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ANNUAL STATISTICAL REPORT



FEDERAL CIVIL DEFENSE ADMINISTRATION
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JUNE 30, 1957

FEDERAL CIVIL DEFENSE ADMINISTRATION
NATIONAL HEADQUARTERS
BATTLE CREEK, MICHIGAN

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INTRODUCTION

The Federal Civil Defense Administration was created by the Federal Civil Defense Act of 1950, Public Law 920, 81st Congress, which was passed January 12, 1951.

Principal responsibilities of the Administrator under this Act are to:

- a. Prepare national civil defense plans and programs.
- b. Delegate appropriate CD responsibilities to other Federal agencies.
- c. Provide for necessary communications and warning systems.
- d. Develop CD measures to protect life and property.
- e. Train people in CD operations and techniques.
- f. Disseminate appropriate CD information to the public.
- g. Encourage the States to enter into interstate CD compacts.
- h. Procure CD materials and facilities.
- i. Make available Federal funds to the States, on a matching basis, for civil defense programs approved by the Administrator.

From the time FCDA was created, programs have been developed and have gone forward to discharge these responsibilities. Since early 1953 the Agency has also had responsibility for coordinating Federal assistance to the States in major natural disasters, under authority of Public Law 875, 81st Congress.

This is the third Annual Statistical Report published to show in summary form the progress made in several aspects of civil defense in the United States and particularly in the programs carried on directly by FCDA. Interim Statistical Reports were published at the end of each quarter during the past year to provide more current data on some of the programs.

This report is organized into seven parts:

1. Reference Material
2. Civil Defense in the U. S.
3. Progress of Delegate Agencies
4. Federal Contributions Program
5. FCDA Stockpiling Program
6. Survival Plan Studies
7. Other FCDA Programs

Each part is subdivided into a number of items with charts and tables giving statistics on a related group of matters pertinent to civil defense operations and programs. Unless noted otherwise, the source of all material is the FCDA National and Regional Offices. In nearly all cases, the information reflects program status as of June 30, 1957.

REFERENCE MATERIAL

PLANNING ASSUMPTIONS

These planning assumptions are effective as of date of issue. They will be amended or, if necessary, replaced by new assumptions whenever changes of sufficient magnitude clearly indicate that this issuance is inadequate.

These assumptions are intended to cover several developmental phases of modern war. They start with the present period when jet aircraft have not fully replaced conventional propeller-driven aircraft, continue through the time when jet bombers may become sonic or slightly supersonic in speed and anticipate the time when some intermediate-range ballistic missiles (IRBM) and intercontinental ballistic missiles (ICBM) may be available.

Since there is no evidence that any nation has yet overcome all of the scientific problems involved in either the IRBM or the ICBM, the major emphasis of these assumptions is on presently available means of delivery. The prime characteristic of this period is the possession by a potential enemy of the means of making nuclear weapons of megaton yield and of delivering them on distant targets by piloted aircraft. Improvements in both offensive and defensive capabilities are virtually certain. However, the strategy and tactics of civil defense are not likely to require major change from those currently being developed until some new technological break-through is achieved.

Planning assumptions are sometimes misunderstood. Frequently they are taken for predictions. Planning assumptions are in no sense predictions. Nor are they based on uncontrollable facts that lead to only one conclusion. Planning assumptions are created by a need for broad estimates in areas where one is bound to be unsure. Civil defense needs to have a common base for planning in several different areas. Consequently, the FCDA carefully canvasses available intelligence, and available information and then establishes assumptions consistent with such estimates.

These assumptions are consistent with classified intelligence sources but do not reflect their detailed content. They have necessarily been developed to apply on a broad national basis.

They give a basis on which Federal, State and local civil defense authorities can develop plans and can set priorities of action. It is expected that each agency with civil defense responsibilities will review its plans in the light of these assumptions.

I. Basic Premises

- A. It is accepted that the USSR has the capability of attacking any target within the United States or its possessions.
- B. It is accepted that the USSR has the capability of:
 - 1. producing nuclear weapons, biological and chemical warfare agents, as well as conventional incendiary and high explosive weapons;
 - 2. delivering these weapons by piloted aircraft, submarine launched missiles or mines and by clandestine means; and
 - 3. supporting a large-scale war effort by technical and industrial skills and organizations.
- C. It is accepted that the USSR is engaged in a major effort to develop both guided and ballistic missiles, including the ICBM.

II. Type of Attack

- A. It is assumed that the greatest weight of attack will be nuclear since the capability of a potential enemy may reach, in the next few years, a size which it could consider as exceeding the destructive tonnage necessary to win a war.
- B. It is assumed that if the United States is attacked the major effort will consist of delivering nuclear weapons upon bases of military retaliation and centers of population and industry.
 - 1. It is assumed that, until the intercontinental ballistic missile is available to an aggressor, principal reliance will be placed upon delivery by manned bombers with higher speed and performance jet bombers tending to replace propeller-driven bombers.
 - 2. It is further assumed that, even when the intercontinental ballistic missile is available, a considerable weight of attack will continue to require delivery by manned aircraft.
 - 3. It is assumed that the time is distant when any nation will possess enough very long-range missiles to make possible the instant destruction of another nation.
- C. It is assumed that nuclear weapons will also be delivered by missiles or mines from submarines or surface vessels or by clandestine means, on a scale considerably less than that of the air attack. Their use independent of an air attack is not considered

REFERENCE MATERIAL

PLANNING ASSUMPTIONS (Continued)

- likely. Danger from naval attack decreases with distance from the coast.
- D. It is assumed that surface bursts will generally be employed since radioactive fallout from such bursts can increase casualties and interfere with military or civilian activity for days or weeks.
- E. It is assumed that, although nuclear weapons will be relied upon as the means of gaining the military decision, chemical warfare and biological warfare agents will be used against humans. Use of these weapons will be to increase confusion and impede defensive actions. The chances of using such weapons are greater in subsequent attacks than in the initial blow. In any case, the threat is minor as compared with that of nuclear weapons.
- F. It is assumed that biological warfare agents will be employed against animals and crops, especially if long-term recuperative power gives indications of being a decisive factor. Use of these agents on any large scale is unlikely in the initial blow.
- G. It is assumed that psychological warfare and all-out propaganda efforts will accompany any attack in order to magnify and distort the real situation, to disrupt defense programs, impair essential production, and weaken our will to fight.
- H. It is assumed that, in addition to clandestine introduction of nuclear weapons, sabotage will be employed involving conventional means as well as biological and chemical weapons.
- I. It is assumed that the enemy's initial attack will be an attempted knockout blow placing primary reliance on nuclear weapons delivered by air. It is assumed that there will be subsequent attacks of varying intensity, employing in addition, other weapons and means of delivery.
- with major servicing and maintenance facilities.
3. Major harbors, ports, and naval bases.
 4. AEC facilities.
 5. Major military command and control headquarters, such as the Pentagon, Continental Army Command, Naval Sea Frontiers, Strategic Air Command, Continental Air Command, and Tactical Air Command.
 6. Target Areas other than CTAs as defined in "Target Areas for Civil Defense Purposes", including all State Capitals.
 7. Army and Marine Corps posts and stations housing divisions of the General Reserve and Fleet Marine Force.
 8. Major military service supply depots.
- In many cases, a number of the above military and civilian categories will be found close together. For example, New York City meets the criteria of at least the following categories: (a) Critical Target Area; (b) Major Port; (c) Naval Base; (d) Airfields with hard surfaced runways in excess of 7,000 feet.
- C. It is assumed that an aggressor may frequently choose to direct attack at any one, several, or all aiming points within a target area. Some targets contain only one probable aiming point. Most, however, either because they are large in area or because they are composed of a variety of military and civilian targets, contain a number of aiming points.
- D. It is assumed that all possible targets will not be attacked either in the initial blow or subsequently. The number of targets to be attacked or the pattern of attack cannot reasonably be predicted at any specific date.

IV. Weapon Size and Physical Damage

- ### III. Targets
- A. It is assumed that bases of military retaliation, other important military installations, and concentrations of population and industry, will be targets for nuclear attack.
- B. It is assumed that an aggressor will select targets from the following categories with priorities determined by its objectives at any particular time:
1. Critical Target areas as defined in "Target Areas for Civil Defense Purposes."
 2. Civil and military airfields with hard surfaced runways of 7,000 feet or more,
- A. It is assumed that the USSR can produce nuclear weapons of varying yields ranging from few kilotons (thousands of tons) to megatons (millions of tons) of TNT equivalent.
- B. It is assumed that the USSR stockpile of nuclear weapons is growing and that the number of megaton yield weapons will, in the course of time, become large enough to permit employment of such weapons on progressively larger numbers of targets.
- C. It is assumed that, for the development of civil defense plans for (a) evacuation and reception; (b) relocation or dispersal; (c) shelter requirements and criteria, the nuclear weapons used will cause complete de-

REFERENCE MATERIAL

PLANNING ASSUMPTIONS (Continued)

- struction (A-Zone) within a radius of two miles as a minimum, five miles as a maximum.
- D. It is assumed that bombing errors will occur and that the aiming point and actual ground zero will seldom exactly coincide. It is assumed, however, that the area of complete destruction will generally be of sufficient size to include such an aiming point in cases where the attacking aircraft reaches its bomb release line.
- E. It is assumed that any target hit by nuclear weapons will be substantially destroyed by the direct effects of blast, heat, and radiation. A number of targets will require more than one detonation because of (1) total area; (2) shape, particularly when one axis is considerably longer than another; (3) wide separation of rewarding aiming points.
- F. It is assumed that radioactive fallout resulting from surface bursts of weapons, whether on or off target, will spread downwind over considerable areas. Fallout from a large-scale attack could affect any portion of the United States.
- G. It is assumed that the USSR can produce a considerable variety of biological and chemical warfare agents and can deliver them on the U. S. It is assumed, however, that large-scale delivery of such weapons will be less accurate and less damaging than the delivery of nuclear weapons by a similar number of carriers.
- V. Warning Time
- A. It is assumed that a civil defense alert of an initial mass attack by manned aircraft will be received on the Canadian border and the Atlantic, Pacific, and Gulf coasts, from one to three hours before targets within these boundaries will be under attack. It is expected that intelligence on the probable time that attacking planes will take to reach specific targets will be available to civil defense through the National Warning System.
- B. It is assumed that interior targets will have one to three hours additional between the time a civil defense alert is received and the time when interior targets are under attack from manned aircraft.
- C. No definite assumptions can be made as to the availability of strategic warning. However, plans should also include the contingency of a strategic warning, announced to the Nation by the President, before any direct attack on this country had been initiated. It might be measured in hours or even days, and would make possible more careful and detailed preparations for an actual alert. We can never be sure that there will be strategic warning. Emphasis should be placed on maximum utilization of tactical warning since the probability of such warning is much higher.

REFERENCE MATERIAL

CRITICAL TARGET AREAS AND TARGET AREAS

The target areas and critical target areas listed in this report have been so designated on the basis of population and industry criteria. FCDA, in conjunction with other Federal agencies, is currently developing an expanded list of target and critical target areas which will incorporate certain military considerations as well as civil defense criteria. The new list, consonant with current planning assumptions, will be issued at a later date.

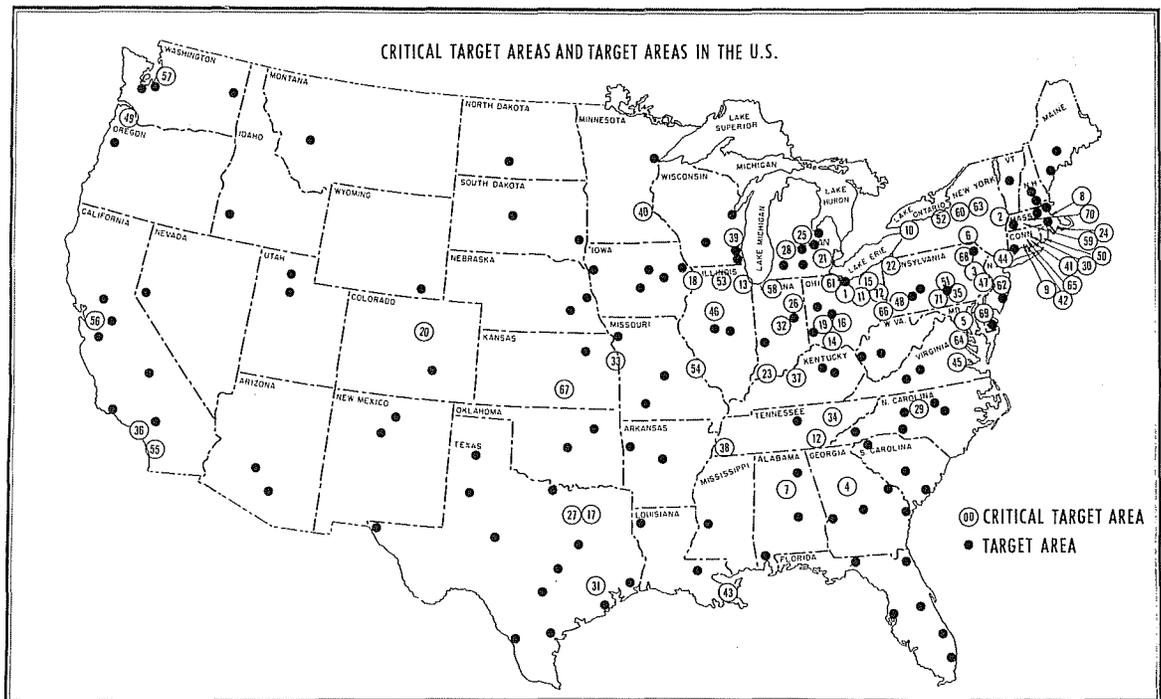
188 areas in the continental United States have been designated as target areas meeting the population and industry criteria. (In addition, eight areas in U.S. Territories and Possessions have been so designated.) The 188 target areas include all Standard Metropolitan Areas as defined by the Federal Committee on Standard Metropolitan Areas and, in addition, all State capitals not already included as Standard Metropolitan Areas. Seventy-two of the 188 areas have been designated as Critical Target Areas. These are the Standard Metropolitan Areas having 40,000 or more manufacturing employees as reported by the U.S. Department of Labor. Washington, D.C. because of its importance as the Nation's capital, is listed as a critical target

area.

Locations of the 188 areas are shown on the following map. These are areas regarded for civil defense purposes as probable targets for nuclear attack since they contain major concentrations of population and industry. Areas including the other criteria listed in III of the planning assumptions are also regarded as targets with the probability determined by the objectives of an aggressor at the particular time.

Three changes in the target area set-up have been made in the past year:

1. The Santa Barbara, California, Standard Metropolitan Area was established and hence will be regarded as a target area.
2. The definition of the Milwaukee, Wisconsin area was amended to include Waukesha County, Wisconsin.
3. The definition of the Lowell, Massachusetts area was amended to include the town of Tyngsborough.



REFERENCE MATERIAL

CRITICAL TARGET AREA POPULATION

The latest census figures on population of most Critical Target Areas are as of 1950. The U.S. Bureau of the Census has made later estimates for six of the areas: namely, Houston, Milwaukee, St. Louis, and Washington, D.C. as of January 1, 1956, and New Orleans and Providence as of July 1, 1956. A total of the latest figures available indicates about 69,371,575 people in the 72 areas.

Each of these areas is a Standard Metropolitan Area as defined by the Federal Committee on Standard Metropolitan Areas. Except in New England, each area is composed of a county or group of closely integrated contiguous counties, having at least one city of 50,000 inhabitants or more. In New England, towns and cities were the units used in defining Standard Metropolitan Areas, with population density the principal criterion.

Since most critical target areas contain entire counties, they may have some rural as well as urban territory. The thickly settled urban core of each Standard Metropolitan Area is referred to as its urbanized area.

Population figures for the urbanized areas of the Critical Target Areas are shown in the following table, since they are significant from

the standpoint of bomb damage, analysis, evacuation plans and other civil defense considerations. As of 1950, the urbanized areas of CTA's included approximately 58,000,000 inhabitants, or roughly 85 percent of the entire CTA population.

Each Critical Target Area has at least one central city of 50,000 or more inhabitants. Some areas have two or more such cities. In the following table the largest city in each of the 72 Critical Target Areas and all other cities of 90,000 or more in the areas are listed as "principal cities" with a comparison of each city's resident population with its day population. The 94 principal cities in the 72 CTA's had a resident population of 41,351,000. Their combined day population was about 17 percent larger than resident population. In six cities (Somerville, Massachusetts; Long Beach, Berkeley and Richmond, California; Jersey City, New Jersey; and Yonkers, New York) the day population is less than resident population as commuters go into the larger central cities in their daily employment. In several cities, population in the daytime increases 50 percent or more over resident population. The population of Newark, New Jersey, more than doubles in the daytime.

