

TABLE Y-1-1-1
RISK CONGLOMERATES WITH HOST COUNTIES

TAB	Y-1-1-1-2	Fulton County
TAB	Y-1-1-1-3	Ballard/McCracken Counties
TAB	Y-1-1-1-4	(DELETED)
TAB	Y-1-1-1-5	Daviess/Hancock Counties
TAB	Y-1-1-1-6	Ft. Campbell
TAB	Y-1-1-1-7	Paradise Power Plant
TAB	Y-1-1-1-8	Ft. Knox/Louisville
TAB	Y-1-1-1-10	Trimble/Gallatin Counties
TAB	Y-1-1-1-11	Frankfort
TAB	Y-1-1-1-12	Northern Kentucky
TAB	Y-1-1-1-13	Fayette/Madison Counties
TAB	Y-1-1-1-14	Mason/Lewis Counties
TAB	Y-1-1-1-15	Boyd/Lawrence Counties

FULTON CONGLOMERATE

RISK POPULATION TO BE EVACUATED 2000

Fulton

2000

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
FULTON	Fulton	2000

BALLARD/McCRACKEN COUNTIES CONGLOMERATE

RISK POPULATION TO BE EVACUATED 87000

Ballard	5800
Livingston	5900
Lyon	2000
Marshall	11,800
McCracken	61,500

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Ballard	Ballard	1000
	Carlisle	2400
	Hickman	2400
Livingston	Livingston	900
	Crittenden	5000
Lyon	Lyon	500
	Caldwell	1500
Marshall	Caldwell	4800
	Calloway	4000
	Marshall	3000
McCracken	Calloway	31500
	Graves	30000

UNION - HENDERSON CONGLOMERATE

REMOVED FROM RISK AREA LIST
UNDER REVISED NABP PLANNING CONSIDERATIONS

Daviess/Hancock Conglomerate

RISK POPULATION TO BE EVACUATED 63500

Daviess	60000
Hancock	3500

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Daviess	Henderson	11000
	Hopkins	30000
	McLean	9000
	Webster	10000
Hancock	Hancock	2500
	McLean	1000

Ft. Campbell Conglomerate

RISK POPULATION TO BE EVACUATED 15000

Christian 15000

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Christian	Christian	5000
Ft. Campbell	Todd	5000
	Trigg	5000

Paradise Conglomerate

RISK POPULATION TO BE EVACUATED 13000

Butler	1500
Muhlenburg	8000
Ohio	3500.

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Butler	Butler	1500
Muhlenburg	Muhlenburg	8000
Ohio	Ohio	3500

TABLE Y-1-1-1
Allocation of Risk Population to Host Counties

Ft. Knox/Louisville Conglomerate
RISK POPULATION TO BE EVACUATED 728,500

Bullitt	20000
Hardin	25000
Jefferson	665000
Meade	10000
Oldham	8500

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Bullitt	Bullitt	6000
	Nelson	14000
Hardin	Hardin	25000
Jefferson	Adair	16000
	Allen	22000
	Barren	60000
	Boyle	34000
	Breckinridge	18000
	Butler	4500
	Casey	20000
	Clinton	9000
	Cumberland	22000
	Edmonson	15000
	Grayson	28000
	Green	16000
	Hardin	10000
	Hart	25000
	Larue	11000
	Logan	30000
	Marion	27000
	Metcalfe	10000
	Monroe	20000
	Nelson	17000
	Ohio	3500
	Pulaski	35000
	Russell	23000
	Shelby	31000
	Simpson	24000

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
	Spencer	5000
	Taylor	30000
	Union Special Concern	
	Warren	80000
	Washington	20000
	Wayne Special Concern	
Meade	Meade	10000
Oldham	Oldham	8500

KyDES-08-92

Y-1-1-1-9

Trimble/Gallatin Conglomerate

RISK POPULATION TO BE EVACUATED 17500

Carroll	9800
Gallatin	4900
Trimble	2800.

