for potential use in planned activities. The kind and quantity of such items should be inventoried and listed. The list may suggest activities. For example, a duplicating machine may suggest the possibility of a shelter "newspaper." The list can also be checked to see if needed materials are likely to be available.

Assessment of Potential Shelter Population

The characteristics of the shelterees will have a bearing on the kinds of activities planned. That being so, the activity planner should attempt to forecast the kinds of shelterees which are likely to occupy his shelter. The potential shelter population will either be in the building which contains the shelter area or in the immediate surrounding area, or in both. If the shelter capacity is less than or equal to the number of people who normally occupy the building, the planner can safely assume his shelter population will come from the building. In that case, assessing the potential shelter population should be no problem. The shelterees will, in all likelihood, be the people in the building. If they represent a special problem for activity planning, as in the case of school children, that factor should be taken into account.

If the shelter population is greater than the number of people normally occupying the building, the planner should assume additional shelterees will come from the surrounding areas. In that case, he must attempt some assessment of the kinds of people normally found in the area of the shelter. The type of neighborhood and the kind of buildings therein will usually provide a basis for such assessment. The presence of a school, hospital, or nursing home may mean a special population problem when such buildings have no integral shelter facility.

The following characteristics of a shelter population may influence activity planning, and should therefore be considered when attempting to assess the potential shelter population.

1. Ratio of adult males to females.
2. Ratio of non-adults to adults.
3. Number and type of special problems; e.g., aged, infirm, hospitalized, etc.
4. Racial composition of shelterees.
5. Religious composition of shelterees.
6. Predominant socio-economic level.

The activity planner may also benefit by attempting to identify specific people in his area who have experience with many of the kinds of activities which will be included in his program. The possibility of contacting those so identified for guidance and help in other ways should not be overlooked.

Procurement and Stocking of Materials

While it is highly unlikely that public fallout shelters will be stocked with materials and equipment to support non-operational activities, other than perhaps printed materials, this does not mean the activity planner for a given shelter should not consider stocking some such materials. If, for example, his shelter facility is essentially barren of materials which can be used to improvise arts and crafts activities for children, he may wish to stock some inexpensive supplies of this kind. One source of supplies could be voluntary contributions from the community.

It is recommended that particular attention be given to the advisability of stocking (1) guidance material for activity leaders, such as books on recreational activities, and (2) reading material for adults and children. Such materials involve little or no cost and require relatively little storage space. Section I of the Appendix lists references of recreational and other kinds of guidance material.

The storage of materials should not conflict with local fire regulations. Consultation with local fire department officials is advised to ensure that such storage is permissible, and to determine how best the materials should be stored to avoid creating a fire hazard. In addition, the materials should be stored so they remain dry, clean, and secure against theft.

Preparation of a Tentative Activity Program

After the activity planner has (1) assessed the actual and potential shelter conditions, (2) assessed the potential shelter population, (3) evaluated materials normally available in the shelter for use in non-operational activities, and (4) stocked additional supplies as suggested, he is ready to plan his program. The program that is developed and stocked should allow for a ten-day shelter stay.

Table V indicates a recommended daily schedule for shelterees not otherwise assigned to shelter duties. The schedule attempts to balance planned activity periods with free time periods. Those who do not wish to participate in the organized activities should not be forced to do so. Also, if shelter conditions warrant an additional "quiet" period, it should be scheduled. The basic schedule shown in Table V should be adhered to unless there are good reasons to modify it. It is consistent with findings from habitability studies which emphasize the need for "free time" periods and "quiet" periods.

Figure 2 illustrates how each day's activities can be planned in some detail. The activity planner should develop such a schedule for each shelter day. He may wish to specify activities more precisely than shown in Figure 2. For example, he may indicate what types of adult training will be offered between 9 and 10 on day 1 of the routine confinement period. Such entries may be indicated in code, or in abbreviated titles, or in a combination of both. Thus, a post-shelter survival training session on the topic of radiation

Table V
A SUGGESTED IN-SHELTER ACTIVITY SCHEDULE
The schedule is intended to cover the shelter hours of
those not assigned to operational activities.

Time	Activity
- 8:30 a.m.	Toilet Activities, Feeding, & Area Clean-up
8:30 - 9:00 a.m.	Shelter Meeting
9:00 - 12:00 p.m.	Planned Activity Period
12:00 - 1:00 p.m.	Preparation for Lunch, Lunch, & Lunch Clean-up
1:00 - 2:00 p.m.	Quiet Hour
2:00 - 3:00 p.m.	Reduced Activity Period
3:00 - 4:00 p.m.	Planned Activity Period
4:00 - 5:00 p.m.	Free Time
5:00 - 6:00 p.m.	Dinner
6:00 - 7:00 p.m.	Free Time
7:00 - 9:30 p.m.	Planned Activity Period

hazards may be recorded: A-3: Rad. Hazards. The A-3 was adapted from the activity codes opposite Figure 2. Presumably, the activity planner would be resourceful enough to develop his own codes. Where the preference is for writing in scheduled activities, the form shown should be enlarged sufficiently to permit such written entries.

When activities are planned for a specific location, the activity planner should check out the availability of the location with other members of the shelter management cadre. It is quite possible that someone else will have planned to use the space desired by the activity planner. If the space is available; i.e., there are no plans for its use, the location may also be rotated on the master schedule. A complete entry would indicate the date, where, and when of each planned group activity or supervised individual activities. Unsupervised activities are not scheduled.

Maintenance of Operational Readiness

Relative to a planned activity program, a shelter is operationally ready if (1) a trained core staff exists, and (2) a tentative activity program has been planned which has taken into account the characteristics of the shelter and the potential shelter population. Maintaining such operational readiness is a matter of the following:

SHELTER ACTIVITY SCHEDULE

Phase: Routine Confinement

Day:

AGE GROUPS	ACTIVITY PERIOD		8-9	9-10	10-11	11-12	12-1	1-2
			PLANNED ACTIVITIES				LUNCH	QUIET HOUR
INFANTS AND YOUNG CHILDREN (0-3)	TOILET ACTIVITIES, FEEDING, AND AREA CLEAN-UP	SUPERVISED CARE					PARENTAL CARE	NAP TIME
NURSERY AND KINDER GARDEN AGES (3-6)		SUPERVISED CARE	C2 E1, 2 F1, 2 G2				PARENTAL CARE	NAP TIME
CHILDREN (7-12)		SCHOOL TIME	A4 C2 F1, F2			SUPERVISED GROUP GAMES AND ACTIVITIES C2 E1 E2	PARENTAL CARE	SLEEP AREA
TEEN-AGERS (13-16)		SHELTER MEETING	SCHOOL A3, 4 C2	EXERCISE	SERVICES	TRAINING OR SERVICES A2 A5 B1, B5	FEEDING AREA	SLEEP AREA
YOUNG ADULTS (17-21)		SHELTER MEETING	TRAINING A1, 2, 3, 5	EXERCISE	NEWS AND CONTROL INFORMATION	TRAINING OR SERVICES A1-5	FEEDING AREA	SLEEP AREA
ADULTS (21-)		SHELTER MEETING	TRAINING A1, 2, 3, 5	EXERCISE	NEWS AND CONTROL INFORMATION	TRAINING OR SERVICES A1-5	FEEDING AREA	SLEEP AREA

Figure 2. MASTER ACTIVITY SCHEDULE: Operational activi

Routine Confinement

Day: 3

SHELTER CONDITIONS: Normal Temperature

GROUP: Basement Area

1-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
	LUNCH	QUIET HOUR	REDUCED ACTIVITY	PLANNED ACTIVITIES	FREE TIME	DINNER	FREE TIME	PLANNED ACTIVITIES		
	PARENTAL CARE	NAP TIME		SUPERVISED CARE	PARENTAL CARE			BED TIME		
	PARENTAL CARE	NAP TIME	SUPERVISED CARE C2 F1, 2 G		PARENTAL CARE C2 F1, 3 G			BED TIME		
GROUP GAMES AND ACTIVITIES C2 F1 F2	PARENTAL CARE	SLEEP AREA	H1, 2 E1, 2	SUPERVISED ACTIVITY F1, 2	PARENTAL CARE C2 F1, 3 G			SUPERVISED PLAY	F1, 3 G	PREPARATION FOR SLEEP
SERVICES A2 A5 B1, B5	FEEDING AREA	SLEEP AREA	H1, 2 E1, 2 B1-5	PLANNED ACTIVITY (OR SERVICES) A1-5 F1, 2 B1-5	SELF-INITIATED ACTIVITY B1-5 C2 F1, 3 G H1, 2			RELIGIOUS SERVICES	ORGANIZED ENTERTAINMENT E1, 2 G H1, 2	PREPARATION FOR SLEEP H1
SERVICES A1-5	FEEDING AREA	SLEEP AREA	H1, 2 E1, 2 B1-5	PLANNED ACTIVITY (OR SERVICES) B1-5	SELF-INITIATED ACTIVITY B1-5 C2 F1-3 G H1, 2			RELIGIOUS SERVICES	ORGANIZED ENTERTAINMENT E1, 2 G H1, 2	PREPARATION FOR SLEEP H1
SERVICES A1-5	FEEDING AREA	SLEEP AREA	H1, 2 F2 B1-5	PLANNED ACTIVITY (OR SERVICES) A1-5 F1, 2 B1-5	SELF-INITIATED ACTIVITY B1-5 C2 F1-3 G H1, 2			RELIGIOUS SERVICES	ORGANIZED ENTERTAINMENT E1, 2 F1, 3 G H1, 2	PREPARATION FOR SLEEP H1

ACTIVITY SCHEDULE: Operational activities have priority over above scheduled non-operational activities.