CRITICAL TARGET AREA POPULATION

Map Ref. No. (a)	Critical Target Area and Principal Cities	Population (1950 except where noted)				
		Critical Target Area	Urbanized Area	Principal City (b)		
				Resident	Day (c)	
					Number	% of Resident
	TOTALS	69,371,575	(d)	41,351,010	(d)	(d)
1.	Akron, Ohio Akron	410,032	366,765	274,605	315,069	115
2.	Albany - Schenectady - Troy, N. Y. Albany Schenectady	514,490	291,897	134,995 91,785	166,975 108,470	124 118
3.	Allentown - Bethlehem - Easton Pennsylvania (New Jersey) Allentown	437,824	225,962	106,756	141,150	132
4.	Atlanta, Georgia Atlanta	694,669	507,887 (e)	331,314	416,569	126
5.	Baltimore, Maryland Baltimore	1,337,373	1,161,852	949,708	1,071,104	113
6.	Binghamton, New York Binghamton	184,698	144,011	80,674	96,033	119
7.	Birmingham, Alabama Birmingham	558,928	445,314	326,037	451,892	139

(Continued)

REFERENCE MATERIAL

CRITICAL TARGET AREA POPULATION (Continued)

Map Ref. No. (a)	Critical Target Area and Principal Cities	Population (1950 except where noted)				
		Critical Target Area	Urbanized Area	Principal City (b)		
				Resident	Day (c)	
					Number	% of Resident
8.	Boston, Massachusetts	2,369,986	2,333,448			
	Boston			801,444	1,075,107	134
	Lynn			99,738	117,796	118
	Cambridge			120,740	147,884	122
	Somerville			102,351	90,693	89
9.	Bridgeport, Connecticut	258,137	237,435			
	Bridgeport			158,709	209,282	132
10.	Buffalo, New York	1,089,230	798,043			
	Buffalo			580,132	717,098	124
	Niagara Falls			90,872	100,945	111
11.	Canton, Ohio	283,194	173,917			
	Canton			116,912	155,724	133
12.	Chattanooga, Tennessee (Georgia)	246,453	167,764			
	Chattanooga			131,041	159,660	122
13.	Chicago, Illinois (Indiana)	5,495,364	4,920,816			
	Chicago			3,620,962	4,251,643	117
	Gary, Indiana			133,911	156,425	117
14.	Cincinnati, Ohio (Kentucky)	904,402	813,292			
	Cincinnati			503,998	620,473	123
15.	Cleveland, Ohio	1,465,511	1,383,599			
	Cleveland			914,808	1,085,830	119
16.	Columbus, Ohio	503,410	437,707			
	Columbus			375,901	422,752	112
17.	Dallas, Texas	614,799	538,924			
	Dallas			434,462	497,621	115
18.	Davenport, Iowa - Rock Island- Moline, Illinois	234,256	194,925			
	Davenport			74,549	112,271	151
19.	Dayton, Ohio	457,333	346,864			
	Dayton			243,872	301,546	124
20.	Denver, Colorado	563,832	498,743			
	Denver			415,786	466,626	112
21.	Detroit, Michigan	3,016,197	2,659,398			
	Detroit			1,849,568	2,181,689	118
	Dearborn			94,994	152,381	160
22.	Erie, Pennsylvania	219,388	151,710			
	Erie			130,803	155,406	119
23.	Evansville, Indiana (Kentucky)	191,137	137,573(f)			
	Evansville			128,636	141,376	110
24.	Fall River-New Bedford, Mass. (R.I.)	274,767	243,615			
	Fall River			111,963	122,666	110
	New Bedford			109,189	120,643	110
25.	Flint, Michigan	270,963	197,631			
	Flint			163,143	192,204	118
26.	Fort Wayne, Indiana	183,722	140,314			
	Fort Wayne			133,607	151,042	113
27.	Fort Worth, Texas	361,253	315,578			
	Fort Worth			278,778	309,781	111
28.	Grand Rapids, Michigan	288,292	226,817			
	Grand Rapids			176,515	208,373	118
29.	Greensboro - High Point, North Carolina	191,057	(d)			
	Greensboro			74,389	(d)	(d)

REFERENCE MATERIAL

CRITICAL TARGET AREA POPULATION (Continued)

Map Ref. No. (a)	Critical Target Area and Principal Cities	Population (1950 except where noted)				
		Critical Target Area	Urbanized Area	Principal City (b)		
				Resident	Day (c)	
			Number		% of Resident	
30.	Hartford, Connecticut Hartford	358,081	300,788	177,397	229,099	129
31.	Houston, Texas Houston	1,077,000(g)	700,508	711,000(g)	775,100(g)	109
32.	Indianapolis, Indiana Indianapolis	551,777	502,375	427,173	484,222	113
33.	Kansas City, Missouri (Kansas) Kansas City, Kansas Kansas City, Missouri	814,357	698,350	129,553 456,622	140,336 529,241	108 116
34.	Knoxville, Tennessee Knoxville	337,105	148,166	124,769	167,696	134
35.	Lancaster, Pennsylvania Lancaster	234,717	76,280	63,774	102,690	161
36.	Los Angeles - Long Beach, Calif. Los Angeles Glendale Long Beach Pasadena	4,367,911	3,996,946	1,970,358 95,702 250,767 104,577	2,590,743 97,779 245,714 122,898	131 102 98 118
37.	Louisville, Kentucky (Indiana) Louisville	576,900	472,736	369,129	424,718	115
38.	Memphis, Tennessee Memphis	482,393	406,034	396,000	436,170	110
39.	Milwaukee, Wisconsin Milwaukee	1,060,900(g)	829,495(h)	711,000(g)	772,600(g)	109
40.	Minneapolis - St. Paul, Minnesota Minneapolis St. Paul	1,116,509	985,101	521,718 311,349	593,477 346,267	114 111
41.	New Britain - Bristol, Connecticut New Britain	146,983	123,079	73,726	84,643	115
42.	New Haven, Connecticut New Haven	264,622	244,836	164,443	194,114	118
43.	New Orleans, Louisiana New Orleans	779,000(i)	659,768	602,000(i)	624,700	104
44.	New York - N. E. New Jersey New York City Elizabeth, New Jersey Jersey City, New Jersey Newark, New Jersey Paterson, New Jersey Yonkers, New York	12,911,994	12,296,117	7,891,957 112,817 299,017 438,776 139,336 152,798	8,201,842 116,145 295,954 884,801 161,116 140,293	104 103 99 202 116 92
45.	Norfolk-Portsmouth-Newport News, Virginia Norfolk	594,817	385,111	213,513	285,666	134
46.	Peoria, Illinois Peoria	250,512	154,539	111,856	146,758	131
47.	Philadelphia, Pennsylvania (N.J.) Philadelphia Camden, New Jersey	3,671,048	2,922,470	2,071,605 124,555	2,466,284 144,468	119 116
48.	Pittsburgh, Pennsylvania Pittsburgh	2,213,236	1,532,953	676,806	1,011,618	149
49.	Portland, Oregon (Washington) Portland	704,829	512,643	373,628	468,699	125
50.	Providence, Rhode Island (Mass.) Providence	771,000(i)	583,346	223,000(i)	293,100	131

(Continued)

REFERENCE MATERIAL

CRITICAL TARGET AREA POPULATION (Continued)

Map Ref. No. (a)	Critical Target Area and Principal Cities	Population (1950 except where noted)				
		Critical Target Area	Urbanized Area	Principal City (b)		
				Resident	Day (c)	
			Number		% of Resident	
51.	Reading, Pennsylvania Reading	255,740	154,931	109,320	179,112	164
52.	Rochester, New York Rochester	487,632	409,149	332,488	383,325	115
53.	Rockford, Illinois Rockford	152,385	122,226	92,927	(d)	(d)
54.	St. Louis, Missouri (Illinois) St. Louis	1,892,000(g)	1,400,058	841,000(g)	1,002,200(g)	119
55.	San Diego, California San Diego	556,808	432,974	334,387	399,198	119
56.	San Francisco - Oakland, Calif. San Francisco Oakland Berkeley Richmond	2,240,767	2,022,078	775,357 384,575 113,805 99,545	1,012,145 491,670 102,311 89,016	131 128 90 89
57.	Seattle, Washington Seattle	732,992	621,509	467,591	550,842	118
58.	South Bend, Indiana South Bend	205,058	168,165	115,911	155,610	134
59.	Springfield-Holyoke, Mass. (Conn.) Springfield	407,255	356,908	162,399	210,085	129
60.	Syracuse, New York Syracuse	341,719	265,286	220,583	258,380	117
61.	Toledo, Ohio Toledo	395,551	364,344	303,616	342,057	113
62.	Trenton, New Jersey Trenton	229,781	189,321	128,009	156,953	123
63.	Utica - Rome, New York Utica	284,262	117,424	101,531	130,825	129
64.	Washington, D.C. (Md. - Va.) Washington, D.C.	1,884,000(g)	1,287,333	859,000(g)	980,100(g)	114
65.	Waterbury, Connecticut Waterbury	154,656	131,707	104,477	120,685	116
66.	Wheeling, W. Va.-Steubenville, Ohio Wheeling	354,092	106,650	58,891	95,532	162
67.	Wichita, Kansas Wichita	222,290	194,047	168,279	182,992	109
68.	Wilkes-Barre - Hazleton, Penna. Wilkes-Barre	392,241	271,589	76,826	99,358	129
69.	Wilmington, Delaware (N.J.) Wilmington	268,387	187,359	110,356	146,929	133
70.	Worcester, Massachusetts Worcester	276,336	219,330	203,486	228,125	112
71.	York, Pennsylvania York	202,737	78,796	59,953	94,276	157
72.	Youngstown, Ohio (Penna.) Youngstown	528,498	298,051	168,330	248,598	148

- (a) Refers to map entitled "Critical Target Areas and Target Areas in the U. S.", page number 4.
 (b) Includes the largest city in each of the 72 Critical Target Areas and all other cities of 90,000 population or more within the areas.
 (c) Normal maximum day population as estimated by the U. S. Bureau of the Census.
 (d) Not available.

- (e) Does not include data for Clayton County, Georgia.
 (f) Does not include data for Henderson County, Kentucky.
 (g) Estimates as of January 1, 1956.
 (h) Does not include data for Waukesha County.
 (i) Estimates as of July 1, 1956.

REFERENCE MATERIAL

POPULATION OF TARGET AREAS*

The 124 target areas (excluding the 72 critical target areas) had a total population of 19,010,484 as of 1950. Eight of these are

in the Territories and Possessions and 116 are in Continental United States.

Target Area	Population (1950)	Target Area	Population (1950)
TOTAL, 124 Areas	19,010,484	Lowell, Massachusetts	135,987
Agana City, Guam	1,330	Lubbock, Texas	101,048
Albuquerque, New Mexico	145,673	Macon, Georgia	135,043
Altoona, Pennsylvania	139,514	Madison, Wisconsin	169,357
Amarillo, Texas	87,140	Manchester, New Hampshire	88,370
Asheville, North Carolina	124,403	Mayaguez, Puerto Rico	87,307
Atlantic City, New Jersey	132,399	Miami, Florida	495,084
Augusta, Georgia (S. Carolina)	162,013	Mobile, Alabama	231,105
Augusta, Maine	83,881	Montgomery, Alabama	138,965
Austin, Texas	160,980	Montpelier, Vermont	42,870
Baton Rouge, Louisiana	158,236	Muncie, Indiana	90,252
Bay City, Michigan	88,461	Nashville, Tennessee	321,758
Beaumont-Port Arthur, Texas	195,083	Ogden, Utah	83,319
Bismarck, North Dakota	25,673	Oklahoma City, Oklahoma	325,352
Boise, Idaho	70,649	Olympia, Washington	44,884
Brockton, Massachusetts	129,428	Omaha, Nebraska (Iowa)	366,395
Carson City, Nevada	4,172	Orlando, Florida	114,950
Cedar Rapids, Iowa	104,274	Pago Pago, American Samoa	1,586
Charleston, South Carolina	164,856	Phoenix, Arizona	331,770
Charleston, West Virginia	322,072	Pierre, South Dakota	8,111
Charlotte, North Carolina	197,052	Pittsfield, Massachusetts	66,567
Charlotte Amalie, Virgin Islands	11,469	Ponce, Puerto Rico	126,810
Cheyenne, Wyoming	47,662	Portland, Maine	119,942
Columbia, South Carolina	142,565	Pueblo, Colorado	90,188
Columbus, Georgia (Alabama)	170,541	Racine, Wisconsin	109,585
Concord, New Hampshire	63,022	Raleigh, North Carolina	136,450
Corpus Christi, Texas	165,471	Richmond, Virginia	328,050
Decatur, Illinois	98,853	Roanoke, Virginia	133,407
Des Moines, Iowa	226,010	Sacramento, California	277,140
Dover, Delaware	37,870	Saginaw, Michigan	153,515
Dubuque, Iowa	71,337	St. Joseph, Missouri	96,826
Duluth, Minn.-Superior, Wis.	252,777	Salem, Oregon	101,401
Durham, North Carolina	101,639	Salt Lake City, Utah	274,895
El Paso, Texas	194,968	San Angelo, Texas	58,929
Fort Smith, Arkansas	64,202	San Antonio, Texas	500,460
Frankfort, Kentucky	25,933	San Bernardino-Riverside-Ontario, Calif.	451,688
Fresno, California	276,515	San Jose, California	290,547
Gadsden, Alabama	93,892	San Juan-Rio Piedras, Puerto Rico	465,741
Galveston, Texas	113,066	Santa Barbara, California	98,220
Green Bay, Wisconsin	98,314	Santa Fe, New Mexico	38,153
Greenville, South Carolina	168,152	Savannah, Georgia	151,481
Hamilton-Middletown, Ohio	147,203	Scranton, Pennsylvania	257,396
Harrisburg, Pennsylvania	292,241	Shreveport, Louisiana	216,686
Helena, Montana	24,540	Sioux City, Iowa	103,917
Honolulu, T.H.	353,020	Sioux Falls, South Dakota	70,910
Huntington, W.Va.-Ashland, Ky. (Ohio)	245,795	Spokane, Washington	221,561
Jackson, Michigan	107,925	Springfield, Illinois	131,484
Jackson, Mississippi	142,164	Springfield, Missouri	104,823
Jacksonville, Florida	304,029	Springfield, Ohio	111,661
Jefferson City, Missouri	35,464	Stamford - Norwalk, Connecticut	196,023
Johnstown, Pennsylvania	291,354	Stockton, California	200,750
Juneau, Alaska	5,956	Tacoma, Washington	275,876
Kalamazoo, Michigan	126,707	Tallahassee, Florida	51,590
Kenosha, Wisconsin	75,238	Tampa - St. Petersburg, Florida	409,143
Lansing, Michigan	172,941	Terre Haute, Indiana	105,160
Laredo, Texas	56,141	Topeka, Kansas	105,418
Lawrence, Massachusetts	125,935	Tucson, Arizona	141,216
Lexington, Kentucky	100,746	Tulsa, Oklahoma	251,686
Lima, Ohio	88,183	Waco, Texas	130,194
Lincoln, Nebraska	119,742	Waterloo, Iowa	100,448
Little Rock-N.Little Rock, Ark.	196,685	West Palm Beach, Florida	114,688
Lorain - Elyria, Ohio	148,162	Wichita Falls, Texas	98,493
		Winston-Salem, North Carolina	146,135

* Critical target areas are not included.

REFERENCE MATERIAL

POPULATION DISTRIBUTION, BY STATES

The following table contains figures on the total population, the target area population, and the critical target area population in each State and FCDA Region. Total population figures for the States are as of July 1, 1956 -- the latest available estimates of the U.S. Bureau of the Census. The latest population figures available for most individual target areas are as of 1950. Exact comparisons on a current basis are therefore impossible. However, it is safe to say that over half of the Nation's population is located in the 188 target areas; between 40 and 45 percent of the total population is in the 72 critical target areas.

The target areas, and especially the critical

target areas, contain the large concentrations of population and industry in the country. These concentrations are mainly in the New England, Middle Atlantic and Great Lakes areas. FCDA Region 1 which includes New England as well as New York and New Jersey, has over 18 percent of the Nation's population. However, it covers about 26 percent of the total target area population and nearly one-third of the critical target area population. Some of the regions, covering large rural areas, on the other hand, have only three to four percent of the total critical target area population. Every State has at least one target area since all State capitals are regarded as possible targets. Nineteen States have no critical target areas.