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Carroll	Henry	9800
Gallatin	Owen	4900
Trimble	Trimble	2800

FRANKFORT CONGLOMERATE

RISK POPULATION TO BE EVACUATED 43500

Franklin 40000

Woodford 3500

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Franklin	Anderson	18000
	Mercer	22000
Woodford	Woodford	3500

Northern Kentucky Conglomerate

RISK POPULATION TO BE EVACUATED 285000

Boone	58000
Campbell	34000
Kenton	143,000

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Boone	*Bath	3000
	Fayette	27000
	Grant	13000
	*Rowan	5000
	Scott	10000
Campbell	*Bath	2500
	Bracken	7500
	Fayette	25000
	Fleming	12000
	Montgomery	18000
	Nicholas	7000
	Robertson	2000
Kenton	*Rowan	10000
	*Bath	3000
	Bourbon	12000
	Clark	20000
	Fayette	60000
	Harrison	18000
	Pendelton	10000
	*Rowan	20000

*Special Needs Sheltering

Fayette/Madison Conglomerate

RISK POPULATION TO BE EVACUATED 75000

Bourbon	2000
Clark	3500
Estill	500
Fayette	15000
Madison	54000

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Bourbon	Bourbon	2000
Clark	Clark	3500
Estill	Estill	500
Fayette	Fayette	15000
Madison	Garrard	9000
	Jackson	3000
	Jessamine	15000
	Lincoln	15000
	Rockcastle	12000

Mason/Lewis Conglomerate

RISK POPULATION TO BE EVACUATED 18700

Lewis	3700
Mason	15000

ALLOCATION OF RISK POPULATION TO HOST COUNTIES

RISK COUNTY	HOST COUNTY	RELOCATEES TO BE HOUSED
Lewis	Lewis	3700
Mason	Greenup	14000
	Mason	1000