2

1. Replacement of no longer available staff members. Volunteers who form a shelter core staff will drop out for reasons of health, departure from area, retirement, death, loss of interest, and other personal reasons. It will be necessary to recruit and train volunteer replacements to maintain the readiness of a core staff.
2. Modification of tentative activity program if required by changing circumstances. Once a tentative activity program has been established, it should require no changes unless new developments have rendered portions of it obsolete. Even in such cases, it is unlikely that the basic schedule will require change. What may require change is for example, the details of some planned instruction. Such details will not necessarily be shown on a master activity schedule shown in Figure 2. Hence, the master schedule will seldom require change.

Shelter Entry and Post-Attack Phase

During this phase, no non-operational activities should be organized. Shelter management should devote its full resources to getting the shelter to function as a shelter. The circumstances will not be compatible with planned activities of the kind discussed in this report. Until it is known that the blast danger is over, or at least unlikely, shelterees should be required to assume a safe position, preferably prone. In the event of blast effects, shelter management must organize to meet contingencies; e.g., shelter damage, shelter fires, or injuries to shelterees. In the event of no blast effects, management must organize to establish basic shelter routines. In either case, the shelter is not ready for non-operational activities.

Routine Shelter Confinement Phase

With the beginning of the routine shelter confinement phase, shelter management must direct its energies mainly at getting the necessary operational activities underway. It will probably take at least one full day to organize the essential operational activities. Depending upon shelter circumstances, all members of the peacetime shelter cadre who are present in the shelter may be fully occupied with organizing the operational activities. Under such circumstances, the organization of non-operational activities will have to wait until the more essential shelter functions are set into operation.

The following basic steps are recommended to get the non-operational activity program underway:

1. Registration of shelterees.
2. Expansion of activity staffs.
3. Training of activity staffs.
4. Re-assessment of shelter conditions.
5. Planning and organizing activities.

Each of the five steps is discussed below.

Registration of Shelterees

Information must be obtained about the shelterees in order to recruit persons who can assist with the planning and organizing of non-operational activities; also, to aid the planning of activities compatible with shelterees. The essential information which would be of value to the activity planners include: (1) Name, (2) sex, (3) age, (4) religion, (5) occupation, (6) physical condition, (7) education, (8) civil defense training, (9) specialized skills, (10) experience in the field of recreation, religion, education, social service, mental health, or physical fitness. Such information should be obtained along with data useful to other members of the shelter management. Bond (15) has developed a general purpose shelteree registration form. He recommends a definite registration procedure as soon as shelter conditions permit.

Selection of Essential Activity Staffs

The next step is to expand the management nucleus into the full organization planned for the shelter. Thus, if the organization plan shown in Figure 1, p. 44 was the plan for the shelter, the heads of the various basic functions plus their individual staffs would have to be recruited from the shelterees if their peacetime cadre equivalents were not present in the shelter.

The wisdom of having a peacetime prepared and stocked shelter management organization plan should now be apparent. The more detailed the plan, the more simple the task of staffing the essential function units under wartime conditions.

To expedite the staffing problem, the Deputy, Special Services (see Figure 1, p. 44) should recruit first the four activity heads for training and education, religious services, recreational activities, and shelteree services respectively. Once acquainted with their responsibilities and duties, the four activity heads should proceed to recruit, as per peacetime plan, their own staffs. In a small shelter, with a simplified management structure, the staffing problem will be relatively simple from the standpoint of members.

Eninger (47) has established selection qualifications for the management roles identified in Figure 1. Application of his qualification standards is intended to ensure the selection of basically qualified personnel. Consult Bend (15) for additional information on the expansion of the shelter management organization by recruiting from shelterees.

Training of Essential Activity Staffs

The newly recruited members of shelter management will require quick orientation and training. New activity staff heads should be oriented and instructed by their respective Deputy superiors, or by the Shelter Manager or Deputy Shelter Manager in the event that staff Deputies are missing. Training can be minimal if the newly recruited staff members are basically qualified; i.e., resourceful people with managerial experience. The essence of the training should be to communicate the what, why, and to a lesser extent, how of their responsibilities and duties. Printed guidance material would greatly facilitate the staff training problem. Where such material is available, it should be turned over to the staff heads for their self-instruction. The staff heads, in turn, should train their own staffs.

This report would provide the minimum bases for the training of the non-operational activity staff heads.

Reassessment of Shelter Conditions

Before plans for the shelter's non-operational activity program are finalized, the shelter conditions should be reassessed. The reassessment should give consideration to such conditions as available space, temperature, ventilation, illumination, noise level, and other environmental characteristics which may influence plans for non-operational activities. For example, if the shelter population greatly exceeds the rated capacity of the shelter, such possible results as crowded space, high temperature-humidity index, and ration shortages may be cause for modifying the activity program planned during peacetime. Of course, where no such plans have been made, the assessment of shelter conditions is a necessary prerequisite for developing such plans.

The shelter assessment should also include a quick survey of the equipment, materials, and supplies which may be useful for organized activities. Stocks of paper, pencils, crayons, and paper clips, for example, are excellent for improvising arts and crafts materials. An office duplicating machine may provide the basis for a daily shelter newsletter. The survey should list the items of potential use, and indicate where they are located so they can be easily located when needed. Some items may be gathered centrally to ensure control of their use.

A similar survey should be made of materials brought in by shelterees. Where the potential shelterees have been educated in peacetime to bring certain items to the shelter, one can reasonably expect many will do so. An inventory of brought-in items is the first step toward their maximal use.

Planning and Scheduling Activities

If a peacetime-developed shelter activity program has been stocked, it should be reviewed by the Deputy, Special Services and his staff heads. (Or, whatever management personnel are responsible for planning and organizing such activities.) The object of the review is twofold: To (1) acquaint those responsible with the nature of the plans, and (2) determine the need for modifications in view of existing shelter conditions and shelteree characteristics. If no plans have been stocked, they should be developed as described earlier (p. 48-49).

A daily schedule for organized activities should be prepared and communicated to all shelterees. If possible, the schedule should be posted in strategic shelter locations. In addition, the line leaders (see Figure 1, p. 44) should be given copies so they can communicate such information verbally upon request. The posted schedule should indicate what organized activities are going on at what time in what location of the shelter. A good plan will schedule alternate activities, particularly for recreational and educational activities, so shelterees may have a choice.

Pro-Shelter Exit Phase

When fallout has diminished to the point where members of shelter management may leave the shelter for short time periods on specific shelter missions, the shelter has reached the pre-shelter exit phase. This phase may last several days, depending upon the length of time it takes the radioactive fallout to decay to a level where it is safe to leave the shelter permanently. During this phase, shelter management should concentrate its efforts on preparing shelterees for the post-shelter world. This will require three basic steps: (1) Assessment of the post-attack status of the region in which the shelter is located, (2) translation of the assessment into a program of orientation and training for post-shelter survival, and (3) application of the program. The first two steps are discussed briefly below.

Assessment of Regional Status

If the shelter is in contact with either the local or state civil defense organization, the latter will presumably provide shelter management

with an assessment of post-attack conditions which characterize the region. If no such contact exists, shelter management will have to make its own assessment. In the latter case, the following information should be ascertained: (1) Extensiveness of blast damage to buildings, roads, and utilities; (2) availability of local food, water, and medical supplies; (3) nature of local civil authority and capability; (4) status of other civil defense shelters in the immediate area; and (5) existence of hazards against which shelterers must take precautions.

The above information may have to be obtained by sending a survey team into the surrounding area after radiation levels have dropped to a safe level. Such probes may be necessary even when there is contact with higher civil defense levels to assist the latter in making a regional assessment of post-attack circumstances. Shelter management should have, therefore, a trained team ready to conduct such a survey.

Preparation of Training Content

A list of potential training topics for post-shelter survival was shown on page 26. Not all of the topics listed need necessarily be incorporated into a post-shelter survival training program. The regional circumstances should indicate to management what topics to include in such a program.

The details of each topic selected for inclusion in a post-shelter survival program should be available in the form of guidance material. Persons who are to conduct such training should be selected early in the routine shelter confinement phase so they can familiarize themselves with the training details. Thus, they will be ready to train any of the topics when the time comes. Assessment of regional conditions will merely indicate what topics to train.

Excluding young children, all shelterers should be required to attend such orientation and training sessions. Special sessions may be conducted for teenagers to acquaint them with the do's and don'ts of post-shelter existence. The advantage of special sessions for teenagers is that instruction can be phrased in manners more appealing and convincing to the teenager. Also, the instructor may wish to say things in adult sessions exclusively for the ears of adults.

CHAPTER V

STUDY LIMITATIONS, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH AND DEVELOPMENT

CHAPTER V OUTLINE

	<u>Page</u>
STUDY LIMITATIONS	56
STUDY CONCLUSIONS	56
RESEARCH AND DEVELOPMENT RECOMMENDATIONS	57

V. STUDY LIMITATIONS, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH AND DEVELOPMENT

Study Limitations

The concepts, principles, and procedures introduced in this report suffer from two definite limitations: (1) lack of direct empirical evidence from previous research which would substantiate the rationale, and (2) absence of convincing verification tests, such as peacetime efforts to apply the recommended concepts and procedures. In brief, this study is based on rational analysis, drawing largely from literature and studies only indirectly related to the basic problem.