POPULATION DISTRIBUTION
Target Areas and Critical Target Areas*

FCDA Region and State	Total Population		Total Target Area Population**		Critical Target Area Population	
	Number	Percent	Number	Percent	Number	Percent
TOTAL	170,378,000**	100.0000	88,382,059	100.0000	69,371,575	100.0000
REGION 1	31,310,000	18.3765	23,142,315	26.1844	21,957,891	31.6526
Connecticut	2,232,000	1.3100	1,393,966	1.5772	1,197,943	1.7269
Maine	910,000	.5341	203,823	.2306	-	-
Massachusetts	4,812,000	2.8243	3,840,138	4.3449	3,382,221	4.8755
New Hampshire	560,000	.3287	151,392	.1713	-	-
New Jersey	5,403,000	3.1711	4,350,493	4.9224	4,218,094	6.0804
New York	16,195,000	9.5052	12,457,974	14.0956	12,457,974	17.9583
Rhode Island	828,000	.4860	701,659	.7939	701,659	1.0115
Vermont	370,000	.2171	42,870	.0485	-	-
REGION 2	32,791,000	19.2459	19,566,186	22.1382	16,896,599	24.3567
Delaware	402,000	.2359	256,749	.2905	218,879	.3155
District of Columbia	866,000	.5083	859,000	.9719	859,000	1.2383
Kentucky	3,017,000	1.7708	872,408	.9871	695,780	1.0030
Maryland	2,812,000	1.6504	1,928,373	2.1819	1,928,373	2.7798
Ohio	9,096,000	5.3387	5,384,086	6.0918	4,839,762	6.9766
Pennsylvania	10,964,000	6.4350	8,136,636	9.2062	7,156,131	10.3156
Virginia	3,651,000	2.1429	1,490,274	1.6862	1,028,817	1.4831
West Virginia	1,983,000	1.1639	638,660	.7226	169,857	.2448
REGION 3	22,983,000	13.4892	6,728,303	7.6127	2,510,605	3.6191
Alabama	3,135,000	1.8400	1,063,254	1.2030	558,928	.8057
Florida	3,770,000	2.2127	1,489,484	1.6853	-	-
Georgia	3,712,000	2.1786	1,258,444	1.4239	732,867	1.0565
Mississippi	2,124,000	1.2466	142,164	.1608	-	-
North Carolina	4,423,000	2.5960	896,736	1.0146	191,057	.2754
South Carolina	2,353,000	1.3810	528,710	.5982	-	-
Tennessee	3,466,000	2.0343	1,349,511	1.5269	1,027,753	1.4815
REGION 4	29,380,000	17.2439	16,151,311	18.2744	14,339,691	20.6708
Illinois	9,432,000	5.5359	6,339,004	7.1723	6,108,667	8.8057
Indiana	4,413,000	2.5901	1,756,828	1.9877	1,561,416	2.2508
Michigan	7,516,000	4.4113	4,225,001	4.7804	3,575,452	5.1540
Missouri	4,255,000	2.4974	2,270,369	2.5688	2,033,256	2.9310
Wisconsin	3,764,000	2.2092	1,560,109	1.7652	1,060,900	1.5293

REFERENCE MATERIAL

POPULATION DISTRIBUTION Target Areas and Critical Target Areas* (Continued)

FCDA Region and State	Total Population		Total Target Area Population**		Critical Target Area Population	
	Number	Percent	Number	Percent	Number	Percent
REGION 5	<u>16,796,000</u>	<u>9.8580</u>	<u>6,090,698</u>	<u>6.8913</u>	<u>2,832,052</u>	<u>4.0824</u>
Arkansas	1,815,000	1.0653	260,887	.2952	-	-
Louisiana	3,004,000	1.7631	1,153,922	1.3056	779,000	1.1229
New Mexico	815,000	.4783	183,826	.2080	-	-
Oklahoma	2,237,000	1.3130	577,038	.6529	-	-
Texas	8,925,000	5.2383	3,915,025	4.4296	2,053,052	2.9595
REGION 6	<u>12,736,000</u>	<u>7.4750</u>	<u>3,877,577</u>	<u>4.3873</u>	<u>2,231,430</u>	<u>3.2166</u>
Colorado	1,612,000	.9461	654,020	.7400	563,832	.8128
Iowa	2,692,000	1.5800	776,366	.8784	100,698	.1451
Kansas	2,103,000	1.2343	555,809	.6289	450,391	.6492
Minnesota	3,241,000	1.9022	1,322,571	1.4964	1,116,509	1.6095
Nebraska	1,414,000	.8299	416,455	.4712	-	-
North Dakota	657,000	.3856	25,673	.0291	-	-
South Dakota	696,000	.4085	79,021	.0894	-	-
Wyoming	321,000	.1884	47,662	.0539	-	-
REGION 7	<u>21,197,000</u>	<u>12.4410</u>	<u>11,772,450</u>	<u>13.3200</u>	<u>8,603,307</u>	<u>12.4018</u>
Arizona	1,057,000	.6204	472,986	.5352	-	-
California	13,433,000	7.8841	8,760,346	9.9119	7,165,486	10.3291
Idaho	625,000	.3668	70,649	.0799	-	-
Montana	638,000	.3745	24,540	.0278	-	-
Nevada	247,000	.1450	4,172	.0047	-	-
Oregon	1,718,000	1.0083	720,923	.8157	619,522	.8931
Utah	812,000	.4766	358,214	.4053	-	-
Washington	2,667,000	1.5653	1,360,620	1.5395	818,299	1.1796
TERRITORIES & POSSESSIONS	<u>3,187,000</u>	<u>1.8705</u>	<u>1,053,219</u>	<u>1.1917</u>	-	-
Alaska	209,000	.1227	5,956	.0068	-	-
American Samoa	19,000**	.0111	1,586	.0018	-	-
Canal Zone	53,000	.0311	-	-	-	-
Guam	59,000**	.0346	1,330	.0015	-	-
Hawaii	560,000	.3287	353,020	.3994	-	-
Puerto Rico	2,263,000	1.3282	679,858	.7692	-	-
Virgin Islands	24,000	.0141	11,469	.0130	-	-

* Source: U.S. Bureau of the Census. State population figures are estimates as of July 1, 1956. For the Territories and Possessions (except American Samoa and Guam, for which 1950 figures were used) estimates are as of July 1, 1955. Data for target area and critical target area population are as of 1950, except that Census estimates have been incorporated for Houston, Milwaukee, St. Louis and Washington, D.C. as of January 1, 1956 and for New Orleans and Providence as of July 1, 1956. Figures do not add to exact totals shown because of rounding or the incorporation of rounded figures.

** Exclusive of certain small trust territories and possessions having a total population of 57,266 as of 1950.

*** Includes critical target area population.

REFERENCE MATERIAL

FCDA APPROPRIATIONS

In 1951 the 81st Congress enacted Public Law 920 creating the Federal Civil Defense Administration at the time the Korean action threatened a major or world-wide conflict. In this law the FCDA Administrator was directed to prepare national plans and programs for the civil defense of the United States; the Federal Government was to provide coordination and guidance while the primary responsibilities for civil defense remained in the States and political subdivisions.

The framework of a budget was evolved with the help of Congress and the Bureau of the Budget. The following appropriations were created:

1. Operations -- for the educational activities, training schools, communications, technical advice, warehouse operations, and all the housekeeping functions of FCDA.
2. Federal Contributions -- to provide Federal matching funds to assist the States and political subdivisions in procuring materials and promoting their Civil Defense programs in such fields as communications, attack warning, education, etc.
3. Protective Facilities -- for shelters and shelter research.
4. Procurement Fund -- established as a revolving fund from which loans could be made to the States to obtain civil defense equipment.

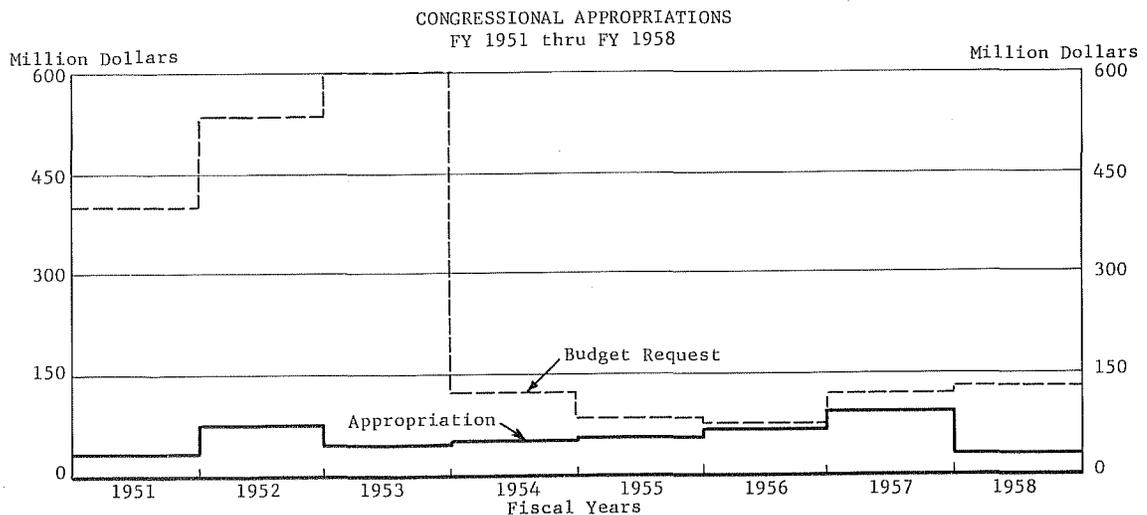
Later, the following appropriations were added:

1. Emergency Supplies and Equipment -- to finance the stockpiling of medical and pharmaceutical supplies, and engineering equipment.
2. Surveys, Plans and Research -- to cover survival plan studies and research.
3. Civil Defense Functions of Federal Agencies -- to finance functions delegated by FCDA to the other Federal departments and agencies.

The initial operating expenses were financed by \$1,831,000 which the President transferred from the Emergency Fund for National Defense. In fiscal year 1951, FCDA requested \$403,000,000 and Congress appropriated \$31,750,000 or 8 percent of the amount requested. Each year since 1951 FCDA has estimated its needs and has requested appropriations to carry out what it considered essential civil defense programs. However, the Congressional appropriations generally have been far less than the amounts requested.

From fiscal years 1951 through 1958, FCDA has requested a total of \$2,077,500,000 and Congress has approved \$449,276,000 or 21.6 percent. Of the total amount approved by Congress, \$222,850,000 or approximately 50 percent was granted for Emergency Supplies and Equipment.

The following chart reflects the amounts requested by FCDA and the amounts appropriated by Congress for fiscal years 1951 through 1958.



REFERENCE MATERIAL

CONGRESSIONAL APPROPRIATIONS FY 1951 through FY 1958 (Thousand Dollars)

Fiscal Year	Appropriation		Percent
	Requested	Approved	
<u>Total</u>	<u>\$ 2,077,500</u>	<u>\$ 449,276</u>	<u>21.6</u>
1951	403,000	33,581*	8.3
1952	535,000	75,310	14.1
1953	600,000	43,000	7.2
1954	125,200	46,525	37.2
1955	85,750	49,325	57.5
1956	75,350	68,675	91.1
1957	123,200	93,560	75.9
1958	130,000	39,300	30.2

* Includes \$1,831,000 transferred from President's emergency funds.

CONGRESSIONAL APPROPRIATIONS By Program (Thousand Dollars)

Program	Appropriation		Percent
	Requested	Approved	
<u>Total FY 1951 through 1958</u>	<u>\$2,077,500</u>	<u>\$449,276</u>	<u>21.6</u>
Operations	141,305	86,376	61.1
Federal Contributions	191,997	107,550	56.0
Emergency Supplies and Equipment	875,648	222,850	25.4
Protective Facilities	750,000	0	-
Procurement Fund	70,000	5,000	7.1
Surveys, Plans and Research	33,200	22,000	66.3
Civil Defense Functions of Federal Agencies (Salaries and Expenses)	15,350	5,500	35.8

CONGRESSIONAL APPROPRIATIONS By Program and Year - FY 1951-FY 1958 (Thousand Dollars)

Program and Year	Appropriation		Program and Year	Appropriation	
	Requested	Approved		Requested	Approved
<u>OPERATIONS</u>			<u>FEDERAL CONTRIBUTIONS</u>		
<u>TOTAL</u>	<u>\$141,305</u>	<u>\$ 86,376</u>	<u>TOTAL</u>	<u>\$191,997</u>	<u>\$107,550</u>
FY 1951	8,360	3,581	FY 1951	21,292	25,000 1/
FY 1952	19,745	11,560	FY 1952	45,255	7,750
FY 1953	32,000	8,000	FY 1953	50,000	15,000
FY 1954	10,900	8,525	FY 1954	14,300	10,500
FY 1955	11,000	10,025	FY 1955	14,750	13,300 2/
FY 1956	12,600	12,125	FY 1956	12,400	12,400
FY 1957	21,700	15,560	FY 1957	17,000	17,000
FY 1958	25,000	17,000	FY 1958	17,000	17,000

(Continued)

REFERENCE MATERIAL

CONGRESSIONAL APPROPRIATIONS
By Program and Year - FY 1951-FY 1958
(Thousand Dollars)
(Continued)

Program and Year	Appropriation		Program and Year	Appropriation	
	Requested	Approved		Requested	Approved
<u>EMERGENCY SUPPLIES AND EQUIPMENT</u>			<u>PROCUREMENT FUND (Con't.)</u>		
<u>TOTAL</u>	<u>\$875,648</u>	<u>\$222,350</u>	FY 1956	0	0
FY 1951	98,348	0	FY 1957	0	0
FY 1952	200,000	56,000	FY 1958	0	0
FY 1953	243,000	20,000	<u>SURVEYS, PLANS AND RESEARCH</u>		
FY 1954	100,000	27,500	<u>TOTAL</u>	\$ 33,200	\$ 22,000
FY 1955	60,000	26,000	FY 1951	0	0
FY 1956	35,300	32,650	FY 1952	0	0
FY 1957	64,000	47,000	FY 1953	0	0
FY 1958	75,000	3,300 ^{3/}	FY 1954	0	0
<u>PROTECTIVE FACILITIES</u>			FY 1955	0	0
<u>TOTAL</u>	<u>\$750,000</u>	<u>0</u>	FY 1956	12,000	10,000
FY 1951	250,000	0	FY 1957	14,500	10,000
FY 1952	250,000	0	FY 1958	6,700	2,000
FY 1953	250,000	0	<u>CIVIL DEFENSE FUNCTIONS OF FEDERAL AGENCIES (Salaries and expenses)</u>		
FY 1954	0	0	<u>TOTAL</u>	\$ 15,350	\$ 5,500
FY 1955	0	0	FY 1951	0	0
FY 1956	0	0	FY 1952	0	0
FY 1957	0	0	FY 1953	0	0
FY 1958	0	0	FY 1954	0	0
<u>PROCUREMENT FUND</u>			FY 1955	0	0
<u>TOTAL</u>	<u>\$ 70,000</u>	<u>\$ 5,000</u>	FY 1956	3,050	1,500
FY 1951	25,000	5,000 ^{4/}	FY 1957	6,000	4,000
FY 1952	20,000	0	FY 1958	6,300	0
FY 1953	25,000	0			
FY 1954	0	0			
FY 1955	0	0			

^{1/} Available for 2 years. Includes \$10,400,000 which was transferred from the Federal Contributions Appropriation to Emergency Supplies and Equipment.

^{2/} Includes reappropriation of \$1,300,000 from Fiscal Year 1954.

^{3/} For warehousing and maintenance of stockpiled materials.

^{4/} Shifted to no-year revolving fund in 1953.