BOYD/LAWRENCE CONGLOMERATE

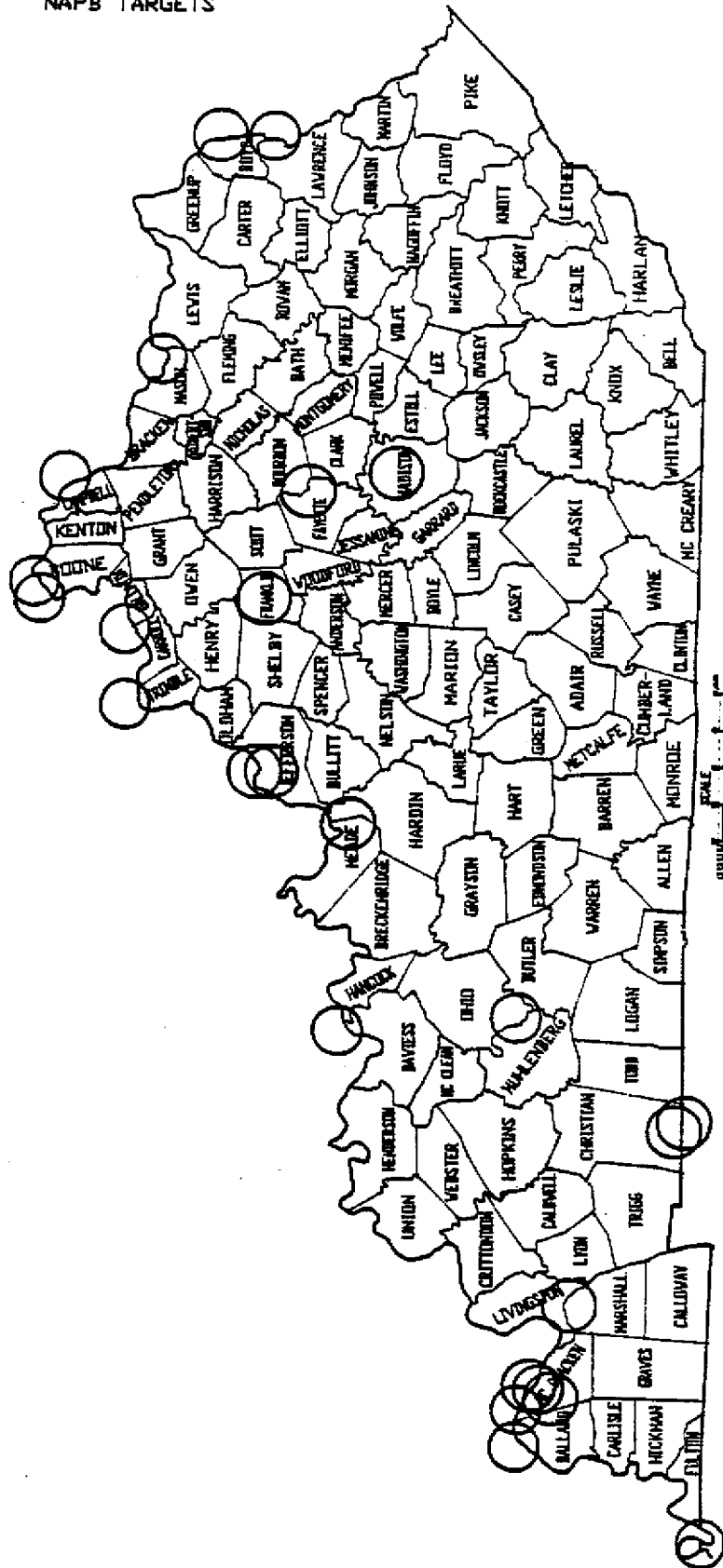
RISK POPULATION TO BE EVACUATED 63900

BOYD	55600
LAWRENCE	8300

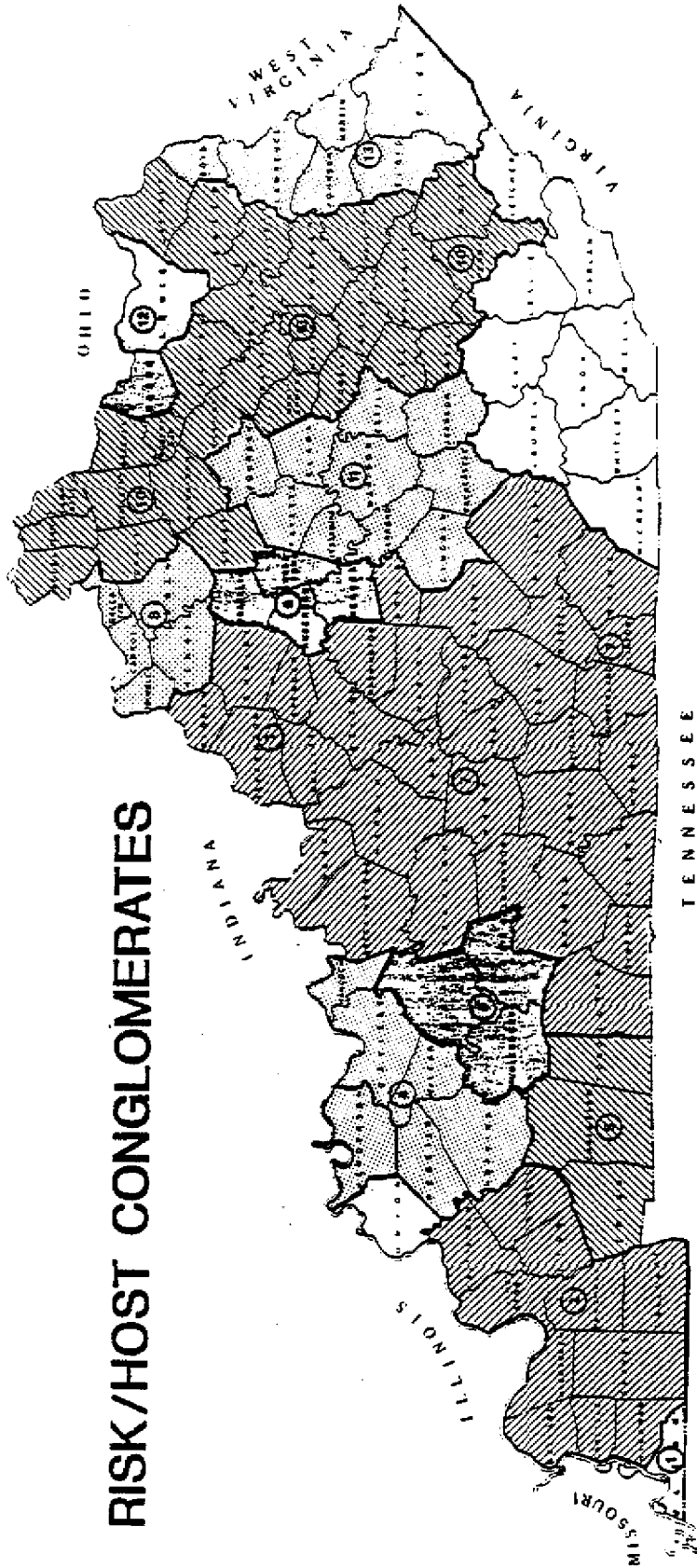
Allocation of Risk Population to Host Counties