Study Conclusions

The major conclusions of the study are as follows:

1. Development of morale and maintenance of social control will be a major problem for shelter management during wartime shelter habitation.
2. The management problem of morale and social control will be reduced substantially by a program of non-operational activities designed to reduce shelteree anxieties, fears, and other disorganizing emotional states.
3. Shelteree morale and social control will also be influenced greatly by the effectiveness with which shelter management carries out the more essential operational activities.
4. A program of non-operational activities should reflect a balance of training and education, shelteree services, physical fitness, religious and social activities, and recreation.
5. A trained peacetime shelter management cadre is desirable for each shelter for the purpose of establishing and maintaining the operational readiness of the shelter. Such a cadre should, in addition to other responsibilities, assume responsibility for planning and organizing a shelter non-operational activity program.
6. The activities included in such a program must be compatible with the characteristics and conditions of the shelterees as well as the shelter.

7. Participation in such an in-shelter activity program should be encouraged, but maintained on a voluntary basis. Forced participation will defeat the improved morale and social control objectives of the program.
8. With the possible exception of printed matter, such as non-operational activity guidance materials, Federal stocking of supplies for use in non-operational activity programs is neither essential nor recommended. Such programs can be planned on the basis of (1) materials normally available in shelter facilities, or (2) supplies contributed voluntarily to the shelters by the surrounding communities or potential shelterees.
9. The importance of non-operational activity programs for morale and social control is sufficiently great to warrant a special effort to known shelter managers in the related principles, concepts, and basic planning procedures.

Research and Development Recommendations

The following research and development recommendations are offered.

1. Activity tryouts in habitability studies. Different kinds of activities should be experimentally manipulated in habitability studies to determine their effects upon shelterees and shelter conditions. Particular attention should be paid to what activities arouse and sustain interests.
2. Operational readiness studies. The procedures recommended in this report should be subject to field verification as follows: Shelter managers should be recruited for civil defense shelters of various capacity, and given the responsibility of developing the operational readiness of the shelters, including plans for shelter activity programs. The experiences gained should be incorporated into a revision, if necessary, of the procedures recommended in this report.
3. Activity leaders handbook. A comprehensive guidance handbook for activity leaders should be developed and stocked in public shelters participating in the Federal fallout shelter capability program. The handbook should cover, in working details, all basic activities; e.g., training, services, recreation, religion, and physical fitness, so that the activity planner will require no other source material.
4. Stress and activity interaction. There is conflicting evidence on how effective non-operational activities may be in competing with fear and anxiety states. Further basic research is needed

to verify the assumption, only indirectly supported, that planned activities will reduce fears by keeping people occupied. It is recommended that OCD solicit specific research proposals related to this basic problem.

5. Activity leadership requirements. The report emphasizes that preference be given to persons with experience in the kinds of activities likely to be planned in shelters when selecting activity leaders. The recommendations should be verified by comparing how effectively such people plan activity programs compared with otherwise qualified people who have no such experience.
6. Post-shelter survival training. A booklet should be developed for shelterees on what they should do and not do upon leaving the shelter after a nuclear attack. The booklet should be comprehensive, touching on the problems that shelterees will most likely encounter. The attempt to develop such a booklet should itself identify many post-shelter survival problems.

REFERENCES

1. Alexander, F. A contribution to the theory of play. Psychoanal. Quart., 1958, 27, 175-193.
2. Alexander, F. Concerning play. Psycho. Heidel., 1956, 10, 11-28.
3. Altman, J. W. Adjustment in a simulated civil defense shelter. Pittsburgh: American Institute for Research, 2 September 1961.
4. Altman, J. W. Laboratory research on the habitability of public fallout shelters. Presented to the Symposium on Human Problems in the Utilization of Fallout Shelters at National Academy of Sciences - National Research Council, 12 February 1960.
5. Altman, J. W., Smith, R. W., Meyers, Rheda L., McKenna, F. S., & Bryson, Sara. Appendices for psychological and social adjustment in a simulated shelter. Pittsburgh: American Institute for Research, 1960.
6. Altman, J. W., Smith, R. W., & McKenna, F. S. Experimental studies of shelter habitability. Battle Creek, Michigan: Office of Civil and Defense Mobilization. 23 December 1959.
7. Altman, J. W., Smith, R. W., Meyers, Rheda L., McKenna, F. S., & Bryson Sara. Psychological and social adjustment in a simulated shelter. American Institute for Research: Office of Civil Defense and Mobilization, November 1960.
8. American Institute for Research. Shelter management handbook. Pittsburgh: Author, March 1960.
9. American Medical Association. Report on national emergency medical care. Chicago: Author, 1959.
10. American National Red Cross. The organization and operation of shelters. Washington, D. C.: Author, July 1950.
11. Baumgarten-Tramer, Franziska, Zur Psychologie der Ausgebombten., Gesundh. u. Wohlf., 1948, 28, 158-163.
12. Bend, E., Erskine, Janice, & Shively, Aliza. Manageable group sizes in shelters. Pittsburgh: American Institute for Research, 1963 (In Press).
13. Bend, E., Griffard, C. D., & Schaner, Ada J. Instructor materials to shelter organization and management. Pittsburgh: American Institute for Research, 1963. (In Press).

14. Bend, E., Griffard, C., & Schaner, Ada. Shelteree orientation pamphlet. Pittsburgh: American Institute for Research, 1963. (In press)
15. Bend, E., Griffard, C., Schaner, Ada, & Shively, Aliza. Guide to shelter organization and management. Pittsburgh: American Institute for Research, 1963. (In press)
16. Bend, E., Griffard, C., Schaner, Ada, & Shively, Aliza. Shelter organization and management, technical report. Pittsburgh: American Institute for Research, 1963. (In press)
17. Benoit, E. P. The play problem of retarded children, Amer. J. Ment. Defic., 1955, 60, 41-55.
18. Bettelheim, B. Behavior in extreme situations, J. Abnor. Soc. Psychol., 1943, 38, 417-452.
19. Biderman, A. D. The relevance of studies of Internment for the problem of shelter habitability. In Appendices for an analysis of several surveys relative to problems of shelter habitability. Washington: National Academy of Sciences - Disaster Research Group, January 1960.
20. Biderman, A. D., Louria, Margot, & Bacchus, Joan. Historical incidents of extreme overcrowding. Washington: Bureau of Social Science Research, Inc., 1963.
21. Biderman, A. D., & Zimmer, H., (eds.) The manipulation of human behavior. New York: John Wiley, 1961.
22. Blake, R. R., Rhead, C. C., Wedge, B., & Houton, Jane S. Housing architecture and social interaction. Sociometry, 1956, 19, 133-139.
23. Bondy, C. Problems of Internment camps. J. Abnor. Soc. Psychol. 1943, 38, 453-475.
24. Bucher, R. Blame and hostility in disaster. In Amer. J. Sociol., 1957, 62, 467-475.
25. Cannell, R. S. Live--A handbook of survival in nuclear attack. New Jersey: Prentice-Hall, Inc., 1962.
26. Cannell, R. S. We can live through nuclear attack...and recover. Air Force and Space Digest. February 1960.
27. Capobianco, R. J., & Cole, Dorothy A. Social behavior of mentally retarded children. Amer. J. Ment. Defic., 1960, 64, 638-651.

28. Carter, T. M. The play problems of gifted children. Sch. Soc., 1958, 86, 224-225.
29. Cernica, J. N., & Charigoon, M. Jean. Bathroom shelter short-time habitability study. Youngstown, Ohio: Youngstown University, September 1961.
30. Chi, Kyung-Woon. A questionnaire study on the play activities among elementary school children. Ewha Wom. Univer. Commen. Essays., 1956, 183-216.
31. Clarke, A. C. The use of leisure and its relation to levels of occupational prestige. Amer. Sociol. Rev., 1956, 21, 301-307.
32. Clifford, R. A. The Rio Grande flood: A comparative study of border communities in disaster. National Academy of Sciences - National Research Council, 1956.
33. Committee on Undersea Warfare. A survey report on human factors in undersea warfare. Washington: National Research Council, 1949.
34. Connor, Ruth, Johnnis, T. B., & Walters, J. Family recreation in relation to role conceptions of family members. Marriage Fam. Living. 1955, 17, 306-309.
35. Crespi, I. The social significance of card playing as a leisure time activity. Americ. Socio. Rev., December 1956, 21, 717-721.
36. Davis, K. Human Society, Macmillan Company, New York, 1957.
37. Demerath, N. J. Human adaptation to disaster: Some general propositions: An interperative summary. Human Organization. 1957, 16, 28-29.
38. Denney, R., & Meyersohn, Mary Lea. A preliminary bibliography on leisure. Amer. J. Sociol., 1957, 62, 602-615.
39. Department of Defense, Office of Civil Defense. Selected statistics on the fallout shelter program. Washington, D. C.: Author, 20 December 1962.
40. Department of Health, Education and Welfare. The care of infants and children in community fallout shelters, Project 1502. Washington: July 1962.

41. Diggory, J. C. Some consequences of proximity to a disease threat. Sociometry, 1956, 19, 47-53.
42. Dollard, J., & Miller, N. E. Personality and Psychotherapy, New York: McGraw-Hill, 1950.
43. Donahue, Wilma, Hunter, W. W., Coons, Dorothy, H., & Maurice, Helen K. Free time: Challenge to later maturity. Ann Arbor: University of Michigan Press, 1958.
44. Donald, Marjorie N., & Havighurst, R. J. The meanings of leisure. Soc. Forces, 1959, 37, 355-360.
45. Dornburh, S. M. Self-control under stressful situations. Popular psychology: A content analysis of contemporary inspirational non-religious books. Washington: Author, September 1962.
46. Dunlap and Associates. Procedures for managing large fallout shelters. Stamford, Connecticut: Author, 1960.
47. Eninger, M. U. The recruitment, selection and training of shelter managers and core staffs. Pittsburgh: American Institute for Research, 1963. (In Press).
48. Federal Civil Defense Administration. A brief review of salient findings on morale and human behavior under disaster conditions. Washington, D. C.: Author, April 18, 1958.
49. Federal Civil Defense Administration. Basic rescue course. Washington: Government Printing Office, January 1956.
50. Fogelman, C. W., & Parenton, V. J. Disaster and aftermath: Selected aspects of individual and group behavior in critical situations. Social Forces, 1959, 38, 129-135.
51. Franklin, Adele. Home play and play equipment for young children. Washington: U. S. Children's Bureau Publications, 1959.
52. Fritz, C. E. Disasters compared in six American communities. Human Organization, 1957, 16, 6-9.
53. Fritz, C. E., & Mathewson, J. H. Convergence behavior in disaster. A problem in social control. National Academy of Sciences - National Research Council, 1957.
54. Fritz, C. E., & Williams, H. B. The human being in disasters: A research prospective. Annals of the American Academy of Political and Social Science. 1957, 309, 42-51.