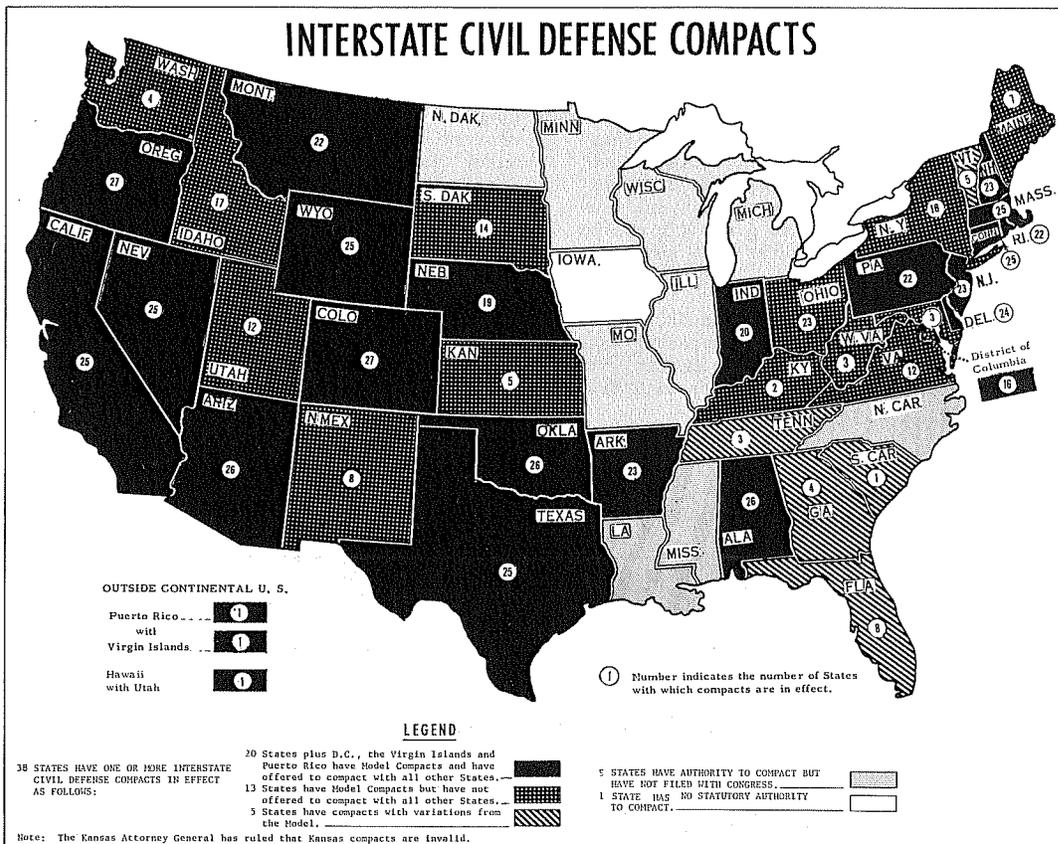
CIVIL DEFENSE IN THE U.S.

INTERSTATE CIVIL DEFENSE AND DISASTER COMPACTS

The Federal Civil Defense Act of 1950, as amended (Sub-section 201 (g)), authorizes the Administrator to encourage, and to assist in, the negotiation of civil defense compacts between States and to review the terms and conditions thereof in order, to the extent feasible, to obtain uniformity in their terms and conditions and consistency with national civil defense plans and programs. The Administrator is also authorized to assist and coordinate activities under such compacts. The Act establishes con-

vides a broad base of legal authority for joint civil defense action by two or more States.

A model compact which was developed by the Office of Civil Defense of the National Security Resources Board in conjunction with representatives of the Council of State Governments has been followed by the States in executing civil defense agreements. There have been no substantial changes in its terms except in several of the Southeastern States, which have executed



gressional procedure for the granting of the consent of Congress to civil defense compacts.

Such a device as the interstate compact was considered necessary by the Congress to avoid Federal centralization of civil defense operations and at the same time to avoid excessive decentralization which might result if each State could operate in civil defense matters only as a separate entity. The interstate compact pro-

compacts which do not contain authority for interstate operations in natural disasters. Vermont is the only other State which deviates from the model in this manner. Some of the Ohio compacts contain a substantial deviation in Article 3 in the rights, privileges, and immunities clause. However, all except a few of the Ohio compacts have now been brought into line with the model by amendment of this article.

(Continued)

CIVIL DEFENSE IN THE U.S.

WORKMEN'S COMPENSATION FOR CD PERSONNEL

Thirty-eight States have adopted legislation providing for compensation to special categories of, or all, civil defense workers who may be injured while in training or on duty or under other specified conditions. In four States (California, New York, Ohio, and Rhode Island) this has been done by amendment to the State Workmen's Compensation Law, while in the remaining States which have enacted this type of legislation to date, it has been done by the State Civil Defense Act or amendments thereto.

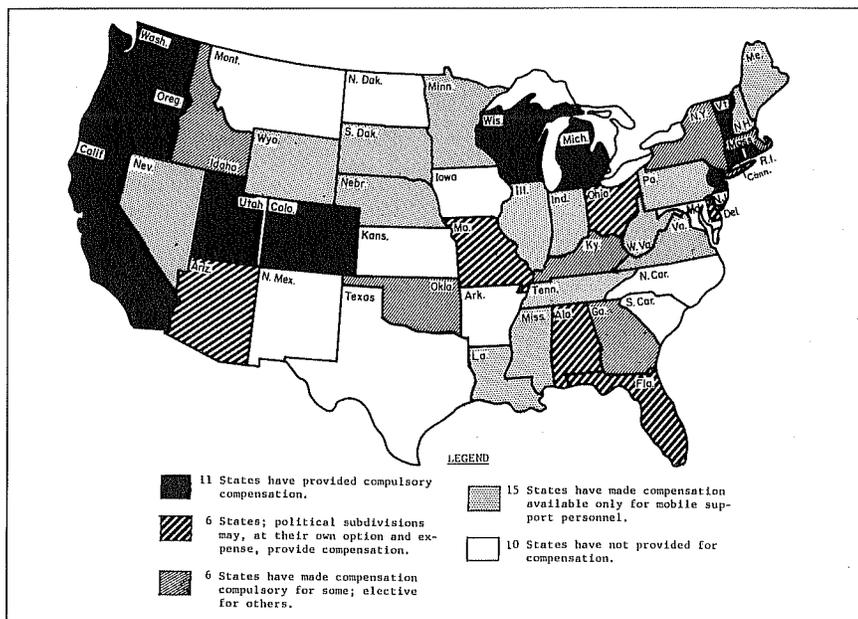
In 13 States (California, Colorado, Connecticut, Maine, Massachusetts, Michigan, New Jersey, New York, Ohio, Oregon, Rhode Island, Washington, and Wisconsin) either compulsory or elective coverage is provided for all types of civil defense workers and for periods while in training, practice, or on duty. The other States have limited coverage to specified civil defense workers, such as members of mobile support units or those rendering aid outside of their own political subdivisions, or police and rescue personnel. In some States coverage is also limited to injuries received during attack or while on actual duty or while performing specified services.

Under most of the existing provisions the cov-

ered volunteer civil defense workers are classified as employees of the State or given the same rights as State employees for purposes of the Workmen's Compensation Law. In some States they are classified as employees of the sponsoring local political subdivision.

In general, benefits under the State Workmen's Compensation Law are applied to civil defense workers who are covered. In California and New York, where coverage for special workers is provided by amendment to Workmen's Compensation Laws, the benefits are less in some respects for these workers than for others. In Massachusetts, where coverage has been included in the State Civil Defense Act, benefits for civil defense workers are greater in some respects than those for regularly covered workers. New Jersey has a special benefit system for civil defense workers.

Civil defense workers who are on a paid basis generally are subject to the same protection for injuries while on duty as other public employees who are on a paid basis. The chart on page 18 summarizes the main provisions of laws relating to workmen's compensation for civil defense personnel.



CIVIL DEFENSE IN THE U.S.

WORKMEN'S COMPENSATION COVERAGE OF CIVIL DEFENSE PERSONNEL

State	Compensation Amendment to Workmen's Compensation Act	Provided by State Civil Defense Act	Benefits for All State Civil Defense Personnel		Benefits for All Political Subdivision CD Personnel		Benefits for Mobile Support Personnel		Benefits Available While Training	Rehabilitation Aid Provided
			Compulsory	Elective	Compulsory	Elective	Compulsory	Elective		
Alabama						g.		g.	i.	i.
Arizona						g.		g.	i.	i.
California										i.
Colorado		a.								i.
Connecticut										i.
Delaware						g.		g.	i.	i.
Florida						g.		g.	i.	i.
Georgia								i.	j.	i.
Idaho									j.	i.
Illinois								i.		i.
Indiana								g.		i.
Kentucky								g.		i.
Louisiana									k.	i.
Maine										i.
Massachusetts			b.	b.	b.	b.	b.	b.	i.	i.
Michigan						i.			i.	i.
Minnesota								g.		i.
Mississippi										i.
Missouri						g.		g.		i.
Nebraska								g.		i.
Nevada								g.		i.
New Jersey		a.								i.
New Hampshire									k.	i.
New York			c.	c.	c.	c.	c.	c.	c.	c.
Ohio									k.	i.
Oklahoma			d.						d.	i.
Oregon									i.	i.
Pennsylvania										i.
Rhode Island										i.
South Dakota								g.		i.
Tennessee								g.		i.
Texas								g.		i.
Utah										i.
Vermont										i.
Virginia			e.		e.		e.		e.	i.
Washington									i.	i.
West Virginia									i.	i.
Wisconsin			f.		f.		f.			i.
Wyoming										i.

- a. By special legislation.
- b. Compulsory for volunteer unpaid firemen and policemen; elective for other volunteer unpaid personnel.
- c. Compulsory for certain civil defense personnel; elective for others.
- d. Compulsory for firemen and policemen performing civil defense activities; no benefits for others.
- e. Only to the extent as provided for sheriffs, constables and local police.
- f. Except personnel acting as employees of a private employer during civil defense activities. Benefits are for injuries only; not death.
- g. Except for elected officials and administrative officers.
- h. Compulsory for State, county and city personnel; elective for town personnel.
- i. No specific provision.
- j. Compulsory for mobile support personnel; elective for political subdivision personnel.
- k. Elective.
- l. Compulsory for State personnel; elective for political subdivision personnel.

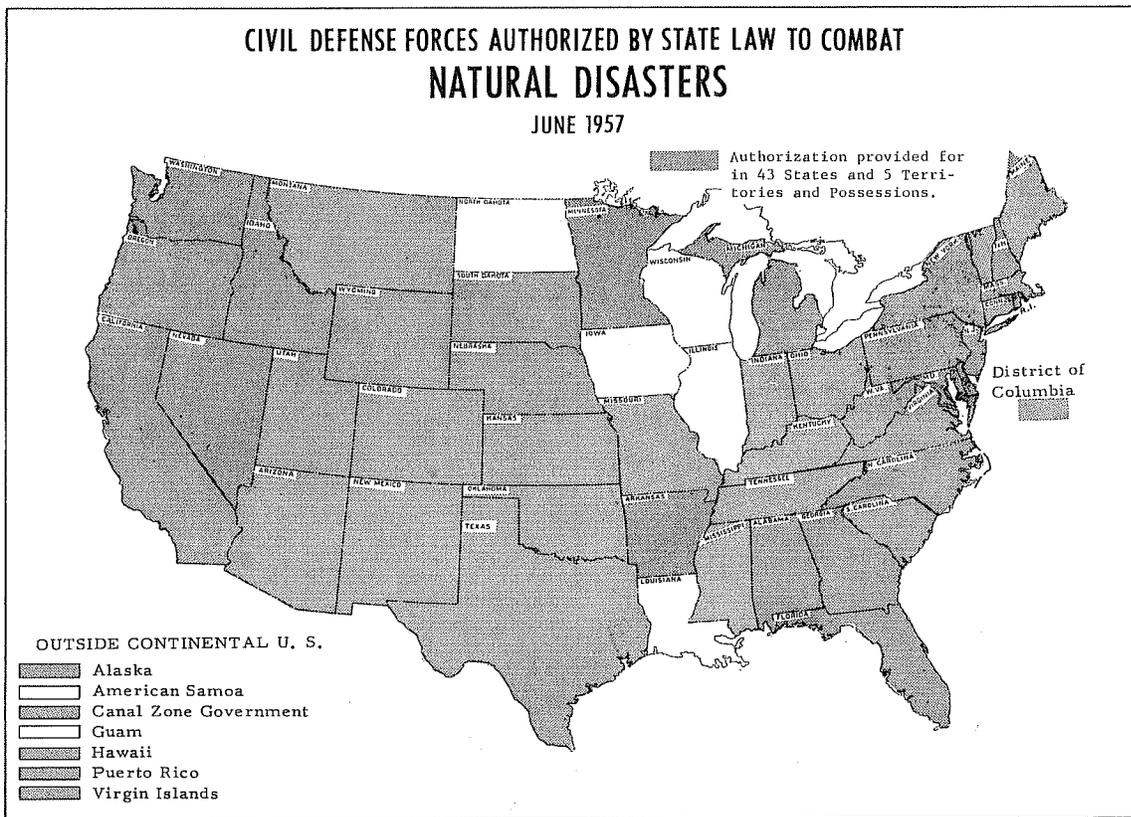
CIVIL DEFENSE IN THE U.S.

USE OF STATE CD FORCES IN NATURAL DISASTERS

In 43 States and the District of Columbia civil defense personnel are authorized by State law to act in natural disasters, such catastrophes as tornadoes, floods, explosions, and fires. Records in the files of the Federal Civil Defense Administration indicate that the States of Illinois, Iowa, Louisiana, North Dakota, and Wisconsin, do not have such legal authority.

The advantages of having natural and enemy-caused disaster functions combined in the same

forces have been demonstrated many times within the past few years. Natural disaster operations have afforded excellent training in organization, leadership, and use of technical skills to those individuals in civil defense whose responsibility it would be to act in an enemy-caused disaster. On the other hand, previous organization and training in civil defense have resulted in increased capability to provide assistance in natural disasters.



CIVIL DEFENSE IN THE U.S.

STATE CIVIL DEFENSE COUNCILS AND ADVISORY COMMITTEES

At the national level there are several groups which help to shape civil defense planning and policy, such as:

- 1) The National Civil Defense Advisory Council appointed by the President in accordance with Public Law 920, 81st Congress.
- 2) The Civil Defense Coordinating Board created by Executive Order 10611 in May 1955, with representatives from 17 major Federal agencies to assist in developing an integrated plan for participation of all Federal departments and agencies in the civil defense of the Nation.
- 3) The Civil Defense Scientific Advisory Committee created in 1954 under authority of Section 102(b), Public Law 920, 81st Congress, to assist

FCDA in major scientific problems affecting civil defense.

- 4) The National Advisory Council for Rural Civil Defense established in December 1955 by the FCDA Administrator.

Just as Civil Defense Advisory Councils and Committees are needed at the national level, so the need for such groups has been recognized by the States. Information obtained by FCDA through its Regional Offices indicates that 42 States, the District of Columbia and three of the territories and possessions had advisory councils or committees as of June 30, 1957. Data are summarized in the following table:

STATE CIVIL DEFENSE COUNCILS AND ADVISORY COMMITTEES

Region and State	States having a CD Council or Advisory Committee	Type		Region and State	States having a CD Council or Advisory Committee	Type	
		Council	Committee			Council	Committee
<u>REGION 1</u>				<u>REGION 5</u>			
Connecticut	X	X		Arkansas	X	X	
Maine	X	X		Louisiana			
Massachusetts	X	X		New Mexico	X	X	
New Hampshire	X	X		Oklahoma	X	X	
New Jersey	X	X		Texas	X	X	
New York	X	X		<u>REGION 6</u>			
Rhode Island	X	X		Colorado	X	X	
Vermont	X	X		Iowa	X(e)		
<u>REGION 2</u>				Kansas	X	X	
Delaware	X		X	Minnesota	X	X	
Dist. of Columbia	X	X(a)		Nebraska			
Kentucky	X	X		North Dakota	X	X	
Maryland	X	X		South Dakota	X	X	
Ohio	X		X(b)	Wyoming	X		X
Pennsylvania	X	X		<u>REGION 7</u>			
Virginia	X		X	Arizona	X	(c)	(c)
West Virginia	X	X		California	X	X	Ten
<u>REGION 3</u>				Idaho	X	Three	
Alabama	X	(c)	(c)	Montana	X	(c)	(c)
Florida	X	X(d)		Nevada	X	(c)	(c)
Georgia	X	(c)	(c)	Oregon	X	X	Six
Mississippi				Utah	X	X	
North Carolina	X	X		Washington	X	X	Nine
South Carolina				<u>TERRITORIES & POSSESSIONS</u>			
Tennessee				Alaska	X	X	
<u>REGION 4</u>				American Samoa			
Illinois	X	(c)	(c)	Canal Zone	X		X
Indiana	X	X(a)		Guam			
Michigan	X		X	Hawaii	X	X	
Missouri				Puerto Rico			
Wisconsin	X	X		Virgin Islands			

- (a) Citizens
 (b) Executive
 (c) Not reported

- (d) Governor's Cabinet
 (e) State Development Commission

CIVIL DEFENSE IN THE U.S.