<u>Risk County</u>	<u>Host County</u>	<u>Relocatees to Be Housed</u>
Boyd	Floyd	20600
	Johnson	10000
	Pike	25000
Lawrence	Johnson	5000
	Martin	3300

MAP Y-1-1-2
NAPB TARGETS



RISK/HOST CONGLOMERATES



Y-1-1-3-1

RISK AREAS

- | | |
|--------------------------|-------------------------|
| 1 - FULTON | 7 - FT. KNOX/LOUISVILLE |
| 2 - BALLARD/MCCRACKEN | 8 - TRIMBLE/GALLATIN |
| 3 - DELETED | 9 - FRANKFORT |
| 4 - DAVIESS/HANCOCK | 10 - NORTHERN KENTUCKY |
| 5 - FT. CAMPBELL | 11 - FAYETTE/MADISON |
| 6 - PARADISE POWER PLANT | 12 - MASON/LEWIS |
| | 13 - BOYD/LAWRENCE |

MAP Y-1-1-3

KyDES-06-91

MAP Y-1-1-4
RELOCATION ROUTES

BEING DEVELOPED AT THE LOCAL LEVEL

TAB Y-1-2
FALLOUT AND SHELTER
UTILIZATION PLAN

I. SITUATION AND ASSUMPTION

- A. Potential enemies of the United States have the capability of detonating nuclear weapons in the U.S. thus posing a nationwide fallout threat.
- B. Fallout may reach this county as a result of nuclear detonations from a war in which the U.S. is not involved.
- C. All studies and analyses of possible attack patterns on the United States demonstrate that fallout shelters can save many lives that would be lost if no protection was provided.
- D. The basic objective of a Fallout Shelter Utilization Plan is to provide the best possible fallout protection for the entire population covered by the plan.
- E. It is estimated that 20% of the population will not evacuate the risk area when ordered. An additional 10% of its population will have to enter the risk area daily from the host areas to maintain the area's economy.
- F. Community fallout shelters are lacking for the majority of the citizens of Kentucky. In order to provide fallout protection for the citizens of the Commonwealth, families or neighborhoods will have to build their own family or community shelters. A computer list of community fallout shelters and upgradable fallout shelters in the Commonwealth is maintained by KyDES at the State EOC, in each KyDES Area Office and each county DES office. Instructions on how to upgrade and build family fallout shelters are available also.
- G. The development of a shelter system for the Commonwealth of Kentucky can be divided into three phases. First, identification of existing and upgradable Fallout Shelter spaces, has been largely completed by the U.S. Army Corps of Engineers, FEMA, and the KyDES Shelter Survey Team. Second is the expansion of the shelter capability, based on the established requirements to fill shelter deficiencies in each community. This must be met largely through the creation of shelter space in new construction by using "slanting" and other techniques, along with the improvement of existing structures via shielding. Third, the operational requirement to develop Shelter Utilization Plans. These plans assume the maximum effective use of all approved public shelters and of all other structures

that, although not approved, are capable of providing reasonable fallout protection through expedient upgrading.

II. MISSION

The mission of all shelter development and utilization planning is to provide protection from the effects of nuclear fallout radiation for the maximum number of citizens of Kentucky.

III. DIRECTION AND CONTROL

KyDES is charged with assisting in developing and training personnel at the county level who must develop and implement a local radiological fallout shelter program. The order to take shelter will originate from FEMA, through KyDES or Ky State Police to each county.

IV. CONCEPT OF OPERATIONS

A. Responsibility

1. KyDES is responsible to see that a radiological shelter program exist in each county.
2. Each county is responsible for the preparation of an In Place Shelter Utilization Plan. This includes:
 - a. A Shelter Assignment Plan.
 - b. A Shelter Management and Organization Plan.
 - c. A Shelter Control Plan.
3. The American Red Cross will provide shelter management training and assistance.