55. Gardner, Ella. Handbook for recreation leaders. Washington: U. S. Children's Bureau Publications, 1959.
56. Ghiselli, E. E., & Brown, C. W. Personnel and industrial psychology. New York: McGraw-Hill, 1948.
57. Gillisple, R. D. Psychological effects of war on citizen and soldier. New York: W. W. Norton, 1942.
58. Glavis, C. R., Jr. Bombing mission number fifteen. J. Abnor. Soc. Psychol. 1946, 41, 189-198.
59. Goldstein, K. Self-control under stressful situations. Stress and the concept of self-realization. Washington, D.C.: Bureau of Social Science Research Inc., September 1962.
60. Greenacre, P. Play in relation to creative imagination. Psychoanal. Stud. Child. 1959, 14, 61-80.
61. Guskin, S. L., & Rohrer, J. H. Social and psychological aspects of shelter living following nuclear attack. Washington: National Academy of Sciences - Disaster Research Group, 20 November 1958.
62. Haggard, E. A. Psychological causes and results of stress. In Human factors in undersea warfare. Washington, D. C.: Committee on Undersea Warfare, National Research Council, 1949.
63. Havighurst, R. J. The leisure activities of the middle-aged. Amer. J. Sociol., 1957, 63, 152-162.
64. Havighurst, R. J., & Feigenbaum, K. Leisure and life-style. Amer. J. of Sociology. 1959, 64, 396-404.
65. Haworth, Joyce. The relationship between the play of a group of school children and their personality traits. Bull. Brit. Psychol. Soc., 1957, 32, 19.
66. Heathers, G. Emotional and independence in nursery school play. J. Genet. Psychol., 1955, 87, 37-57.
67. Janis, I., L. Air war and emotional stress. New York: McGraw-Hill, 1951.
68. Janis, I. L. Problems of theory in the analysis of stress behavior. J. Social Issues, 1954, 10, 12-25.
69. Jordan, M. L. Leisure time activities of sociologists and attorneys. Sociol. Soc. Res., 1956, 40, 176-178.

70. Kaplan, M. Leisure in American: A social inquiry. New York: John Wiley, 1960.
71. Kardos, Elizabeth, & Peto, A. Contributions to the theory of play. Brit. J. Med. Psychol., 1956, 29, 100-112.
72. Kilpatrick F. P. Problems of perception in extreme situations. Human Organization, 1957, 16, 20-22.
73. Klausner, S. Z. Self-control under stressful situations. A collation of concepts of self-control. Washington, D. C.: Bureau of Social Science Research, Inc., 9-10 September 1962.
74. Kluckhohn, C. Myths and rituals: A general theory. Harv. Theol. Rev., 1942, 35, 45-79.
75. Langdon-Davies, J. Air raid. London: George Routledge and Sons, Ltd., 1938.
76. Leist, F. Musse and Kult. J. Psychol. Psychother., 1956, 4, 23-39.
77. Lewinsky, H. Boredom. Brit. J. Educ. Psychol., 1943, 13, 147-152.
78. Marks, E. S., & Fritz, G. E. Report on a porch collapse occurring in Chicago, Illinois, June 17, 1951. University of Chicago, National Opinion Research Center, 1954.
79. Mayo, E. Revery and industrial fatigue. J. Person. Research, 1924, 3, 273-281.
80. Meade, Margaret. The pattern of leisure in contemporary American culture. Ann. Amer. Acad. Pol. Soc. Sci., 313, 11-15.
81. Meyers, S. M., & Bradbury, W. C. The political behavior of Korean and Chinese analysis. Washington, D. C.: Human Resources Research Office, 1958.
82. Moyer, K. E., & Gilmer, B. Von Haller. Experimental study of children's preferences and use of blocks in play. J. Genet. Psychol., 1956, 89, 3-10.
83. National Recreation Association. Emergency recreation services in civil defense. New York: Author, 1951.
84. Nordlie, P. G., & Popper, R. D. Social phenomena in a post-nuclear attack situation. Arlington, Virginia: Human Sciences Research, Inc., August 1961.

85. Nottingham, Elizabeth, K. Religion and society. New York: Random House, 1954.
86. Office of Civil Defense. Emergency health care. Washington: U. S. Government Printing Office, November 1961.
87. Office of Civil Defense. Preliminary systems and components catalog. Fallout shelter program. Washington: Author, 16 April 1962. Revised.
88. Olson, W. E., & McCormack, J. B. Recreational counseling in the psychiatric service of a general hospital. J. Nerv. Ment. Dis., 1957, 125, 237-239.
89. Pappas, W., & Silver, R. J. Developmental differences between the successful and unsuccessful aged. J. Amer. Geriat. Soc., 1958, 6, 360-367.
90. Perry, S. E., et al. The child and his family in disaster: A study of the 1953 Vicksburg tornado. National Academy of Sciences - National Research Council, 1956.
91. Phillips, R., H. The nature and function of children's formal games. Psychoanal. Quart., 1960, 29, 200-207.
92. Quednau, N. Die monotomie, ihre analyse und ihre theorie. Industr. Psychotech., 1940, 17, 84-100.
93. Raker, J. W., Wallace, A. F. C., & Rayner, Jeannette, F. Emergency medical care in disasters. A summary of recorded experience. Washington: National Academy of Sciences - National Research Council, 1956.
94. Ramsay, R. W. The nature of work, in Gilmer, B., Von Haller. Industrial Psychology. New York: McGraw-Hill, 1961.
95. Rayner, Jeannette, F. An analysis of several surveys relative to problems of shelter habitability. Disaster Research Groups, National Academy of Sciences - National Research Council, January 1960.
96. Rayner, Jeannette, F. Report of the Winsted, Connecticut exploratory study. National Academy of Sciences - National Research Council, 1955.
97. Redl, F. The impact of game ingredients on children's play behavior. In Schaffner, B. (Ed.), Group processes: Transactions of the fourth conference. New York: Josiah Macy, Jr. Foundation, 1959.

98. Bloch, D. Self-control under stressful situations. - A behavioral approach to the problem of self-control. Washington, D. C.: Bureau of Social Science Research, Inc., 9-10 September 1962.
99. Robertson, J. P. S. Leisure activities in relation to neuropsychiatric diagnosis and treatment. J. Clin. Psychol., 1957, 13, 56-58.
100. Rohrer, J. H. Studies of human adjustment to polar isolation and implications of those studies for living in fallout shelters. Washington: Georgetown University Medical School, July 1959.
101. Rose, A. W. Toward understanding the concept and function of play. Educ. Theory, 1956, 6, 20-25.
102. Schachter, S. The psychology of affiliation. Stanford, California: Stanford University Press, 1959.
103. Schonbach, P. Cognition, motivation and time perception. J. Abnor. Soc. Psychol., 1959, 58, 195-202.
104. Schorsch, R. S. Psychology of play. Notre Dame Ind: University of Notre Dame, unpublished Ph.D. dissertation, May 1942.
105. Shaffer, L. F. Fear and courage in aerial combat. J. Consult. Psychol., 1947, 11, 137-143
106. Sinha, D. Behavior in a catastrophic situation: A psychological study of reports and rumors. Brit. J. Psychology. 1952.
107. Smith, R. W., Lasky, Mary Ann. Planning guides for dual-purpose shelters. Pittsburgh: American Institute for Research. (In Press).
108. Smith, R. W., Lasky, Mary Ann. Technical report: Planning guides for dual-purpose shelters. Pittsburgh: American Institute for Research (in Press).
109. Standles, L. S., & Popham, W. J. Participation in leisure time activities as related to selected vocational and social variables. J. Psychol., 1958, 46, 149-154.
110. Stewart, S. Give us this day. New York: Popular library, 1961.
111. Strobe, W. E., Etter, H. S., Schultze, D. P., & Pond, J. I. The family occupancy test 4-6 November 1960. San Francisco, California: U. S. Naval Radiological Defense Laboratory, August 1962.
112. Strobe, W. E., Etter, H. S., Goldbeck, R. A., Halskell, R. M., & Sheard, J. H. Preliminary report on the shelter occupancy test of 3-17 December 1959. San Francisco: Naval Radiological Defense Laboratory, 4 May 1960.