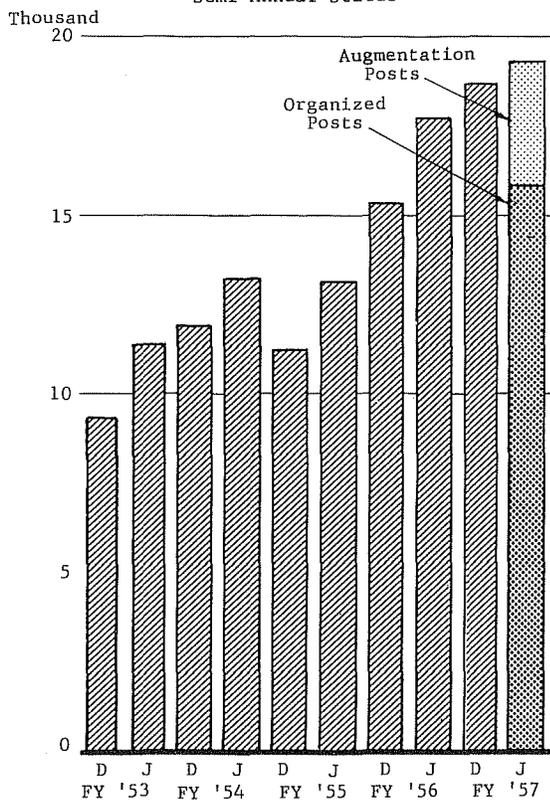
GROUND OBSERVER CORPS

The Ground Observer Corps program is administered by the U. S. Air Force. National and local civil defense officials assist in the recruiting function. The program of organizing observation posts and recruiting volunteers to scan the skies for enemy planes is a supplement to radar and other means of guarding against surprise attacks of enemy planes. To accomplish adequate air surveillance by visual-aural means, observation posts should be established approximately every eight miles. When posts cannot be established at distances of eight miles, they are established as close to this pattern as conditions will permit. As of June 30, 1957 the Air Force estimated that observation posts were required in 23,144 locations to provide adequate air surveillance.

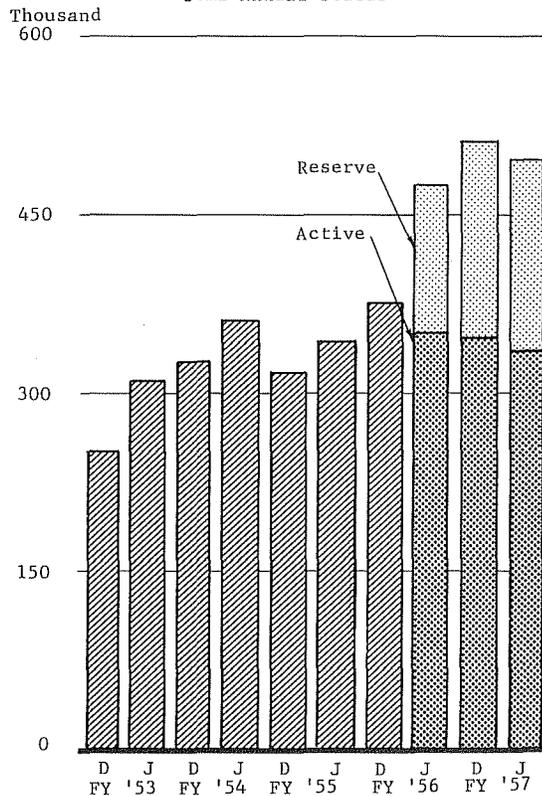
The program has grown since December 1952, as

indicated by the following charts, from less than 10,000 observation posts and approximately 250,000 volunteers, to its status on June 30, 1957 with 19,278 observation posts and 497,551 volunteers. Of the 19,278 observation posts, 15,800 are organized posts maintaining operational proficiency; 3,478 are classified as "Augmentation Posts" established in designated areas and considered to have surveillance potential during an emergency, but do not meet the requirements for fully organized posts. A total of 863 organized posts are classified as "24-hour" posts in that they operate around the clock or average at least 160 hours per week in active operation. Of the 497,551 volunteers, the Air Force reports as of June 30, 1957 show 336,371 active and 161,180 in a reserve capacity.

OBSERVATION POSTS ORGANIZED
Semi-Annual Status



VOLUNTEERS ENROLLED
Semi-Annual Status

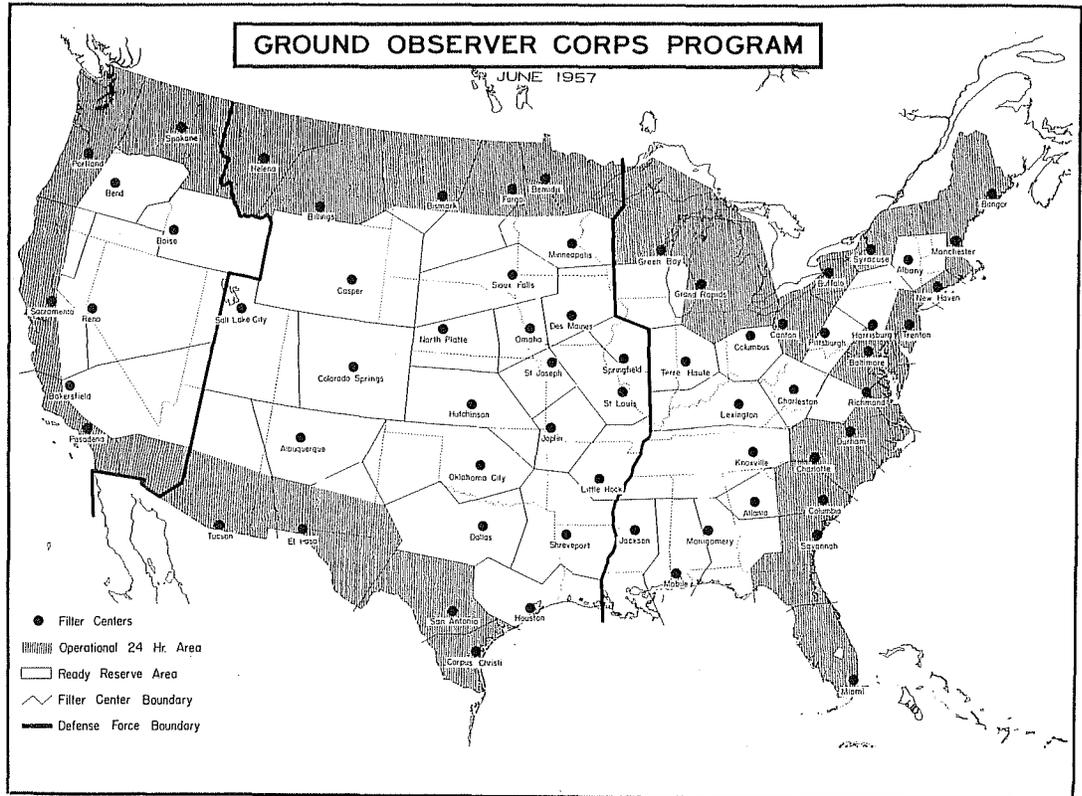


CIVIL DEFENSE IN THE U.S.

GROUND OBSERVER CORPS (Continued)

As of June 30 the observation posts report their observations of aircraft to 64 filter centers scattered through the country. These centers with the area reporting to each are indicated on

the following map. During fiscal year 1957, eight filter centers were consolidated with adjacent centers, reducing the total from 72 to the present 64 centers.



OBSERVATION POSTS

The following table presents some pertinent statistics on Ground Observer Corps activities by States. Eight States and the District of Columbia had organized observation posts equal to 90 percent or more of those required at specific locations. Nineteen States had from 75 to 89 percent, fourteen States had 50 to 74 percent,

six States had 25 to 49 percent, and one State had less than 25 percent of the required organized posts. The number of volunteers, by States, is not available. The States with the largest numbers of operational 24-hour posts were California (105), Texas (100), Michigan (84), Washington (76) and New York (57).

CIVIL DEFENSE IN THE U.S.

OBSERVATION POSTS - BY STATE

FCDA Region and State	Number Required	Organized Posts		Total Number of Observation Posts*	Operationally Ready (24 hours)**
		Number	Percent of Required		
TOTAL	<u>23,144</u>	<u>15,800</u>	<u>68.3</u>	<u>19,278</u>	<u>863</u>
REGION 1	<u>1,448</u>	<u>1,249</u>	<u>86.3</u>	<u>1,461</u>	<u>166</u>
Connecticut	73	70	95.9	87	4
Maine	315	274	87.0	321	38
Massachusetts	143	120	83.9	128	13
New Hampshire	124	89	71.8	120	11
New Jersey	81	90	111.1	106	27
New York	555	471	84.9	541	57
Rhode Island	24	25	104.2	33	4
Vermont	133	110	82.7	125	12
REGION 2	<u>2,167</u>	<u>1,885</u>	<u>87.0</u>	<u>1,968</u>	<u>121</u>
Delaware	20	21	105.0	21	7
District of Columbia	1	1	100.0	1	-
Kentucky	371	321	86.5	332	-
Maryland	106	100	94.3	104	35
Ohio	531	404	76.1	424	20
Pennsylvania	590	565	95.8	568	12
Virginia	347	303	87.3	345	39
West Virginia	201	170	84.6	173	8
REGION 3	<u>2,762</u>	<u>1,997</u>	<u>72.3</u>	<u>2,594</u>	<u>75</u>
Alabama	403	252	62.5	283	-
Florida	405	251	62.0	464	10
Georgia	565	430	76.1	560	21
Mississippi	374	237	63.4	252	-
North Carolina	340	272	80.0	391	34
South Carolina	305	252	82.6	341	10
Tennessee	370	303	81.9	303	-
REGION 4	<u>3,182</u>	<u>2,474</u>	<u>77.7</u>	<u>2,663</u>	<u>112</u>
Illinois	684	586	85.7	615	-
Indiana	432	384	88.9	388	9
Michigan	713	659	92.4	678	84
Missouri	674	253	37.5	280	-
Wisconsin	679	592	87.2	702	19
REGION 5	<u>3,651</u>	<u>2,739</u>	<u>75.0</u>	<u>3,151</u>	<u>106</u>
Arkansas	645	265	41.1	286	-
Louisiana	446	329	73.8	340	-
New Mexico	428	370	86.4	510	6
Oklahoma	428	310	72.4	327	-
Texas	1,704	1,465	86.0	1,688	100
REGION 6	<u>4,346</u>	<u>2,921</u>	<u>67.2</u>	<u>3,872</u>	<u>37</u>
Colorado	453	400	88.3	466	-
Iowa	628	353	56.2	521	-
Kansas	640	219	34.2	271	-
Minnesota	859	635	73.9	866	11
Nebraska	572	333	58.2	536	-
North Dakota	416	370	88.9	507	26
South Dakota	369	332	90.0	382	-
Wyoming	409	279	68.2	323	-
REGION 7	<u>5,588</u>	<u>2,535</u>	<u>45.4</u>	<u>3,544</u>	<u>246</u>
Arizona	507	259	51.1	302	6
California	1,249	532	42.6	882	105
Idaho	596	260	43.6	445	5
Montana	763	454	59.5	569	29
Nevada	770	175	22.7	200	-
Oregon	800	254	31.8	421	25
Utah	367	227	61.9	229	-
Washington	536	374	70.0	496	76
Canada - Ontario	-	-	-	25	-

* Includes organized and augmentation posts.
 ** Included in organized posts.

Source: U. S. Air Force

CIVIL DEFENSE IN THE U.S.

NUMBER OF STATE AND LOCAL GOVERNMENT EMPLOYEES

There were 5,275,000 employees of State and local governments in the United States as of October 1956 according to a survey made by the U. S. Bureau of the Census. Of this total 1,322,000 were State employees and 3,953,000 were employees of local governments. This large pool of public employees could and would be the source of manpower through which emergency and

support actions would be accomplished in a civil defense emergency. In fact many of them, such as police, firemen, hospital employees, etc., are by regular occupation in jobs which would be vital in an emergency. The percentage distribution of these State and local employees by function is as follows:

PERCENTAGE DISTRIBUTION OF STATE AND LOCAL GOVERNMENT
EMPLOYEES, BY FUNCTION
October 1956

Function	Percentage Distribution		
	Total	State	Local
<u>Total</u>	<u>100.0</u>	<u>25.1</u>	<u>74.9</u>
Education	43.3	7.7	35.6
Highways	9.3	4.0	5.3
Health and Hospitals	10.4	5.2	5.2
Police	5.4	.5	4.9
Fire	3.5	-	3.5
Public Welfare	2.0	.8	1.2
Sanitation	2.3	-	2.3
Natural Resources	2.5	1.9	.6
Administrative and All Others	21.3	5.0	16.3

CIVIL DEFENSE IN THE U.S.

STATE AND LOCAL GOVERNMENT EMPLOYEES

By Function and by State - October 1956

State	Total all Functions	Education	Highways	Health and Hospitals	Police	Fire	Public Welfare	Sanitation	Natural Resources	All Others
UNITED STATES TOTAL	5,274,909	2,283,161	491,748	548,171	287,006	182,999	106,731	123,738	128,864	1,122,491
State	1,321,759	407,245	212,214	274,712	25,722	-	42,555	-	98,531	260,780
Local	3,953,150	1,875,916	279,534	273,459	261,284	182,999	64,176	123,738	30,333	861,711
REGION 1 TOTAL	1,068,214	351,868	91,643	150,713	79,539	47,630	28,717	32,486	12,784	272,834
State	222,263	29,746	34,008	70,069	4,363	-	6,367	-	11,816	65,894
Local	845,951	322,122	57,635	80,644	75,176	47,630	22,350	32,486	968	206,940
Connecticut Total	68,450	28,462	7,118	7,756	5,057	3,105	1,451	1,293	659	13,549
State	21,165	4,606	3,492	6,607	544	-	857	-	659	4,400
Local	47,285	23,856	3,626	1,149	4,513	3,105	594	1,293	-	9,149
Maine Total	31,841	12,546	5,502	1,884	1,280	2,115	523	286	1,121	6,584
State	9,689	1,942	2,686	1,304	234	-	339	-	1,043	2,141
Local	22,152	10,604	2,816	580	1,046	2,115	184	286	78	4,443
Massachusetts Total	166,769	48,314	13,889	24,332	12,432	12,687	4,246	4,368	1,133	45,368
State	34,532	2,856	5,376	12,552	601	-	1,104	-	924	11,119
Local	132,237	45,458	8,513	11,780	11,831	12,687	3,142	4,368	209	34,249
New Hampshire Total	21,061	6,889	3,388	1,871	1,119	2,102	773	218	665	4,036
State	6,750	1,587	1,713	1,276	91	-	214	-	655	1,214
Local	14,311	5,302	1,675	595	1,028	2,102	559	218	10	2,822
New Jersey Total	162,602	65,197	11,689	20,044	15,101	6,154	3,421	4,243	2,193	34,560
State	30,988	5,490	4,060	7,733	1,043	-	980	-	1,940	9,742
Local	131,614	59,707	7,629	12,311	14,058	6,154	2,441	4,243	253	24,818
New York Total	580,135	176,028	45,473	91,630	42,213	19,320	17,206	21,456	6,067	160,742
State	105,258	9,842	14,694	37,903	1,467	-	2,053	-	5,657	33,642
Local	474,877	166,186	30,779	53,727	40,746	19,320	15,153	21,456	410	127,100
Rhode Island Total	24,074	8,608	2,168	2,616	1,851	1,483	928	538	477	5,405
State	8,854	1,862	948	2,144	203	-	699	-	477	2,521
Local	15,220	6,746	1,220	472	1,648	1,483	229	538	-	2,884
Vermont Total	13,282	5,824	2,416	580	486	664	169	84	469	2,590
State	5,027	1,561	1,039	550	180	-	121	-	461	1,115
Local	8,255	4,263	1,377	30	306	664	48	84	8	1,475
REGION 2 TOTAL	907,364	407,526	97,186	82,796	51,022	30,552	18,689	22,537	16,369	180,687
State	235,259	51,218	52,675	53,419	5,561	-	6,569	-	15,522	50,295
Local	672,105	356,308	44,511	29,377	45,461	30,552	12,120	22,537	847	130,392
Delaware Total	13,380	6,635	1,311	1,288	636	252	161	215	476	2,406
State	7,679	3,561	1,055	1,257	202	-	159	-	451	994
Local	5,701	3,074	256	31	434	252	2	215	25	1,412
District of Columbia (Total)	22,523	6,598	991	2,810	2,462	1,110	1,240	2,141	-	5,171
Kentucky Total	75,404	35,122	9,216	5,721	3,501	2,639	653	1,469	2,958	14,125
State	23,457	4,625	6,809	2,573	564	-	244	-	2,759	5,883
Local	51,947	30,497	2,407	3,148	2,937	2,639	409	1,469	199	8,242
Maryland Total	79,003	35,323	5,733	9,922	6,044	2,023	748	2,146	1,032	16,032
State	21,635	5,464	3,152	6,778	494	-	60	-	969	4,718
Local	57,368	29,859	2,581	3,144	5,550	2,023	688	2,146	63	11,314
Ohio Total	277,638	120,401	26,849	24,894	13,224	13,291	6,262	7,413	3,087	62,217
State	52,892	14,507	9,014	12,685	1,115	-	1,748	-	2,830	10,993
Local	224,746	105,894	17,835	12,209	12,109	13,291	4,514	7,413	257	51,224
Pennsylvania Total	284,373	124,151	33,701	25,340	18,677	8,405	7,540	6,166	4,274	56,119
State	77,338	10,353	16,876	20,259	2,144	-	3,596	-	4,252	19,858
Local	207,035	113,798	16,825	5,081	16,533	8,405	3,944	6,166	22	36,261
Virginia Total	104,508	51,120	13,379	9,660	4,594	2,054	1,338	2,299	2,753	17,311
State	35,093	8,378	10,641	7,652	720	-	98	-	2,564	5,040
Local	69,415	42,742	2,738	2,008	3,874	2,054	1,240	2,299	189	12,271
West Virginia Total	50,535	28,176	6,006	3,161	1,884	778	747	688	1,789	7,306
State	17,165	4,330	5,128	2,215	322	-	664	-	1,697	2,809
Local	33,370	23,846	878	946	1,562	778	83	688	92	4,497

CIVIL DEFENSE IN THE U.S.