B. Shelter Programs

1. In Place Shelter
 - a. The objective of this program is to achieve maximum utilization of all available existing shelters during an emergency. There are four types of shelters; community, upgradable, family and expedient.
 1. Each state agency has developed its own plan in conjunction with DES officials for the sheltering of its essential workers and their families.
 2. Assignment of people to pre-identified

fall-out protective shelters by local counties has been developed on the basis of resident population, resident and relocated population, or remain behind key workers. Shelter spaces in buildings having shelter have been assigned to people in that building and vicinity. The assignment process continued in an expanding circle from the building, until the shelter was filled or the limiting factor of a 30-minute walking or driving distance from the shelter had been reached.

b. Community Shelter

1. The object of this program is to locate non-residential structures that can protect more than just a family from radioactive fallout.

2. Upgradable Shelter

The objective of this program is to achieve maximum utilization of all potential shelters during an emergency specific upgradable shelters have been developed on the basis of resident and relocated population. Upgrading of each shelter will be the responsibility of the people assigned to that shelter.

3. Expedient Shelter

The object of this program is to allow individuals to quickly construct a fallout shelter in a time of crisis.

4. Family Shelter

The object of this program is for a family to construct its own fallout shelter on their own property.

c. Protection Factor

1. Fallout shelters surveyed by FEMA are assigned a Protection Factor Number (PF). This PF number is normally expressed within a PF Category Range. Used to express the relationship between the amount of fallout gamma radiation that would be received by a person in shelter. An occupant of a shelter with a PF of 40 would be exposed to a dose rate 1/40th (2 1/2%) of the rate to which he would be exposed if this location were unprotected. Depending on the amount and intensity of the fall-

out one may still get sick and even die of a radiation dose even though in an approved fallout shelter.

2. The relationship of PF Number to PF Category is as follows:

<u>Category</u>	<u>PF</u>	<u>Category</u>	<u>PF</u>
1.....	20-39	5.....	150-249
2.....	40-79	6.....	250-499
3.....	80-99	7.....	500-1000
4.....	100-149	8.....	Over 1000

3. Fallout shelter space in community fallout shelters is assigned at 10 square feet per person.

D. Operational Phases

1. Preparedness Phase

- a. Develop overall shelter assignment and control plan for essential workers.
- b. Assist in the development of local shelter organization.
- c. Assist locals in marking shelters.
- d. Assist locals in developing stocking plan.
- e. Train local shelter organization personnel to include managers and monitors.
- f. Take part in exercise.
- g. Identify and prepare public information hand-outs and news media release.

2. Response Phase

a. Increased Readiness Period

- 1) Complete all steps not completed under preparedness phase.
- 2) Assists in reviewing and updating local and state critical workers In Place Shelter Utilization Plans.
- 3) Alert state and local DES organization of existing conditions.
- 4) Advise the public on methods of constructing expedient and home shelters and upgrading upgradable shelters.

- 5) Advise the public of the warning signals and their meaning.
- 6) Publish the In Place Shelter Protection Plan and educate the public of its purpose and use.

b. Relocation Phase

- 1) This phase may or may not be activated before the Attack Phase.
- 2) Complete all steps not completed under the preparedness or alert phase.
- 3) Ensure all local DES and state agency organizations know their jobs.
- 4) Help locals activate shelter stocking plan.
- 5) Assist locals in upgrading upgradable shelters.
- 6) Provide public information on home, community, upgradable and expeditious shelters.

c. Attack Period

- 1) Activate all warning systems.
- 2) If relocation has not been ordered or the county is not a risk or host county, the local In Shelter Utilization Plan will be put into effect.
- 3) If relocation has been ordered and the county is a risk or host county, the local relocation Shelter Utilization Plan will be put into effect.
- 4) The length of the shelter stay will vary across the state and county and will depend on the following factors: outside radiation levels, shelter radiation levels, overcrowding, food and water supplies, medical supplies, illness and disease, and temperature and humidity. There is no way to state definitely the best time for any group to leave the shelters. All factors must be considered and a course of action determined. The decision will originate at

the local County emergency operating center. KyDES advice will be made available if communications permit. If communications are not available with KyDES then the decision will rest with the local official.