113. Strobe, W. E., Schultze, D. P., & Pond, J. I. Preliminary report on the shelter occupancy test of 25-29 July 1960. San Francisco: Naval Radiological Defense Laboratory, 21 March 1961.
114. Sussman, M. B. Leisure: Bane or blessing? Soc. Wk., 1956, 1, 11-18.
115. Swanson, G. E. Self-control under stressful situations. - The routinization of love. Washington, D. C.: Bureau of Social Science Research, Inc., 9-10 September 1962.
116. Thomae, H. Beziehungen zwischen Freizeitverhalten, sozialen Faktoren und Persönlichkeitsstruktur, Psychol. Rdsch., 1960, 11, 151-159.
117. Thomas, L. G. Leisure pursuits by socio-economic strata. J. educ. Socio., 1956, 29, 367-377.
118. Thouless, R. H. Psychological effects of air raids, nature. 1941, 148, 183-185.
119. Torrance, E. P. The behavior of small groups under the stress conditions of "survival," Amer. Socio. Review, December 1954, 19, 751-755.
120. Tyhurst, J. S. Behavior under stress. Ottawa: Defense Research Board of Canada, 1950.
121. Tyhurst, J. S. Individual reactions to community disaster: The natural history of psychiatric phenomena, Amer. J. of Psychiatry, 1951, 197, 764-769.
122. Ulich, E. Spare time activities of teenage pupils, Psychol. Rdsch., 1959, 10, 180-190.
123. United States Armed Forces Committee, Bennett, A. L. (Ed.). The army and navy hymnal. Washington: United States Government Printing Office, 1942.
124. White, R. C. Social class differences in the uses of leisure, Amer. J. Sociol., 1955, 61, 145-150.
125. White, R. C. Motivation reconsidered: The concept of competence, Psychol. Rev., 1959, 66, 297-333.
126. Williams, H. P., & Rayner, Jeannette F. Emergency medical services in disaster. In Popper, R. D., & Lybrand, W. A. (Eds.) An inventory of selected source materials relevant to integration of physical and social effects of air attack. Arlington, Virginia: Human Sciences Research, Inc., 1960.
127. Willis, M. P., Markowitz, Eileen M., & Nagin, Edythe F. Requirements and methods for improving civil defense training. Pittsburgh: American Institute for Research, 1963.

APPENDIX

Section I. Bibliography and Recommended Activity References

I. BIBLIOGRAPHY AND RECOMMENDED ACTIVITY REFERENCES

General

1. Capobianco, R. J., & Cole, Dorothy A. Social behavior of mentally retarded children. Amer. J. Ment. Defic., 1960, 64, 638-651.
2. Clarke, A. C. The use of leisure and its relation to levels of occupations prestige. Amer. Sociol. Rev., 1956, 21, 301-307.
3. Crespi, I. The social significance of card playing as leisure time activity. Amer. Sociol. Rev., December 1956, 21, (6), 717-721.
4. Donald, Marjorie N., & Havighurst, R. J. The meanings of leisure, Social Forces, 1958-59, 37.
5. Greenacre, P. Play in relation to creative imagination. Psychoanal. stud. Child., 1959, 14, 61-80.
6. Havighurst, R. J. The leisure activities of the middle-aged. Amer. J. Sociol., 1957, 63, 152-162.
7. Havighurst, R. J., & Feiganbaum, K. Leisure and life-style. Amer. J. Sociol., January 1959, 64, (4), 396-404.
8. Heathers, G. Emotional dependence and independence in nursery school play. J. genet. Psychol., 1955, 87, 37-57.
9. Jordan, M. L. Leisure time activities of sociologists and attorneys. Sociol. soc. Res., 1956, 40, 176-178.
10. Leist, F. Leisure and cult. In Musse and Kult (Eds.) J. Psychol. Psychotherapy, 1956, 4, 23-29.
11. Moyer, K. E., & Gilmer, B. von Haller. Experimental study of children's preferences and use of blocks in play. J. genet. Psychol., 1956, 89, 3-10.
12. National Recreation Association. Emergency recreation services in civil defense. New York: Author, 1951.
13. Pappas, W., & Silver, R. J. Development differences between the successful and unsuccessful aged. J. Amer. Geriat. Soc., 1958, 6, 360-367.
14. Phillips, R. H. The nature and function of children's formal games. Psychoanal. Quart., 1960, 29, 200-207.
15. Rose, A. W. Toward understanding the concept and function of play. Educ. Theory, 1956, 6, 20-25, 59.

16. Standless, L. S., & Popham, J. W. Participation in leisure time activities as related to selected vocational and social variables. J. Psychol., 1958, 46, 149-154.
17. Sussman, M. B. Leisure: Bane or blessing? Soc. Wk., 1956, 1, (3), 11-18.
18. Thomas, H. Relationships between spare time activities, social factors, and personality structure. Psychol. Rdsch., 1960, 11, 151-159.
19. Thomas, L. G. Leisure pursuits by socio-economic strata. J. educ. Sociol., 1956, 29, 367-377.
20. Ulich, E. Spare time activities of teenage pupils. Psychol. Rdsch., 1959, 10, 180-190.
21. White, R. C. Social class differences in the uses of leisure. Amer. J. Sociol., September 1955, 61, 145-150.

Medical

22. Office of Civil Defense. Family guide--Emergency health care manual. Washington: U. S. Government Printing Office, November 1961.

Activities for Special Groups

23. Carlson, Bernice W., & Gingland, D. R. Play activities for the retarded child. Nashville, Tennessee: Abingdon Press, 1961.
"Special recreational activities for teachers and parents. A psychologically and educationally sound aid toward helping a retarded child develop into a useful person."
24. Cleaver, Nancy. The treasure of family fun. New York: Fleming H. Revell Company, 1960.
"A collection of creative, home-centered indoor and outdoor activities ideas and projects for every month of the year. Individual and group activities for all ages."
25. Chapman, F. M. Recreation activities for the handicapped. New York: Ronald Press, 1960.
"Descriptions of over 250 activities divided among ten program areas. Information on necessary equipment, procedures, variations, and diagnostic group or groups to which activities are best suited."
26. Department of Health, Education & Welfare. Care of infants and children in community fallout shelters. Washington: Author, Children's Bureau, 1962.

27. Eisenberg, Helen, & Eisenberg, L. The family fun book. New York: Association Press, 1953.
"Hundreds of ideas for outdoor fun, rainy day fun, fun on trips, hobby suggestions. For all ages."
28. Hunt, Valerie V. Recreation for the handicapped. Englewood Cliffs, New Jersey: Prentice-Hall, 1955.
"Discusses problems encountered by handicapped persons in satisfying their needs through recreation; the psychophysical aspects of various disabilities."
29. Kraus, R. The family book of games. New York: McGraw-Hill, 1960.
"More than 300 games, stunts, tricks, and puzzles for home, scout, school, and church activities. Sections on party planning, game leadership, leadership of large groups."
30. Lucas, Carol. Recreational activity development for the aging in homes, hospitals, and nursing homes. Springfield, Illinois: Charles C. Thomas, 1962.
"A very effective evaluation of both the physical and mental recreational needs for the elderly people. It carries a step-by-step plan for setting up a recreation program, including staffing, training and volunteer programs."
31. Rees, Elizabeth L. A doctor looks at toys. Springfield, Illinois: Charles C. Thomas, 1961.
"This book is especially helpful to anyone working with the ill and handicapped as there are sections for all ages and disabilities. Helpful advice and references for parents."
32. Silson, J. E., Cohen, E. M., & Hill, Beatrice H. Recreation in hospitals. New York: National Recreation Association, 1959.
"A report on the findings of a two-year study of organized recreation programs in United States hospitals."
33. Smith, Anne M. Play for convalescent children in hospitals and at home. New York: A. S. Barnes and Company. No date.
"Numerous suggestions for games, crafts, etc. For all those concerned with child development--teachers, play leaders, hospital personnel, social workers."
34. Spencer, Marietta B. Blind children in family and community. Minneapolis: University of Minnesota Press. No date.
"How social workers and parents can guide blind children to develop as normally as possible in everyday activities using basic principles of child guidance."
35. Sullivan, Kay. What every harassed mother should know. Redbook. January 1963, 120, 3.

36. Tedford, J. The giant book of family fun and games. New York: Franklin Watts, Inc., 1958.
"An anthology of hundreds of games, puzzles, skits, projects, hobbies, etc. for family 'round table' and fireside, backyard parties, rainy days, outings, picnics, camping trips."
37. Thompson, M. Starting a recreation program in institutions for the ill or handicapped aged. New York: National Recreation Association, 1960.
"Explains the need for recreation in nursing homes and homes for the aged and suggests ways for meeting this need."

Recreation for Senior Citizens

38. Kleemeier, R. W. Aging and leisure. Fair Lawn, New Jersey: Oxford University Press, 1961.
"A research perspective, supported by the Ford Foundation, of a variety of viewpoints from pertinent fields of social science. Represents the best thinking of our time on meaningful activity for older people."
39. Williams, A. Recreation in the senior years. New York: Association Press, 1962.
"For leaders in every setting--program ideas and best practice in planning sound recreation with the aging. A revised up-dating of Recreation for the Aging. All who work with such groups--or train their leaders--can keep up to date with the best methods for planning, starting and running worthwhile recreational programs for senior citizens."

Religious Group Recreation

40. Barbour, Ruth, & Barbour, R. Religious ideas for arts and crafts. Philadelphia: Christian Education Press, 1959.
"A manual to stimulate leaders to make use of religious ideas for art and craft work. Symbols, emblems, etc., for use in camps, churches, conferences."
41. Casey, Beatrice. Good things for church groups. Minneapolis: T. S. Denison and Company, No date.
"A collection of monologues, readings, dialogues, comedies, skits,, and religious plays for use by church and affiliated groups."
42. Enterline, Mildred H. Best plays for the church. Philadelphia: Christian Education Press, 1959. (Revised edition)
"Carefully selected list of plays, pageants, readings and resource books. Plays for holidays, children, interracial groups, all-women or all-men casts, teenagers."