STATE AND LOCAL GOVERNMENT EMPLOYEES

By Function and by State - October 1956

State	Total all Functions	Education	Highways	Health and Hospitals	Police	Fire	Public Welfare	Sanitation	Natural Resources	All Others
REGION 3 TOTAL	648,773	315,000	71,048	64,901	27,984	17,287	8,821	17,271	23,195	103,266
State	216,677	97,564	34,929	29,798	3,578	-	5,322	-	19,832	25,654
Local	432,096	217,436	36,119	35,103	24,406	17,287	3,499	17,271	3,363	77,612
Alabama Total	85,635	45,733	10,842	5,841	3,384	1,922	1,102	1,594	2,835	12,382
State	22,113	7,265	3,602	3,128	531	-	959	-	2,587	4,041
Local	63,522	38,468	7,240	2,713	2,853	1,922	143	1,594	248	8,341
Florida Total	126,554	52,623	11,596	16,262	6,745	3,945	1,717	4,978	4,559	24,129
State	27,845	6,627	4,918	6,225	602	-	1,067	-	3,877	4,529
Local	98,709	45,996	6,678	10,037	6,143	3,945	650	4,978	682	19,600
Georgia Total	99,381	48,863	10,734	10,241	4,639	2,819	1,086	3,162	3,055	14,782
State	23,117	6,691	5,372	4,185	548	-	208	-	2,596	3,517
Local	76,264	42,172	5,362	6,056	4,091	2,819	878	3,162	459	11,265
Mississippi Total	61,961	30,386	9,329	5,744	2,125	1,247	1,354	935	3,126	7,715
State	17,097	4,795	3,080	3,549	373	-	1,210	-	2,318	1,772
Local	44,864	25,591	6,249	2,195	1,752	1,247	144	935	808	5,943
North Carolina Total	116,031	61,037	11,235	10,618	4,639	3,710	1,315	2,265	3,631	17,581
State	85,692	61,037	9,047	5,807	628	-	116	-	2,899	6,158
Local	30,339	-	2,188	4,811	4,011	3,710	1,199	2,265	732	11,423
South Carolina Total	64,043	34,393	6,070	6,796	2,776	1,223	755	1,461	2,643	7,926
State	17,974	4,536	4,181	3,340	362	-	676	-	2,494	2,385
Local	46,069	29,857	1,889	3,456	2,414	1,223	79	1,461	149	5,541
Tennessee Total	95,168	41,965	11,242	9,399	3,676	2,421	1,492	2,876	3,346	18,751
State	22,839	6,613	4,729	3,564	534	-	1,086	-	3,061	3,252
Local	72,329	35,352	6,513	5,835	3,142	2,421	406	2,876	285	15,499
REGION 4 TOTAL	894,623	381,833	72,793	93,656	51,437	39,325	19,165	23,195	15,974	197,245
State	195,625	68,132	21,030	44,398	4,018	-	8,591	-	12,314	37,142
Local	698,998	313,701	51,763	49,258	47,419	39,325	10,574	23,195	3,660	160,103
Illinois Total	269,518	106,076	19,518	25,432	18,711	10,061	7,216	8,530	3,950	70,024
State	52,654	13,450	6,586	13,632	1,051	-	2,833	-	2,573	12,529
Local	216,864	92,626	12,932	11,800	17,660	10,061	4,383	8,530	1,377	57,495
Indiana Total	129,871	59,111	9,934	16,274	6,313	5,607	2,131	1,947	2,450	26,104
State	32,949	12,220	4,048	8,125	883	-	547	-	2,080	5,046
Local	96,922	46,891	5,886	8,149	5,430	5,607	1,584	1,947	370	21,058
Michigan Total	247,434	113,394	18,156	27,556	13,535	10,790	3,420	7,290	3,407	49,886
State	56,481	24,463	3,529	13,011	1,344	-	1,155	-	2,884	10,095
Local	190,953	88,931	14,627	14,545	12,191	10,790	2,265	7,290	523	39,791
Missouri Total	117,064	52,667	11,111	12,965	6,837	3,911	2,310	2,182	2,374	22,707
State	27,741	6,964	5,532	5,651	655	-	1,901	-	2,172	4,866
Local	89,323	45,703	5,579	7,314	6,182	3,911	409	2,182	202	17,841
Wisconsin Total	130,736	50,585	14,074	11,429	6,041	8,956	4,088	3,246	3,793	28,524
State	25,800	11,035	1,335	3,979	85	-	2,155	-	2,605	4,606
Local	104,936	39,550	12,739	7,450	5,956	8,956	1,933	3,246	1,188	23,918
REGION 5 TOTAL	513,526	263,275	51,588	42,405	21,402	13,905	7,755	11,922	16,411	84,863
State	145,466	52,401	26,296	27,114	2,267	-	6,698	-	11,429	19,261
Local	368,060	210,874	25,292	15,291	19,135	13,905	1,057	11,922	4,982	65,602
Arkansas Total	47,622	25,223	5,154	4,792	1,686	1,616	660	604	1,533	6,354
State	15,474	5,185	2,776	3,475	316	-	628	-	1,184	1,910
Local	32,148	20,038	2,378	1,317	1,370	1,616	32	604	349	4,444
Louisiana Total	102,354	47,747	10,289	10,980	4,625	2,123	2,423	2,332	4,933	16,902
State	39,392	11,727	5,784	10,454	585	-	2,134	-	3,463	5,245
Local	62,962	36,020	4,505	526	4,040	2,123	289	2,332	1,470	11,657
New Mexico Total	28,317	15,564	2,655	1,353	980	366	892	682	1,664	4,161
State	10,975	4,190	1,867	829	158	-	855	-	1,387	1,689
Local	17,342	11,374	788	524	822	366	37	682	277	2,472
Oklahoma Total	81,354	42,754	8,283	6,672	3,046	2,311	1,250	1,573	3,012	12,453
State	26,869	11,337	3,115	4,806	501	-	1,128	-	2,558	3,424
Local	54,485	31,417	5,168	1,866	2,545	2,311	122	1,573	454	9,029

CIVIL DEFENSE IN THE U.S.

STATE AND LOCAL GOVERNMENT EMPLOYEES

By Function and by State - October 1956

State	Total all Functions	Education	Highways	Health and Hospitals	Police	Fire	Public Welfare	Sanitation	Natural Resources	All Others
REGION 5 (Con't.)										
<u>Texas Total</u>	253,879	131,987	25,207	18,608	11,065	7,489	2,530	6,731	5,269	44,993
State	52,756	19,962	12,754	7,550	707	-	1,953	-	2,837	6,993
Local	201,123	112,025	12,453	11,058	10,358	7,489	577	6,731	2,432	38,000
REGION 6 TOTAL										
State	471,579	216,790	51,011	42,271	16,052	11,442	9,058	5,231	12,745	106,979
State	124,021	47,216	17,592	25,150	1,623	-	3,194	-	10,368	18,878
Local	347,558	169,574	33,419	17,121	14,429	11,442	5,864	5,231	2,377	88,101
Colorado Total										
State	59,482	28,896	5,535	5,168	2,461	1,230	1,061	844	1,664	12,623
State	16,249	7,017	1,698	3,263	351	-	188	-	1,369	2,363
Local	43,233	21,879	3,837	1,905	2,110	1,230	873	844	295	10,260
Iowa Total										
State	96,497	48,244	9,683	8,617	2,835	2,284	2,544	1,297	1,742	19,251
State	25,520	10,473	2,896	4,660	322	-	1,306	-	1,682	4,181
Local	70,977	37,771	6,787	3,957	2,513	2,284	1,238	1,297	60	15,070
Kansas Total										
State	78,071	37,675	9,761	6,684	2,687	2,143	1,447	876	1,101	15,697
State	21,693	8,794	3,229	4,912	192	-	409	-	956	3,201
Local	56,378	28,881	6,532	1,772	2,495	2,143	1,038	876	145	12,496
Minnesota Total										
State	115,354	48,768	13,172	12,741	4,151	3,931	2,450	1,303	3,148	25,690
State	28,742	10,436	4,307	6,320	335	-	492	-	2,780	4,072
Local	86,612	38,332	8,865	6,421	3,816	3,931	1,958	1,303	368	21,618
Nebraska Total										
State	54,269	22,970	5,051	5,207	1,856	813	591	335	2,571	14,875
State	14,132	4,297	2,030	3,777	196	-	170	-	1,772	1,890
Local	40,137	18,673	3,021	1,430	1,660	813	421	335	799	12,985
North Dakota Total										
State	26,084	10,936	2,953	1,082	765	467	340	183	838	8,520
State	6,352	2,279	977	922	55	-	109	-	627	1,365
Local	19,732	8,657	1,976	160	710	467	231	183	211	7,155
South Dakota Total										
State	27,755	12,456	3,440	1,172	794	245	371	192	878	8,207
State	7,429	2,582	1,540	908	116	-	334	-	660	1,289
Local	20,326	9,874	1,900	264	678	245	37	192	218	6,918
Wyoming Total										
State	14,067	6,845	1,416	1,600	503	329	254	201	803	2,116
State	3,904	1,338	915	388	56	-	186	-	522	499
Local	10,163	5,507	501	1,212	447	329	68	201	281	1,617
REGION 7 TOTAL										
State	770,830	346,869	56,479	71,429	39,570	22,858	14,526	11,096	31,386	176,617
State	182,448	60,968	25,684	24,764	4,312	-	5,814	-	17,250	43,656
Local	588,382	285,901	30,795	46,665	35,258	22,858	8,712	11,096	14,136	132,961
Arizona Total										
State	32,774	15,967	3,412	2,585	1,340	930	329	564	993	6,654
State	8,456	2,802	1,983	1,009	158	-	313	-	730	1,461
Local	24,318	13,165	1,429	1,576	1,182	930	16	564	263	5,193
California Total										
State	486,125	212,834	28,657	49,774	28,054	14,332	10,159	8,354	18,715	115,246
State	97,104	31,492	11,822	14,964	2,612	-	1,918	-	7,609	26,687
Local	389,021	181,342	16,835	34,810	25,442	14,332	8,241	8,354	11,106	88,559
Idaho Total										
State	22,767	10,339	2,956	1,685	939	777	200	180	1,961	3,730
State	7,793	2,865	1,305	705	185	-	177	-	1,430	1,126
Local	14,974	7,474	1,651	980	754	777	23	180	531	2,604
Montana Total										
State	24,051	11,245	3,118	1,234	948	349	426	253	1,410	5,068
State	8,241	2,855	1,721	856	137	-	330	-	1,045	1,297
Local	15,810	8,390	1,397	378	811	349	96	253	365	3,771
Nevada Total										
State	10,065	3,875	1,234	1,235	623	224	100	130	423	2,221
State	2,551	573	860	152	47	-	55	-	267	597
Local	7,514	3,302	374	1,083	576	224	45	130	156	1,624
Oregon Total										
State	63,791	30,082	6,298	4,875	2,752	2,488	1,191	402	2,911	12,792
State	21,420	6,059	3,267	3,183	456	-	953	-	2,413	5,089
Local	42,371	24,023	3,031	1,692	2,296	2,488	238	402	498	7,703
Utah Total										
State	30,661	16,496	2,276	1,984	1,125	671	290	227	1,140	6,452
State	9,881	4,783	1,136	678	156	-	246	-	911	1,971
Local	20,780	11,713	1,140	1,306	969	671	44	227	229	4,481
Washington Total										
State	100,596	46,031	8,528	8,057	3,789	3,087	1,831	986	3,833	24,454
State	27,002	9,539	3,590	3,217	561	-	1,822	-	2,845	5,428
Local	73,594	36,492	4,938	4,840	3,228	3,087	9	986	988	19,026

CIVIL DEFENSE IN THE U.S.

C. D. EXPENDITURES OF STATE GOVERNMENTS

Special annual surveys made for FCDA by the Bureau of the Census, indicate that the State Governments spent a total of \$83,034,000 for civil defense purposes during the six-year period from FY 1951 to FY 1956. Of this total amount spent by the State Governments, the surveys show that \$31,190,000 or 38% of the total expenditures were financed by funds received from the Federal Government. The remaining 62% or \$51,844,000 in expenditures were financed by the States.

The table below shows the civil defense expenditures of State governments for fiscal years 1951 through 1956. Revised figures for the earlier years are given for Alabama and Texas to reflect adjusted data obtained by the Census Bureau from these States.

The \$83,034,000 was expended by the State Governments for the following purposes:

<u>Expenditures of State Governments</u> (1951 to 1956)		
<u>Types of Expenditure</u>	<u>Amount</u>	<u>Percent of Total</u>
Current Expenditures	\$54,878,000	66
Purchase of Equipment	11,990,000	15
Construction of Facilities	1,772,000	2
Payments to Local Governments	<u>14,394,000</u>	<u>17</u>
Total	\$83,034,000	100

STATE EXPENDITURES FOR CIVIL DEFENSE, FY 1951-1956*
(Thousand Dollars)

FCDA Region and State	Total	1956	1955	1954	1951-53
U. S. TOTAL	83,034	81,168	81,346	82,070	82,770
REGION 1	28,908	6,519	6,082	7,215	9,092
Connecticut	1,850	491	265	260	834
Maine	726	260	161	89	216
Massachusetts	3,416	623	323	1,380	1,090
New Hampshire	271	41	49	63	118
New Jersey	2,473	581	290	454	1,148
New York	19,705	4,429	4,888	4,878	5,510
Rhode Island	277	48	59	58	112
Vermont	190	46	47	33	64
REGION 2	15,069	3,773	3,605	4,113	3,378
Delaware	641	261	65	127	188
Kentucky	182	33	76	27	46
Maryland	2,103	521	382	545	655
Ohio	5,975	1,544	1,199	1,596	1,636
Pennsylvania	5,307	1,132	1,803	1,526	866
Virginia	742	275	54	266	147
West Virginia	119	27	26	26	40
REGION 3	4,135	1,086	979	825	1,245
Alabama	631	117	115**	180**	219**
Florida	608	112	296	35	165
Georgia	1,553	457	396	325	375
Mississippi	172	90	41	30	11
North Carolina	291	127	44	32	88
South Carolina	66	13	14	13	26
Tennessee	814	170	73	210	361
REGION 4	8,705	1,123	1,635	1,999	3,948
Illinois	1,634	294	487	557	296
Indiana	576	114	215	79	168
Michigan	4,915	407	640	808	3,060
Missouri	1,130	225	170	395	340
Wisconsin	450	83	123	160	84
REGION 5	3,311	1,215	1,005	389	702
Arkansas	112	81	30	-	1
Louisiana	952	173	189	178	412
New Mexico	87	69	-	-	-
Oklahoma	716	268	168	133	147
Texas	1,444	606	618**	78**	142**
REGION 6	3,924	565	638	562	2,359
Colorado	654	128	141	127	258
Iowa	98	27	21	18	32
Kansas	1,284	34	25	19	1,206
Minnesota	1,522	292	184	329	717
Nebraska	114	18	12	23	61
North Dakota	48	15	10	9	14
South Dakota	110	31	17	17	45
Wyoming	94	20	28	20	26
REGION 7	18,982	2,887	3,602	5,647	6,846
Arizona	208	19	40	53	96
California	15,738	2,062	3,013	4,961	5,702
Idaho	94	56	-	5	33
Montana	171	53	40	37	41
Nevada	49	14	-	12	23
Oregon	1,228	454	252	260	262
Utah	216	26	51	41	98
Washington	1,278	203	206	278	591

* These expenditures include funds received from the Federal Government.
** Revised.

Source: U. S. Bureau of the Census

CIVIL DEFENSE IN THE U.S.

STATE EMERGENCY FUNDS AVAILABLE FOR CIVIL DEFENSE

Under the Federal Civil Defense Act of 1950 a state of civil defense emergency may be proclaimed by the President or by concurrent resolution of the Congress when an attack upon the United States has occurred or is anticipated. During such emergency the President and the Federal Civil Defense Administrator are authorized to exercise broad emergency powers.