3. Recovery Phase

a. Post Attack Period

- 1) Actions during this phase will include actions to save lives, minimize property damage, restore the economy and the continuation of the war effort.
- 2) During this period, relocation of the risk area may or may not continue. If risk areas were not relocated before the attack, they may now be so ordered.

b. Return Period

- 1) Revert to Preparedness Phase or Response Phase or continue Recovery Phase as circumstance dictates.
- 2) Conduct operations to save lives, minimize property lost, and bring about economic recovery of the county.
- 3) Maintain availability of shelters until FEMA recommends return to Preparedness Phase.
- 4) Critique operations for updating plan and standard operating procedures.

D. Shelter Guidance Publications

1. Home Fallout Shelter - FEMA H 12A to H 12F
2. Home Fallout Shelter - FEMA H 12-1 to H 12-3
3. In Time of Emergency - FEMA H 14
4. How to Manage Congregate Lodging Facilities and Fallout Shelters - FEMA SM 11
5. Shelter Management Handbook - FEMA P&P 8
6. Guidance for Developing an Emergency Fallout Shelter Stocking Plan - FEMA CPG 1-19

7. Civil Preparedness Posting Fallout Shelter Signs - FEMA CPG 1-19A
8. Guidance for Design and Development of a Local Radiological Defense Support System - FEMA CPG 1-30.
9. Radiological Defense Preparedness - FEMA CPG 2-601.
10. Emergency Shelters - DCPA L-91
11. Life Support Operations in Shelters - FEMA CPG 1-8

V. ADMINISTRATIVE SUPPORT

- A. Administrative support will be provided by the various state agencies.
- B. Augmentation and training of emergency organizations will be carried out as set forth in CPG 1-7 - "Guide for Increasing Local Government Civil Defense Readiness During Period of International Crisis."

TAB Y-1-3
GLOSSARY

Community Fallout Shelter Plan (CSP) - A document (normally published in map form) that enables a local government to give its people the answers to questions, such as "Where do I go for shelter?" and "What do I do?" when the warning sounds. The In Place Shelter Plan (IPSP) designates specific shelters to be used by people working or living in specific areas of the community, before relocation is ordered, thus allocating the people to the best available fallout and/or blast protection. The Relocation In Place Fallout Shelter Plan designates specific shelters for residents and relocated population.

Congregate Care Facilities - Public or private buildings in the Host Areas that may be used to lodge and care for evacuees. Generally, assigned space is approximately 40 square feet per person. The facility may or may not meet criteria for designation as "fallout shelter".

Counterforce Areas - Places which contain strategic offensive military forces; e.g., SAC Bomber Bases, ICBM Fields, Missile Submarine Support Bases.

Emergency Public Information (EPI) - Information which is disseminated before, during or after an emergency that instructs and transmits direct orders to the public via the news media.

Evacuees - See Relocatee

Fallout, Radioactive - The process or phenomenon of the fallback to the earth's surface of particles contaminated with radioactive materials from a cloud of the matter formed by a nuclear detonation. The term is also applied in a collective sense to the contaminated particulate matter itself. The early (or local) fallout is defined, somewhat arbitrarily, as those particles which reach the earth within 24 hours after a nuclear explosion. The delayed (or worldwide) fallout consists of the smaller particles which ascend to the upper troposphere and into the stratosphere and are carried by winds to all parts of the earth. The delayed fallout is then brought to earth mainly by rain or snow, over extended periods ranging from months to years.

Fallout Shelter - A habitable structure, facility, or space (public or private) used to protect its occupants from radioactive fallout. Space is allocated at 10 square feet per person.

Federal Emergency Management Agency (FEMA) - Federal agency charged with coordinating federal resources in an emergency situation.

Government, Essential - Those governmental operations which are necessary to protect the health and safety of those risk area residents who cannot be moved for various reasons and the evacuee's property.

Home Shelter - A radiological fallout shelter facility located in a private home for use by the home owner's family.

Host County - A specified county relatively unlikely to experience direct weapons effects (blast, heat, and initial nuclear radiation) from a nuclear attack. It is designated for reception and care of risk area evacuees.

Host Ratio - A fixed proportion of evacuees to indigenous population; e.g., a hosting of 3.1 means there are three evacuees to each person already residing in the area.

Industries, Essential - Those plans which are necessary to the continuing operation of the national economy during the crisis relocation period.