43. Gilliss, Flora. Bible games for young and old. Minneapolis; T. S. Denison and Company. No date.
"A new way to learn and understand Bible stories and lessons while playing over 300 original games based on them."
44. Keiser, Armilda B. Here's how and when. New York: Friendship Press, 1952.
"Program material for Sunday school and daily vacation Bible school. Simple crafts, games, and other recreation activities."
45. Lobingier, Elizabeth M. Activities in child education: For the church school teacher. Boston: Pilgrim Press, 1950.
"Emphasizes place of activity in curriculum. Helps teachers understand purpose and importance of creative teaching. Photographs of author's and children's work."
46. Taylor, Margaret. Time for wonder. Philadelphia: Christian Education Press, 1961.
"For children 5 to 7; rhythmic movement and creative movement leading to a simple dramatization of feelings. Fulfills the need for a book on using creative dramatic movement in Christian education, for use by church school teachers and parents."

Arts and Crafts--General

47. Benson, K. R. Creative crafts for children. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1958.
"Forty illustrated craft projects, arranged in order of difficulty. Relates the leadership responsibilities of teachers, playground leaders and camp counselors to the craft activity needs of children."
48. Blumenau, Lili. The art and craft of hand weaving: Including fabric design. New York: Crown Publishers, Inc., 1955.
"A fully illustrated book, for beginner or expert, on yarns, looms, tools, weave and structure, design and procedure of fabric making."
49. Cherry, R. General leather-craft. New York: Taplinger Publishing Company, Inc., 1958.
"Especially for the beginner, clear instruction and 365 photographs for every detail from laying out and cutting to putting in zippers."
50. Green, A. S. Arts and crafts for primary grade children. Minneapolis: T. S. Denison and Company, 1962.
"Based upon the creative, expressive approach to teaching, utilizing a wide variety of media as: plaster, paper, soap, shells, buttons, bottles, etc. Examples to stimulate imagination and develop ability."

51. Green, A. S. Creative arts and crafts activities. Minneapolis: T. S. Denison and Company. No date.
"Arts and crafts activities for primary, intermediate and upper grade children for use by teachers, therapists, counselors and parents."
52. Haines, R. E. (Ed.) The home crafts handbook. Princeton: D. Van Nostrand Company, 1948. (Second edition)
"A complete crafts reference guide in seven sections including leather-craft, woodworking, metal art crafts, handmade jewelry, graphic arts, plastic crafts, and basketry."
53. Hunt, Kari, & Carlson, Bernice W. Masks and mask makers. Nashville, Tennessee: Abingdon Press, 1961.
"Masks through the century--the fascinating story of purposes and uses of masks. Present day uses and mask making for exhibits, TV and theater"
54. Mattil, E. L. Meaning in crafts. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1959.
"100 profusely illustrated craft projects for children. Includes puppets, seasonal activities, block prints, papier mache, collage, mosaics, weaving, mobiles, painting, modeling and sculpture. Teaching suggestions."
55. Musselman, Virginia. Simple puppetry. New York: National Recreation Association, 1952.
"Information on different types of puppets, how to make simple puppets, the puppet stage, leadership methods and techniques. Line drawings. Suggested reading."
56. Reed, C., & Orze, J. Art from scrap. Worcester, Massachusetts: Davis Publications Inc., 1960.
"Sculpture, graphics, mosaics, puppets, masks, collages, jewelry, crafts. Projects for all ages. Includes formulas and mixtures list of scrap materials."
57. Rice, Rebecca. Creative activities. Boston: Pilgrim Press, 1947.
"A manual of things to do geared to modern educational practices. Includes handwork in the curriculum, materials, and equipment, what to do and how to do it, and seasonal activities."
58. Staples, F. A. Arts and crafts series. New York: National Recreation Association, 1954.
"Manuals for leaders, with comprehensive project outline covering all age groups. Accompanying workbook."
59. Staples, F. A. Arts and crafts program manual. New York: National Recreation Association, 1954.
60. Staples, F. A. How to do it - arts and crafts projects for the recreation program. New York: National Recreation Association, 1953.

61. Tassel, V. R. Woodworking crafts. Princeton: D. Van Nostrand Company, Inc., 1947.
"A compact, authoritative guide to all phases of woodworking, including the use of hand tools and directions for making a variety of ornamental wood projects."
62. Wardwell, Jane. 10¢ crafts for kids. New York: Association Press, 1961.
"Imaginative, low-budget crafts from scrap materials such as egg cartons, hangers and toothpicks. A guide for group leaders who are not crafts specialists."
63. Wiener, L. Handmade jewelry. Princeton: D. Van Nostrand Company, Inc., 1948. (Second edition)
"Up-to-date material on jewelry making techniques, this source book gives careful instructions for amateurs or experienced craftsmen. Includes stone setting, enameling, silver wire jewelry, etching and polishing."

Painting, Drawing, Graphics

64. Diller, Mary B. The holiday drawing book. New York: Pitman Publishing Corporation, 1953.
"To encourage and help children to draw. Simplified, colorful instructions for drawing numerous holiday and seasonal pictures with the aid of six geometric 'helping shapes'."
65. Ellis, Mary J., & Ellis, W. G. Creative art ideas. Minneapolis: T. S. Denison and Company, 1959.
"Method of creative art training for children in the third and fourth grades. The child is given a basic approach simple enough to grasp creative fundamentals while utilizing his natural aesthetic sense."
66. Hill, A. The beginner's book of oil painting. New York: Emerson Books, Inc., 1959.
"Explains what colors, brushes, and other accessories to buy and how to choose your subject matter. Shows the important effects of light and shade, composition."
67. Hill, A. The beginner's book of water color painting. New York: Emerson Books, Inc., 1959.
"The fundamentals of water color painting including choice of materials, color chart, choice of subject matter, approach, perspective, tinted drawing and gouache, composition, etc."

68. Hill, A. What shall we draw? New York: Emerson Books, Inc., 1959.
"For beginners of any age. Step-by-step instructions in the fundamentals of sketching. How to draw faces, people, animals, scenery."
69. Perard, V., and others. How to draw. New York: Pitman Publishing Corporation, 1957.
"Practical, self-teaching book covering shading, pencil, pen and brush technique, line composition, perspective, figures, details."
70. Slobodkin, L. The first book of drawing. New York: Franklin Watts, Inc., 1958.
"The way to good drawing for beginners and students. Text and drawings by a famous artist-author includes anatomy, movement, perspective and materials. Detailed instruction in various mediums."

Paper Crafts

71. Becker, Edith C. Adventures with scissors and paper. Scranton, Pennsylvania: International Textbook Company, 1959.
"A background for any person who is interested in the exciting and creative uses of paper with children in school, recreational or church programs. Excellent guide for teachers."
72. Johnson, Pauline. Creating with paper. Basic forms and variations. Seattle, Washington: University of Washington Press, 1958.
"Techniques of folding, cutting, bending, and shaping paper into abstract or representational forms. Uses of paper in holiday, party, and festival decorations."
73. Murray, W. D., & Rigney, F. J. Paper folding for beginners. New York: Dover Publications, Inc. No date.
"Contains a full, crystal clear text that anticipates all difficulties that the reader might have. More than 275 carefully labeled diagrams that show important stages in the creation of paper objects."

Dancing

74. Andrews, Gladys. Creative rhythmic movement for children. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1954.
"Concentrates on movement as a form of expression, its relation to music, art, language arts, social studies and other school experiences."

75. Herman, M. Folk dances for all. New York: Barnes & Noble, Inc., 1947.
"Intended for both dance leader and participant. There are nineteen folk dances from fifteen countries. The step-by-step instructions and the easy piano scores that accompany each dance make this the ideal book."
76. Kraus, R. Square dances of today and how to teach and call them. New York: McGraw-Hill Book Company, 1950.
"Wide selection of calls, directions for teaching many dances, appropriate music. Musical scores."
77. Latchaw, Marjorie, & Pyatt, Jean. A pocket guide of dance activities. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1958.
"For the teacher who is not a dance specialist. Includes exploratory movement exercises and social forms such as folk dances, singing games, mixers."
78. Lunt, Lois. Mix 'em and match 'em. Minneapolis: T. S. Denison and Company, 1961.
"A collection of 40 mixers and simple recreational dances for teachers and recreational directors. Much new material to integrate into programs. Simple instructions."
79. Parson, T. E. How to dance. New York: Barnes & Noble, Inc., 1956.
"A self-instruction book for nine dances, from foxtrot to cha-cha-cha. A useful handbook for adults and young people. Also included are definitions of terms and accepted abbreviations."
80. Stuart, Frances R., & Ludlam, J. S. Rhythmic activities. Minneapolis: Burgess Publishing Company, 1955. Series III - Junior high school.
81. Stuart, Frances R., & Ludlam, J. S. Rhythmic activities. Minneapolis: Burgess Publishing Company, 1955. Series I - Kindergarten to grade 3. Series II - Grades 3 - 6.
82. Turner, Margery J. Dance handbook. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1959.
"An orientation to all forms of dance taught in today's schools. Emphasizes fundamental skills in forms from folk dancing through modern. Social events and dance parties are also discussed."
83. White, Betty. Betty White's dancing made easy. New York: David McKay Company, Inc., 1958.
"A social dance book on an adult level. Covers all the popular dances from waltz and foxtrot to samba and conga."
84. White, Betty. Betty White's teenage dance book. New York: David McKay Company, Inc., 1958.
"Contains all the popular dances with clear and easy instructions. Helpful ideas on invitations, dress, etc."

85. White, Betty. Betty White's teenage dance etiquette. New York: David McKay Company, Inc., 1956.
"Presents the accepted social practices for teenagers at an informal dance, prom or ball."
86. Yerrington, Beverly H., & Outland, Tressie A. Social dance. Palo Alto, California: National Press, 1961.
"Provides clear, simple, diagrammatic instructions for all current social dances. Basic rhythms are explained. Useful for both teacher and student. Complete and practical for recreation leaders."