FCDA has attempted to ascertain the extent of emergency funds available to the State Governors

for civil defense use in the event of such an emergency. The results are shown in the following table. The situations vary greatly among the States. More than half of the States have provided no emergency funds for immediate CD use. Some rely on contingent funds available for any emergency -- civil defense or other. A few authorize the transfer of funds from regular channels to emergency CD use. California had the largest emergency fund available.

FCDA Region and State	Amount of Funds Available	Notes	FCDA Region and State	Amount of Funds Available	Notes	
REGION 1			REGION 3			
Connecticut	none	Governor empowered to transfer monies and establish fund in an emergency. Monies transferable to Director of Civil Defense in an emergency. Regular emergency fund. Governor may direct the transfer from any State department, of necessary funds for an emergency occasioned by aggression, sabotage or disaster. Regular governmental emergency fund. Also has emergency authority to take, use or destroy property. Annual general emergency fund. To be expended by the Emergency Board at the request of the Governor.	Alabama	250,000	CD emergency fund. General emergency fund controlled by State Budget Commission. General contingencies and emergencies. For CD and natural disaster emergencies. For CD emergency by the Governor upon the recommendation of the (CD) council and upon approval of the State budget committee. Legislature must be called into emergency session when a state of emergency is declared. Special emergency and disaster fund. Regular emergency fund, appropriated annually, available to the Governor, disbursed, upon approval, by the State Board of Liquidation.	
Maine	no amount		Florida	500,000		
Massachusetts	----		Georgia	none		
New Hampshire	not given		Mississippi	none		
New Jersey	no amount		North Carolina	1,750,000		
New York	\$3,000,000		South Carolina	none		
Rhode Island	500,000		Tennessee	amount confidential		
Vermont	300,000		REGION 4			
REGION 2			Illinois	none		
Delaware	none		Indiana	350,000		
Dist. of Columbia	none	Michigan	none			
Kentucky	none	Missouri	none			
Maryland	none	Wisconsin	none			
Ohio	none	REGION 5				
Pennsylvania	none	Arkansas	100,000			
Virginia	none	Louisiana	no amount			
West Virginia	none					

(Continued)

CIVIL DEFENSE IN THE U.S.

STATE EMERGENCY FUNDS AVAILABLE FOR CIVIL DEFENSE (Continued)

FCDA Region and State	Amount of Funds Available	Notes	FCDA Region and State	Amount of Funds Available	Notes
<u>REGION 5 (Con't.)</u>			<u>REGION 6 (Con't.)</u>		
New Mexico	300,000	Not specifically identified as a CD emergency fund. General emergency and contingency fund controlled by the Governor. Other funds transferable by the Governor in an emergency.	South Dakota	100,000	Special emergency and disaster fund. Administered by the Governor and Executive Committee in disaster operations.
Oklahoma	500,000		Wyoming	50,000	
Texas	200,000		<u>REGION 7</u>		
<u>REGION 6</u>			Arizona	none	Revenue deficiency reserve fund, available for periods of extreme emergency.
Colorado	none	California	75,000,000		
Iowa	1,000,000 (plus)	Idaho	25,000	For disaster relief purposes.	
Kansas	none	For use in natural disasters or emergencies arising in the State. \$50,000 emergency fund for restoration of public facilities in event of a natural disaster. Emergency fund; disbursements in excess of \$10,000 subject to action by Emergency Commission.	Montana	none	To be used by State Emergency Board.
Minnesota	200,000		Nevada	none	
Nebraska	none		Oregon	1,500,000	
North Dakota	500,000		Utah	none	Governor's Emergency Fund, \$50,000 available when state of emergency is declared.
			Washington	none	
			Alaska	10,000	
			<u>TERRITORIES AND POSSESSIONS</u>		
			American Samoa	none	Available by direction of the Governor.
			Hawaii	500,000	
			Guam	none	

CIVIL DEFENSE IN THE U.S.

C. D. EXPENDITURES OF MAJOR CITIES

The 41 major cities of the United States--those with 250,000 or more inhabitants in 1950--spent \$6,812,000 for civil defense in fiscal year 1956. The corresponding figures for earlier years were \$7,407,000 in FY 1955; \$6,391,000 in FY 1954; \$5,331,000 in FY 1953; \$5,863,000 in FY 1952, and \$2,809,000 in FY 1951. These figures are from surveys of civil defense expenditures made by the U. S. Bureau of the Census at the request of FCDA.

In the six-year period covered by the table below, New York City expended \$10,861,000 for civil defense purposes which was far more than was spent by any other city. Detroit spent \$2,265,000 and the other cities with expenditures of over \$1,000,000 were Philadelphia (\$1,482,000), Los Angeles (\$1,335,000), Baltimore (\$1,745,000), Cleveland (\$1,100,000), Wash-

ington, D. C. (\$1,028,000), Boston (\$1,034,000), San Francisco (\$1,549,000), and Buffalo, including Erie County (\$1,232,000).

The expenditures made by these cities were usually financed in part by funds received from the Federal and State Governments, as well as by local revenues.

In the following table the expenditures of the 41 city governments are shown for the six-year period 1951-1956. For 1955 and 1956 the expenditures of county governments in counties containing the cities are given in the succeeding table. Since separate figures for the cities and surrounding counties were not reported in a few cases--Buffalo, Columbus, Rochester, Akron and Omaha--combined city-county expenditures are given.

TABULATION OF MAJOR CITY EXPENDITURES, 1951-1956

(Cities of 250,000 Population or More)
(Thousand Dollars)

City	Total	FY 1956	FY 1955	FY 1954	FY 1951-53
TOTAL (41 cities)	\$34,613	\$6,812	\$7,407	\$6,391	\$14,003
<u>1,000,000 or more inhabitants</u>					
New York	10,861	1,603	2,194	1,882	5,182
Chicago	974	281*	228*	235	230
Philadelphia	1,482	192	204	424	662
Los Angeles	1,335	603*	175*	270	287
Detroit	2,265	552*	646*	500	567
<u>500,000 to 1,000,000 inhabitants</u>					
Baltimore	1,745	498	386	316	545
Cleveland	1,100	76*	120*	228	676
St. Louis	559	111	95	88	265
Washington, D.C.	1,028	78	189	174	587
Boston	1,034	104	74	123	733
San Francisco	1,549	304	313	270	662
Pittsburgh	153	17*	19*	75	42
Milwaukee	931	209*	191*	162	369
Houston	448	86*	85*	97	180
Buffalo	1,232**	342**	890**	-	-
New Orleans	464	79	89	131	165
Minneapolis	298	85	91	41	81
Cincinnati	190	138*	52*	-	-
<u>250,000 to 500,000 inhabitants</u>					
Seattle	683	64*	73*	188	358
Kansas City, Missouri	210	27*	26*	64	93
Newark	703	98*	152*	152	301
Dallas	49	16*	18*	11	4
Indianapolis	160	42	16	31	71
Denver	361	88	60	26	187
San Antonio	116	15	49	8	44
Memphis	172	44*	37*	18	73
Oakland	704	63*	60*	147	434
Columbus	278**	53**	42**	36	147
Portland, Oregon	661	350*	134*	106	71
Louisville	128	10	18	62	38

(Continued)

CIVIL DEFENSE IN THE U.S.

TABULATION OF MAJOR CITY EXPENDITURES, 1951-1956
(Cities of 250,000 Population or More)
(Thousand Dollars)
(Continued)

City	Total	FY 1956	FY 1955	FY 1954	FY 1951-53
250,000 to 500,000 inhabitants(Contd)					
San Diego	\$ 588	\$ 97*	\$ 142*	\$ 218	\$ 131
Rochester	579**	154**	185**	30	210
Atlanta	190	37*	44*	25	84
Birmingham	193	45	74	13	61
St. Paul	230	39	37	48	106
Toledo	306	57*	59*	83	107
Jersey City	126	15	22	22	67
Fort Worth	167	26	25	37	79
Akron	62**	20**	20**	18	4
Omaha	189**	75**	53**	19	42
Long Beach	110	19	20	13	58

* In addition, the county government covering this area, expended in FY 1956 and FY 1955 the amounts indicated in the table below.

** Includes expenditures by county government for the years noted.

Source: U. S. Bureau of the Census

CD EXPENDITURES OF SELECTED COUNTY GOVERNMENTS, FY 1955 and FY 1956
(Supplemental to City Figures in the Preceding Table)
(Thousand Dollars)

Area	County	Expended	
		FY 1956	FY 1955
Chicago	Cook	\$ 42	\$ 48
Los Angeles	Los Angeles	216	476
Detroit	Wayne	47	83
Cleveland	Cuyahoga	138	135
Pittsburgh	Allegheny	18	13
Milwaukee	Milwaukee	74	21
Houston	Harris	-	28
Cincinnati	Hamilton	138	92
Seattle	King	64	41
Kansas City, Mo.	Jackson	2	2
Newark	Essex	18	6
Dallas	Dallas	19	1
Memphis	Shelby	44	48
Oakland	Alameda	52	31
Portland	Multnomah	14	14
San Diego	San Diego	67	63
Atlanta	Fulton	15	15
Toledo	Lucas	79	25

Source: U.S. Bureau of the Census

CIVIL DEFENSE IN THE U.S.

NATIONAL WARNING SYSTEM (NAWAS)

As of May 1, 1957 a new National Warning System (NAWAS) was put into effect, combining the basic warning capabilities of the former Civil Air Defense Warning System (CADW) and the National Warning Control System (NAWAC) into a new and improved warning system. Three FCDA Warning Centers are the sources of warning. These are located at (1) Headquarters, North American Air Defense Command, Colorado Springs, Colorado, (2) Headquarters, Eastern CONAD Region, Stewart Air Force Base, New York, and (3) Headquarters, Western CONAD Region, Hamilton Air Force Base, California.

Under the NAWAS system a warning from any one of the FCDA Warning Centers can be flashed simultaneously to 200 warning points over the country in a matter of seconds. It is the responsibility of the States to provide for further dissemination of the warning to local communities. The NAWAS warning circuit is a party line type circuit which includes the FCDA National and Regional Offices also. Acknowledge-

ment of the warning from points within a State is channeled to one designated State Warning Point which, in turn, acknowledges for the State to the FCDA Warning Center. The system is set up so that all State acknowledgements can be received at a single Warning Center or, if desired, it can be divided into three segments with each Warning Center receiving acknowledgements from States in its area.

In addition to the warning circuit, NAWAS contains a control circuit which provides (1) communication between the three Warning Centers, (2) an emergency line in event of failure in the warning circuit, (3) an administrative circuit between FCDA Headquarters and Regional Offices when the line is not required for warning purposes, and (4) a method of separating or connecting segments of the warning circuit.

A diagram of the National Warning System is shown on the accompanying map.

FCDA NATIONAL WARNING SYSTEM (NAWAS)



CIVIL DEFENSE IN THE U.S.

NATIONAL WARNING SYSTEM (NAWAS) (Continued)

The following list indicates the locations of the Warning Points and State Warning Points served by each warning center. The map reference numbers are keyed to the map on page 36.

WARNING POINT LOCATIONS

State and Map Reference Number	City	State and Map Reference Number	City	State and Map Reference Number	City
EASTERN WARNING CENTER					
<u>Alabama</u>		<u>Maine (Cont.)</u>		<u>New York (Cont.)</u>	
1	*Montgomery	33	Houlton	68	Rochester
2	Birmingham	34	Portland	69	Schenectady
3	Gadsden			70	Syracuse
4	Mobile	<u>Maryland</u>		71	Troy
		35	*Pikesville	72	Utica
<u>Connecticut</u>		36	Hagerstown		
5	*Hartford	37	Salisbury	<u>North Carolina</u>	
6	Bloomfield			73	*Raleigh
7	Colchester	<u>Massachusetts</u>			
8	New Haven	38	*Boston	<u>Ohio</u>	
9	Ridgefield	39	Bridgewater	74	*Cambridge
		40	Holden	75	Canton
<u>Delaware</u>		41	Northampton	76	Cincinnati
10	*Dover			77	Cleveland
11	Delaware City	<u>Michigan</u>		78	Dayton
		42	*East Lansing	79	Delaware
<u>District of Columbia</u>		43	Bay City	80	Findlay
12	*Washington, D.C.	44	Detroit	81	Ironton
		45	Jackson	82	Toledo
		46	Marquette	83	Youngstown
<u>Florida</u>		47	Paw Paw		
13	*Jacksonville	48	Port Huron	<u>Pennsylvania</u>	
14	Miami	49	Rockford	84	*Harrisburg
15	Tallahassee	50	Sault Ste. Marie	85	Allentown
16	Tampa	51	Traverse City	86	Blakely
				87	Butler
<u>Georgia</u>		<u>Mississippi</u>		88	Erie
17	*Atlanta	52	*Jackson	89	Greensburg
18	Savannah			90	Hollidaysburg
		<u>New Hampshire</u>		91	Lancaster
<u>Indiana</u>		53	*Concord	92	Montoursville
19	*Pendleton	54	Littleton	93	Philadelphia
20	Charlestown			94	Pittsburgh
21	Chesterton	<u>New Jersey</u>		95	Punxsutawney
22	Connersville	55	*Trenton	96	Reading
23	Greencastle	56	Hammonton	97	Washington
24	Indianapolis	57	Morristown	98	Wilkes-Barre
25	Jasper				
26	Ligonier	<u>New York</u>		<u>Rhode Island</u>	
27	Redkey	58	*New York City	99	*Providence
28	Seymour	59	Albany		
29	West Lafayette	60	Binghamton	<u>South Carolina</u>	
		61	Buffalo	100	*Columbia
<u>Kentucky</u>		62	Garden City		
30	*La Grange	63	Hawthorne	<u>Tennessee</u>	
		64	New York City	101	*Nashville
<u>Maine</u>		65	Newburgh	102	Arlington
31	*Augusta	66	Niagara Falls	103	Chattanooga
32	Bangor	67	Plattsburg	104	Knoxville

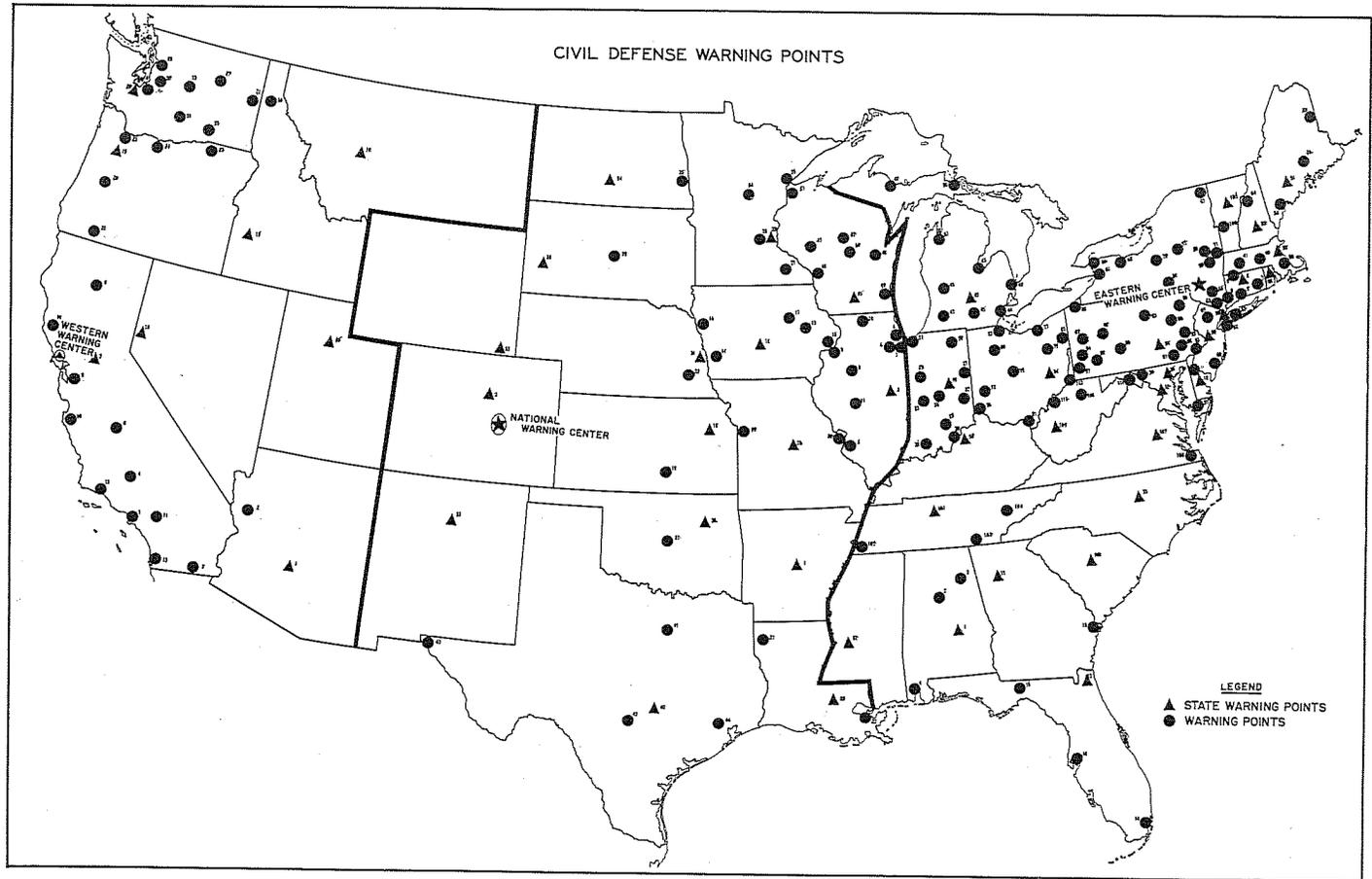
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CIVIL DEFENSE IN THE U.S.