In-Place Shelter Plan (IPSP) - See Community Shelter Plan (CSP).

National Shelter Survey (NSS) - An effort started in 1961 to locate potential public fallout shelter space in the event of an attack.

Population Protection (PPP) - A planning effort designed to provide protection of the population through one or a combination of the following options: 1) in place, at or near their places of residence or work; and 2) orderly relocation of people from areas of potentially high risk from the direct effects of nuclear weapons to area of lower risk.

Organizational Relocation - A concept of movement by organizations or organizational units (as opposed to individuals) to assigned host area operational support services. This would maximize the potential of the affected families to manage their own affairs and alleviate some of the burden placed on the host area community.

Protection Factor (PF) - A number used to express the relationship between the amount of gamma fallout radiation that would be received by a person in a completely unprotected location and the amount that would be received by a person in a protected location.

Public Fallout Shelter - A shelter facility for use by the general public which contains radiological fallout shelter protection.

Reception Centers - Strategically located control points in the host area where relocatees report and are assigned to Registration Centers.

Relocatee - Persons who leave a risk county and travel to a host county in response to the Governor's order.

Relocation, Spontaneous - Persons who might leave an area in periods of intense crisis in response to a real or feared threat, whether or not they are advised to relocate.

Reserve Host County - Acts as a Host County if so directed by the state due to an unforeseen situation.

Risk County - Counties considered relatively more likely to experience the direct weapons or fallout of at least 10,000 Roentgens. Criteria for designation of high risk areas may be found in "FEMA - National Attack Planning Basis 1990".

Risk Area Survey - Survey's conducted in high risk areas to identify fallout shelter space available and best locations to resist initial nuclear weapons effects.

Risk/Host County - A county that only a portion of its land mass is considered at risk to possible attack. Normally a county lying next to a risk county.

Shelter - An area which provides protection from one or more of the various effects (blast, fire initial radiation and fallout) to which communities might be subjected in the event of nuclear attack because of their size, location, or military value.

Shelter, Expedient - Any shelter constructed in an emergency or crisis period on a crash basis by individuals or single families.

Shelter Survey, All Effects - A survey to identify protection against the most likely peacetime or attack hazards that a community could face.

Shelter, Upgradable - Shelter space obtained by taking actions to improve fallout protection in existing facilities and spaces; usually accomplished by adding mass overhead to walls through use of earth and other materials.

Shelter Utilization Plan - See Community Shelter Plan.

Stay Puts - Risk area residents who may refuse to leave even under the circumstances of manifesting crisis and a direction to relocate.

Traffic Control Points - Places along evacuation routes that are manned by police to direct and control movement to and from the area being evacuated.

Worker, Essential - An individual whose skills are required to continue operation of vital facilities and activities that will provide goods and services to the relocated population and host county residents, or insure continuance of the nation's production capabilities and preservation of the economic system.

APPENDIX Y-2
CONVENTIONAL WAR

I. SITUATION AND ASSUMPTIONS

- A. The U.S. during its history has engaged in five wars that have necessitated total mobilization of the economy for support of the war effort. Revolutionary War, War of 1812, Civil War, World War I and World War II.
- B. The U.S. has during its history fought numerous declared and undeclared wars that have made slight to significant demands on its economy.
- C. There are only a few years within the history of the United States that this country has not been involved in a declared or undeclared war.
- D. The possibility that the U.S. will be involved in an undeclared war making slight demands on the U.S. economy is highly likely. That the U.S. may become involved in a declared war necessitating total mobilization of the U.S. economy is a very real possibility.

II. MISSION

The mission of the Commonwealth is to protect the lives and property of its citizens and support the Nation in its military effort.

III. DIRECTION AND CONTROL

KyDES, at the direction of the Governor, will coordinate all state, local and private organizations engaged in the war effort.

IV. CONCEPT OF OPERATIONS

Operations under this plan will be carried out in three distinct time phases: Preparedness, Response, and Recovery. See Annex Y, Section IV (Concept of Operations) for detailed information on these three phases.

V. ADMINISTRATIVE SUPPORT

- A. Administrative support will be provided by the various state agencies.
- B. Augmentation and training of emergency organization will be carried out as set forth in CPG 1-7 - "Guide for Increasing Local Government Civil Defense Readiness During Period of International Crisis."