Drama--Children's Theatre

87. Durland, Frances C. Creative dramatics for children. Yellow Springs, Ohio: Antioch Press. No date.
"A guide to the values of creative dramatics in education, including scripts written and presented by children's groups."
88. Huber, L. J. Easy arena plays. Minneapolis: The Northwestern Press, 1951.
"17 short plays and skits to be played in an open area, indoors or outdoors."
89. Miksch, W. F. Teen-age sketches. Minneapolis: T. S. Denison and Company, 1947.
"Plays and skits for teenagers. Suitable for assemblies, special programs, entertainments. Themes deal with the everyday experiences of young people."
90. Musselman, Virginia. Informal dramatics. New York: National Recreation Association, 1952.
"Describes the different types of informal dramatics--pantomime, skits, stunts, dramatic games, dramatic play, story dramatization, improvisation, etc. Suggested reading."
91. National Recreation Association. Stunts series. New York: Author, No date.
"Stunts that require few properties and costumes that can be improvised."
92. Seattle Junior Programs. Children's theater manual. Anchorage, Kentucky: Children's Theater Press, 1951.
"Practical booklet of detailed advice on creating and maintaining a children's theater organization for the community."

93. Walker, Pamela. Seven steps to creative children's dramatics. New York: Hill & Wang, Inc., 1957.
"How to set up a dynamic children's theatre and instructions for producing a play. Includes three original scripts."

Production and Techniques

94. Bailey, H. The ABC's of play producing: A handbook for the nonprofessional. New York: David McKay Company, Inc., 1955.
"Every stage of production covered in concise detail. Appendix of classified, recommended plays."
95. Berk, Barbara, & Bendix, Jeanne. How to have a show. New York: Franklin Watts, Inc., 1957.
"An informal guide on amateur productions with limited facilities. Party games, one-man performances to fullscale productions, planning, financing and managing."
96. National Recreation Association. Drama is recreation. New York: Author. No date.
"Drama transports us to the world of high adventure - a report on Drama in Public Recreation, from the series on the Performing Arts as Recreation."

Games & Puzzles--General

97. Bell, R. C. Board and table games from many civilizations. Fair Lawn, New Jersey: Oxford University Press, 1960.
"Defines the rules of play and tells about the origin and history of the world's best board and table games."
98. Cox, Claire. Rainy day fun for kids. New York: Association Press, 1962.
"Just perfect for a rainy day at camp, home or school. Designed to keep the kids happy no matter what the setting and is guaranteed to be helpful to the leader during inclement weather."
99. Donnelly, R. J., Helms, W. G., & Mitchell, E. D. Active games and contests. Cambridge, Massachusetts: Harvard University Press, 1954. (Second edition)
"A collection of 1800 games and contests of a vigorous nature. Traditional and wellknown forms of games together with newer approaches."

100. Edwards, J. G. Inclement weather activities. New York: Arco Publishing Company, Inc., 1959.
"A collection of active and quiet indoor games and activities for children of elementary school age. Classified by age groups and types of activities."
101. Ellis, Mary J. Finger play approach to dramatization. Minneapolis: T. S. Denison and Company. No date.
"An old but favorite play, familiar words and pleasing rhymes provide a springboard for children in learning creative dramatics and correlated concepts."
102. Ellis, Mary J., & Lyons, Frances. Finger playtime. Minneapolis: T. S. Denison and Company. No date.
"Jingles adapted for finger actions on subjects familiar to children. Directions are simple in order to encourage the natural expression and personality of the child."
103. Frey, R. L. Rules of games according to hoyle. New York: Garden City Doubleday & Company, Inc., 1956.
"Complete up-to-date instructions, scoring and strategy for over 200 games: cards, dice, parlor, word and children's games. Special section on the best solitary games."
104. Gardner, Grace H. Games we like to play. New York: William-Frederick-Press, 1959.
"A handbook of favorite games for young children. Includes outdoor games, indoor games and stunts. Simple descriptions and rules for the games for easy interpretation. Additional reference books."
105. Hindman, D. A. Handbook of active games. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1951.
"Collection intended to include all active games that are well known and considered worth playing in the United States. Designed for leaders, players, and physical education teachers."
106. Kemmerer, J. W., & Brickett, Eva M. Games and parties. Minneapolis: T. S. Denison and Company, 1939.
"Contains all of the well known games for all age groups. In addition, contains a section on theme parties, with many new and exciting ideas."
107. Kohl, Marguerite, & Young, Frederica. Games for children. New York: Hill & Wang, Inc., 1953.
"Over 250 tested games, indoor and out, active or quiet. Age groups 4-6, 7-9, and 10-12."
108. Kohl, Marguerite, & Young, Frederica. Games for grownups. New York: Hill & Wang, Inc., 1951.
"All sorts of games for successful home entertainment, featuring handy charts to tell at a glance where to find the right game for the right time."

109. Leeming, & Miller. Riddles, riddles, riddles. New York: Franklin Watts, Inc., 1953.
"An unusual and truly sparkling book. The country was scoured for the best and most entertaining riddles, charades, enigmas, conundrums, number and word games. A perfect party book, camping or picnic companion."
110. Mason, & Mitchell. Party games. New York: Barnes & Noble, Inc., 1946.
"A sure way of becoming the life of the party, with lively games and stunts. This book is complete with a recreational calendar, dancing aids, mystery games, mental play, jokes, tricks and social mixers."
111. Macfarlan, A., & Macfarlan, Paulette. Fun with brand new games. New York: Association Press, Inc. No date.
"A treasure for group leaders, brimming over with new games that require no equipment. Includes games from foreign lands, with easy to follow directions."
112. Macfarlan, A. A. More new games for teen-agers. New York: Association Press, 1950.
"A collection of over 200 recreational games that can be played by 2 to 20 players. Designed especially for 9-15 year olds."
113. McGann, Muriel E. Active games for the live wires. New York: National Recreation Association, 1952.
"Games for use in home, club, school and community center. For 6 to 14 age group."
114. McGann, Muriel E. Singing games. New York: National Recreation Association, 1961.
"For 5 to 7 age group."
115. Menaker, F., & Folsom, F. How smart are you? New York: Sentinel Books, Inc. No date.
"This stimulating book can provide loads of fun for you and your friends. Test your wits on the many variations of brain teasers and puzzles."
116. National Recreation Association. Games for boys and men. New York: Author, 1938.
"A collection of games, stunts, songs, for the playground, at camp, at stag parties, picnics, banquets and luncheon meetings."
117. National Recreation Association. Games for quiet hours and small spaces. New York: Author, 1938.
"More than 100 games and stunts that can be played almost anytime, anywhere."

118. National Recreation Association. Make your own games. New York: Author, 1952.
"Games to make from wood and cardboard includes familiar games like ring toss and lesser known games like Fox and Geese."
119. New York Herald Tribune. The book of New York Herald Tribune cross-word puzzles. New York: Author. No date.
"Contains 100 puzzles and 100 cryptograms. This book is not only entertaining, but full of fun and excitement for the lover of mental challenge."
120. Richardson, Hazel A. Games for the elementary school grades. Minneapolis: Burgess Publishing Company, 1951.
"File of 160 cards with 137 individual games with variations. Classified by grade and index for playground, gym and classroom."
121. Richardson, Hazel A. Games for junior and senior high schools. Minneapolis: Burgess Publishing Company, 1957.
"171 selected games, where they can be played, number of players, and equipment needed on 4x6 cards for handy use."
122. Richart, Genevieve. The master game and party book. Minneapolis: T. S. Denison and Company. No date.
"A collection of games, old and new, for home and school use and every kind of social gathering. Includes anagrams, riddles, romping games, proverbs, pantomimes and charades."
123. Settle, Geraldine W. Easy games for youngsters. Minneapolis: T. S. Denison and Company. No date.
"Compilation of indoor-outdoor games for teachers and parents to use with kindergarten-fourth grade children. Includes paper and pencil games, skill-improving activities and easy contents."
124. Wackerbarth, Marjorie, & Graham, Lillian S. Games for all ages and how to use them. Minneapolis: T. S. Denison and Company. No date.
"Descriptions of approximately 450 games. No special equipment required. Suggestions for game programs, creative play."
125. Webb, Marion A. Games for younger children. New York: William Morrow and Company, Inc., 1947.
"Rules for 100 games; sections on holidays and birthday party games. Mother Goose parties. Lists of stories, poetry and songs. Valuable for mothers, teachers, playground and recreation directors."
126. Young, W. P., & Gardner, H. J. Games and stunts for all occasions. Philadelphia: J. P. Lippincott Company, 1957.
"A practical manual of more than 150 original games and adaptations of old favorites for small and large groups."

Leadership--General

127. Ball, Edith L. Developing volunteers for service in recreation programs. New York: National Recreation Association. No date.
"A guide for those needing volunteers and those already working with them. Includes recruiting, training, resources for recreation education, sample courses, etc."
128. Corbin, H. D. Recreation leadership. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1959. (Second edition)
"History of the recreation movement, psychological basis for leadership activities, complete discussion of problems facing the profession. Section on delinquency."
129. Harbin, E. O. The recreation leader. Nashville, Tennessee: Abingdon Press, 1952.
"How to discover and develop recreation leaders in church and community, base a recreation program on a wholesome philosophy of life, and evaluate correctly the role of recreation in character training."
130. Knowles, Hulda, & Knowles, M. How to develop better leaders. New York: Association Press, 1955.
"Practical ways of training and improving leadership in all kinds of organizations. Non-technical."
131. Kraus, R. Recreation leader's handbook. New York: McGraw-Hill, 1955.
"For use with groups of various sizes and different ages. Discusses objectives of leadership and covers many activities--games, dances, dramatics, etc."
132. National Recreation Association. Personnel standards in community recreation leadership. New York: Author. No date. (Revised edition)
"Leadership positions, standards, salary recommendations prepared by the National Advisory Committee on Recruitment, Training and Placement of Recreation Personnel."
133. Peterson, H. C. A guide for chairmen. Minneapolis: T. S. Denison and Company, 1954.
"Simplified explanation of the duties and responsibilities of the chairman, especially designed for the novice."
134. Ross, M. G., & Hendry, C. E. New understandings of leadership: A survey and application of research. New York: Association Press, 1957.
"What the leader must be and do; implications of leadership on the group, leadership training and selection etc."
135. Sutherland, W. C. Recreation leadership. New York: National Recreation Association. No date.
"An accurate handbook of qualifications, opportunities, salaries, etc., for careers in recreation."

Music

136. Beckwith, P. (Ed.) "Anywhere" songs. Chicago: University of Chicago Press, 1952.
"Includes a large assortment of hymns, choruses, spirituals, sacred and secular rounds and graces, camp and folk songs. Can be used whenever people gather to sing informally."
137. Best, D., & Best, Beth. The new song fest. New York: Crown Publishers, Inc. No date.
"The International Outing Club Association's collection of words and music for 300 songs. Folk songs, work songs, college songs, drinking songs, chanties, rounds, etc."
138. Birchard, C. C., Dykema, P. W., Earhart, W., Dann, H., & McConathy, O. Twice 55 community songs. "The green book." Evanston, Illinois: Summy-Birchard Publishing Company, 1923.
139. Eisenberg, Helen, & Eisenberg, L. How to lead group singing. New York: Association Press, 1955.
"Planning for group singing, selection of music, teaching the song, how to accompany, special attention to folk songs, acting-out songs, etc."
140. Frieswyk, S. H. Forty approaches to informal singing. New York: National Recreation Association, 1939.
"Varied approaches to the art of conducting informal singing with suggested music material."
141. Gerl, F. H. Illustrated games and rhythms for children. (Primary games.) Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1955.
"Activities for kindergarten, first, second and third grade children. Covers rhythms, singing games, dances, special events games, relays and equipment games. Music, simple instructions, many drawings."
142. Gerl, F. H. Illustrated games, rhythms and stunts for children. (Upper elementary.) Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1955.
"A collection arranged in a progressive sequence to meet the needs and interests of children in the upper elementary grades. Authored by a playground director."
143. Jackson, Grace R., & Reed, Jeanette P. Sing it and do it. Albuquerque, New Mexico: University of New Mexico Press, 1942.
"Intended for small children from 3 to 7, singing exercises accompanied by individual verses which give directions for the practice of the rhythms."

144. Latchaw, Marjorie. A pocket guide of games and rhythms for the elementary school. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1956.
"Group games for boys and girls, organized in specific skill categories. Gives objects of games, directions, and an evaluative checklist."
145. National Recreation Association. Action songs. New York: Author, No date.
"Songs which provide fun and exercise for large groups where space is limited."
146. National Recreation Association. Songs for every purpose and occasion. New York: Author. No date.
"Words and music to 357 familiar songs for home, school and assembly use. Classified and alphabetical indexes."
147. Ray, Florence. Singing days of childhood. Minneapolis: T. S. Denison and Company. No date.
"Songs, poems, finger plays, and rhythms for the young child. Subject matter includes the seasons, holidays, cowboys, the circus, family fun, the farm. Teaching suggestions."
148. Roberts, Virginia, & Mackay, Mary L. Songs for young children. Minneapolis: T. S. Denison and Company. No date.
"Songs especially suited for the different seasons of the year. Some are traditional and others are original. Ideal for young children."

Parties and Entertainment

149. Allen, Catherine. Fun for parties and programs. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1956.
"Quiet and active games, relaxers and stunts, songs and sample parties are included for anyone who wants to give a successful party."
150. Borst, Evelyn, & Mitchell, E. D. Social games for recreation. New York: Ronald Press Company, 1959. (Second edition)
"Descriptions of over 700 games for social recreation programs. Indoor activities, theme parties, outdoor activities, techniques for managing participants."
151. Brings, L. M. The master stunt book. Minneapolis: T. S. Denison and Company, 1957.
"A collection of stunts, pantomimes, skits and games selected to meet the requirements of clubs, schools, churches and youth groups."

152. DeMarche, Edythe, and DeMarche, D. Handbook of co-ed teen activities. New York: Association Press, 1958.
"Games, party suggestions, how to plan dances, what to serve, camping, projects with purpose, hobby guide and parliamentary procedures for leaders, parents and teenagers."
153. Eisenberg, Helen, & Eisenberg, L. Fun with skits, stunts and stories. New York: Association Press, 1955.
"Hundreds of skits, stunts and stories, long and short, one-man entertainment plans. Emphasizes simple props, minimum preparation."
154. Eisenberg, Helen, & Eisenberg, L. The handbook of skits and stunts. New York: Association Press, 1953.
"Complete instructions for 400 easily staged skits and stunts. Includes some longer skits requiring rehearsal."
155. Eisenberg, Helen, & Eisenberg, L. Omnibus of fun. New York: Association Press, 1956.
"Activities for every age--stunts, games, skits, quizzes, songs, party and banquet tips, holiday celebrations."
156. National Recreation Association. Breathers and stretchers. New York: Author, 1959.
"Mixers and games for use during break time at meetings, conferences, banquets, and other functions where people are seated for long periods."
157. Preston, Effa E. Fun with stunts. Minneapolis: T. S. Denison and Company, 1957.
"A collection of up-to-date stunts, skits, radio and television material, musical stunts, pantomimes to aid the program director."
158. Van Rensselaer, A. Party fun and games. Greenwich, Connecticut: Fawcett Publications, Inc. No date.
"This book shows you how to make any party a success. It simplifies the whole problem of entertaining and explains how to make people feel at home and relaxed. Games for every age and every temperament."

Physical Fitness

159. Dauer, V. P. Fitness for elementary school children through physical education. Minneapolis: Burgess Publishing Company, 1962.
"With emphasis on physical fitness, here is an analysis of games rhythms, dances and sports by grade level. Includes organizing for effective teaching, program planning, and movement education."

160. Johnson, D. G., & Heldenstam, O. Modern body-building. New York: Emerson Books, Inc., 1958.
"A complete guide to the promotion of fitness, strength, and physique. Based on medically approved progressive--resistance exercises, suitable for home or gym use."
161. Kiphuth, R. How to be fit. New Haven, Connecticut: Yale University Press, 1956. (Revised edition)
"Exercises for men and women designed to correct faulty posture, strengthen the entire body, and increase general vigor. No equipment is required."
162. Royal Canadian Air Force. Exercise plans for physical fitness. New York: Pocket Books, Inc., 1962.
163. Vermes, H. G. The boy's book of physical fitness. New York: Association Press, 1961.
"How to build health and strength for more fun and later success. What to do and what to avoid in diet, exercise and recreation. Explains how the body works."
164. Vermes, J. C. The girl's book of physical fitness. New York: Association Press, 1961.
"Modern health rules for looking and feeling 'tops.' Clearly explains physiological changes to expect during adolescence."
165. Walsh, J. The first book of physical fitness. New York: Franklin Watts, Inc., 1961.
"Complete regimen for achieving and maintaining fitness. Daily exercises, formation of good habits, and suggested sports are discussed."

Research

166. National Recreation Association. Research in recreation completed in 1957. New York: Author, 1957.
"A listing of research projects in recreation."
167. National Recreation Association. Research in recreation completed in 1958. New York: Author, 1958.
"A listing of projects in a wide range of subjects especially useful to students contemplating graduate theses."
168. National Recreation Association. Research in recreation completed in 1959. New York: Author, 1959.
"A classified list of completed research projects in recreation which should be useful for college faculty and students, recreation and park authorities, libraries, government officials, etc."

169. National Recreation Association. Research in recreation completed in 1960 and 1961. New York: Author, 1961.
"A classified list of 300 completed research projects in recreation. Important to the entire field of recreation."
170. National Recreation Association. Recreation topics meriting study or research. New York: Author. No date.
"A listing prepared at the suggestion of the National Advisory Committee on recreation research. Suggests projects on areas and facilities, activities, and programs, leadership, organization and administration, etc."

Notice

Appreciation is expressed to the National Recreation Association for permission to use these descriptive statements which were taken from their catalogue, A Guide to Books in Recreation.

Section II. Desirable Types of Activities Under Various Shelter Conditions

Activity Code

A. TRAINING AND EDUCATION ACTIVITIES

1. Management 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. Post-shelter living training

B. SHELTEREE SERVICE ACTIVITIES

1. Care of infants and children
2. Non-medical care of ill and injured
3. Medical support activities
4. Psychological support activities
5. Activities to improve shelter appearance

C. PHYSICAL FITNESS ACTIVITIES

1. Self-initiated physical exercises
2. Leader-initiated group calisthenics

D. RELIGIOUS ACTIVITIES

1. Non-denominational services
2. Denominational services
3. Self-initiated prayer and meditation

E. ARTS AND CRAFTS

1. Art activities
2. Craft activities

F. SOCIAL-RECREATIONAL ACTIVITIES

1. Small group games
2. Organized group discussions
3. Informal group singing

G. SPECTATOR ENTERTAINMENTS

H. FREE-TIME QUIET ACTIVITIES

1. Reading
2. Other quiet-time activities

Desirable Activities Given This Single Environmental Condition		Environmental Condition								