WARNING POINT LOCATIONS (Continued)

State and Map Reference Number	City	State and Map Reference Number	City	State and Map Reference Number	City	
<u>EASTERN WARNING CENTER</u> (Continued)			<u>Minnesota (Cont.)</u>			
<u>Vermont</u>		26	Minneapolis	4	Bakersfield	
105	*Montpelier	27	Rochester	5	El Centro	
106	Rutland	<u>Missouri</u>			6	Fresno
<u>Virginia</u>		28	*Jefferson City	7	Los Angeles	
107	*Richmond	29	Kansas City	8	Oakland	
108	Norfolk	30	St. Louis	9	Redding	
<u>West Virginia</u>		<u>Nebraska</u>			10	Salinas
109	*South Charleston	31	*Omaha	11	San Bernardino	
110	Clarksburg	32	Lincoln	12	San Diego	
111	Martinsburg	<u>New Mexico</u>			13	Santa Barbara
112	Parkersburg	33	*Santa Fe	14	Ukiah	
113	Wheeling	<u>North Dakota</u>			<u>Idaho</u>	
<u>CENTRAL WARNING CENTER</u>			34	*Bismarck	15	*Boise
<u>Arkansas</u>		35	Fargo	16	Coeur d'Alene	
1	*Little Rock	<u>Oklahoma</u>			<u>Montana</u>	
<u>Colorado</u>		36	*Tulsa	17	*Helena	
2	*Denver	37	Edmond	<u>Nevada</u>		
<u>Illinois</u>		<u>South Dakota</u>			18	*Reno
3	*Urbana	38	*Rapid City	<u>Oregon</u>		
4	Chicago	39	Pierre	19	*Salem	
5	East St. Louis	<u>Texas</u>			20	Eugene
6	Joliet	40	*Austin	21	Medford	
7	Park Forest	41	Arlington	22	Pendleton	
8	Peoria	42	Boerne	23	Portland	
9	Rock Island	43	El Paso	24	The Dalles	
10	Rockford	44	Houston	<u>Utah</u>		
11	Springfield	<u>Wisconsin</u>			25	*Salt Lake City
<u>Iowa</u>		45	*Madison	<u>Washington</u>		
12	*Des Moines	46	Appleton	26	*Olympia	
13	Cedar Rapids	47	Eau Claire	27	Coulee Dam	
14	Council Bluffs	48	La Crosse	28	Everett	
15	Davenport	49	Milwaukee	29	Pasco	
16	Sioux City	50	Stevens Point	30	Renton	
17	Waterloo	51	Superior	31	Spokane	
<u>Kansas</u>		52	Wausau	32	Tacoma	
18	*Topeka	<u>Wyoming</u>			33	Wenatchee
19	Wichita	53	*Cheyenne	34	Yakima	
<u>Louisiana</u>		<u>WESTERN WARNING CENTER</u>				
20	*Baton Rouge	<u>Arizona</u>		1	*Phoenix	
21	Bossier City	1	Kingman	2		
22	New Orleans	2		<u>California</u>		
<u>Minnesota</u>		<u>California</u>		3	*Sacramento	
23	*St. Paul					
24	Brainerd					
25	Duluth					

* State Warning Points



CIVIL DEFENSE IN THE U.S.

WARNING SYSTEMS OF PRINCIPAL CITIES

The problem of adequate systems to warn city dwellers of an impending attack has been a major concern of civil defense from the inception of the program. States and cities have been encouraged to procure and install the necessary warning devices with the Federal Government providing half of the funds under the Federal Contributions Program. Through June 30, 1957, a total of \$7,562,989 in Federal Funds has been obligated for the Attack Warning programs of States and localities.

Of 264 principal cities in target areas, 154 or 59 percent had adequate warning systems as of June 30, 1957. This means that these cities have installed sirens or other outdoor warning devices to provide essentially 100 percent coverage of their respective areas. The remaining cities had varying degrees of warning coverage for their respective areas with 18 cities regarded as completely inadequate, as indicated in the table below. The 264 cities include all cities of 50,000 population or more and State capitals with less than 50,000 in the United States, its Territories and Possessions.

On June 30, 1956, 165 cities reported having complete coverage; the current number indicated above shows a decline in the number of cities with complete coverage. The reason for this decline is that some cities have re-evaluated their warning systems and have determined that coverage was not as complete as originally believed. Furthermore, newly developed areas in some cities require additional warning devices to provide adequate coverage. Of the 22 principal cities reported in 1956 having totally inadequate warning systems, four are presently installing warning devices, leaving 18 principal cities throughout the country with completely inadequate warning.

Although satisfactory outdoor warning devices may be installed, there is still the problem of how to warn people in homes and other buildings in which the outdoor devices may not be heard. Under contract with FCDA certain research organizations are engaged in studying and developing internal warning systems which can utilize existing power distributing or telephone facilities.

WARNING STATUS OF PRINCIPAL CITIES

Status	Number of Cities	Percentage of Total
Adequate	154	59
50-99% Adequate	73	27
1-49% Adequate	19	7
Inadequate	18	7
<u>TOTAL</u>	<u>264</u>	<u>100</u>

CIVIL DEFENSE IN THE U.S.

RADIOACTIVE FALLOUT FORECAST PROGRAM

The need of defense measures against possible radioactive fallout from nuclear explosions led to the establishment of a fallout forecast program by the U. S. Weather Bureau in June 1955. The initial program provided data for fallout patterns around the Nation's 72 critical target areas. The program was expanded in February 1956 to cover the entire Nation, Alaska and Hawaii. During fiscal year 1957 the number of stations making fallout forecasts was increased from 52 to 68 in the Continental United States and eight stations of the Canadian Meteorological Service began to provide fallout forecasts on a cooperative basis.

The system is based on observations of wind direction and speed taken at 76 observatories in the Continental United States and Canada, and 2 each in Alaska and Hawaii. The reporting stations in the United States and Canada are listed below and the locations are shown on the accompanying map. Each station sends aloft balloon-borne instruments called rawinsondes, as high as 100,000 feet, to obtain measurements of atmos-

pheric pressure, temperature and moisture content. Wind speeds and directions at various levels are obtained by electronic tracking of the balloons.

The fallout forecasts are prepared and transmitted twice daily by 54 stations and four times daily by 22 stations. These messages are carried over the United States Government Teleprinter Service "C" to the 229 Weather Bureau Stations listed on pages 40 and 41. Civil Defense officials in any locality can obtain the fallout forecasts by calling the Weather Bureau Station in their area and, with the instructions available, can construct fallout plots required for their area of responsibility. FCDA has advised State and local civil defense offices to obtain the coded messages applying to the area within 500 miles of the border of their area boundaries -- within 1,000 miles in winter -- and to develop the ability to decode these messages and construct fallout plots. With training and practice, a complete fallout plot can be completed in less than five minutes.

U.S. WEATHER BUREAU RAWIN OBSERVATORIES

Region and State	City	Call Letters	Region and State	City	Call Letters
<u>REGION 1</u>			<u>REGION 4 (Con't.)</u>		
Maine	Caribou	CAR	Illinois	*Peoria	PIA
	Portland	PWM	Michigan	*Flint	FNT
Massachusetts	Nantucket	ACK		*Sault Ste. Marie	SSM
New York	*Albany	ALB	Missouri	Columbia	CBI
	*Buffalo	BUF	Wisconsin	Green Bay	GRB
	*New York	IDL			
<u>REGION 2</u>			<u>REGION 5</u>		
Dist. of Columbia	*Washington	WBC	Arkansas	Little Rock	LIT
Ohio	*Dayton	DAY	Louisiana	Burrwood	BRJ
Pennsylvania	Philadelphia	PHL		Lake Charles	LCH
	*Pittsburgh	PIT		*Shreveport	SHV
Virginia	*Norfolk	ORF	New Mexico	Albuquerque	ABQ
			Oklahoma	Oklahoma City	OKC
<u>REGION 3</u>			Texas	*Amarillo	AMA
Alabama	*Montgomery	MGM		Brownsville	BRO
Florida	Jacksonville	JAX		El Paso	ELP
	Miami	MIA		*Fort Worth	ACF
	Tampa	TPA		Midland	MAF
Georgia	Athens	AHN		San Antonio	SAT
Mississippi	Jackson	JAN	<u>REGION 6</u>		
North Carolina	Greensboro	GSO	Colorado	*Denver	DEN
	Hatteras	HAT		Grand Junction	GJT
South Carolina	Charleston	CHS	Kansas	Dodge City	DDC
Tennessee	Nashville	BNA		*Topeka	TOP
			Minnesota	International Falls	INL
<u>REGION 4</u>				St. Cloud	STC
Illinois	Chicago	MDW			

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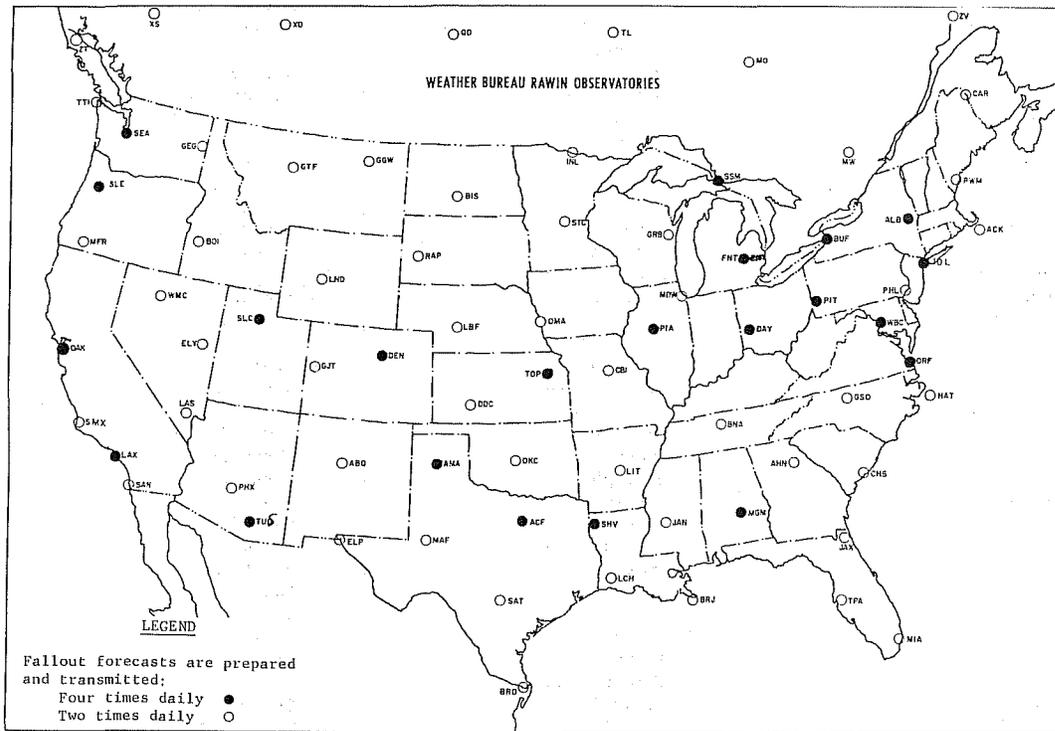
CIVIL DEFENSE IN THE U.S.

U.S. WEATHER BUREAU RAWIN OBSERVATORIES (Continued)

Region and State	City	Call Letters	Region and State	City	Call Letters
REGION 6 (Con't.)			REGION 7 (Con't.)		
Nebraska	North Platte	LBF	Oregon	Medford	MFR
	Omaha	OMA		*Salem	SLE
North Dakota	Bismarck	BIS	Utah	*Salt Lake City	SLC
South Dakota	Rapid City	RAP	Washington	*Seattle	SEA
Wyoming	Lander	LND		Spokane	GEG
				Tatoosh Island	TTI
REGION 7			<u>CANADIAN UF REPORTING STATIONS</u>		
Arizona	Phoenix	PHX	<u>PROVINCE</u>		
	*Tucson	TUS	Alberta	Edmonton	XD
California	*Los Angeles	LAX	British Columbia	Port Hardy	ZT
	*Oakland	OAK		Prince George	XS
	San Diego	SAN	Manitoba	The Pas	QD
	Santa Maria	SMX	Ontario	Moosonee	MO
Idaho	Boise	BOI		Trout Lake	TL
Montana	Glasgow	GGW	Quebec	Maniwaki	MW
	Great Falls	GTF		Seven Island	ZV
Nevada	Ely	ELY			
	Las Vegas	LAS			
	Winnemucca	WMC			

* Fallout forecasts are prepared and transmitted 4 times daily.

Source: U. S. Weather Bureau



CIVIL DEFENSE IN THE U.S.

WEATHER BUREAU STATIONS

Region and State	Region and State	Region and State
<u>REGION 1</u> Connecticut Bridgeport Hartford (Windsor Locks) New Haven Maine Caribou Portland Massachusetts Boston Harvard Nantucket Worcester New Hampshire Concord New Jersey Atlantic City Trenton New York Albany Binghamton Buffalo New York Rochester Syracuse Rhode Island Providence Vermont Burlington <u>REGION 2</u> Delaware Wilmington District of Columbia Washington Kentucky Lexington Louisville Maryland Baltimore Olney Ohio Akron Cincinnati Cleveland Columbus Dayton Sandusky Toledo Youngstown Pennsylvania Allentown Erie Harrisburg Lancaster Philadelphia Pittsburgh Reading	<u>REGION 2 (Con't.)</u> Scranton Williamsport Virginia Lynchburg Norfolk Richmond Roanoke West Virginia Charleston Huntington Parkersburg <u>REGION 3</u> Alabama Birmingham Mobile Montgomery Florida Daytona Beach Ft. Myers Jacksonville Key West Lakeland Miami Orlando Pensacola Tallahassee Tampa West Palm Beach Georgia Athens Atlanta Augusta Macon Rome Savannah Thomasville Mississippi Jackson Meridian Vicksburg North Carolina Asheville Charlotte Greensboro Raleigh Wilmington Winston-Salem South Carolina Charleston Columbia Greenville Tennessee Bristol Chattanooga Knoxville Memphis	<u>REGION 3 (Con't.)</u> Nashville <u>REGION 4</u> Illinois Cairo Chicago Moline Peoria Springfield Indiana Evansville Ft. Wayne Indianapolis South Bend Michigan Alpena Battle Creek* Detroit Escanaba Flint Grand Rapids Lansing Marquette Muskegon Sault Ste. Marie Ypsilanti Missouri Columbia Kansas City Springfield St. Louis Wisconsin Green Bay LaCrosse Madison Milwaukee <u>REGION 5</u> Arkansas Ft. Smith Little Rock Louisiana Baton Rouge Lake Charles New Orleans Shreveport New Mexico Albuquerque Roswell Oklahoma Oklahoma City Tulsa Texas Abilene Amarillo Austin Brownsville Corpus Christi

* Located at FCDA Headquarters

(Continued)

CIVIL DEFENSE IN THE U.S.

WEATHER BUREAU STATIONS (Continued)

Region and State	Region and State	Region and State
<u>REGION 5 (Con't.)</u>	<u>REGION 6 (Con't.)</u>	<u>REGION 7 (Con't.)</u>
Dallas	Nebraska	San Francisco
Denton	Grand Island	Santa Maria
El Paso	Lincoln	Santa Rosa
Ft. Worth	Norfolk	Idaho
Galveston	North Platte	Boise
Houston	Omaha	Lewiston
Laredo	Scottsbluff	Pocatello
Lubbock	Valentine	Montana
Midland	North Dakota	Billings
Port Arthur	Bismarck	Glasgow
San Angelo	Fargo	Great Falls
San Antonio	Williston	Havre
Victoria	South Dakota	Helena
Waco	Huron	Missoula
Wichita Falls	Rapid City	Nevada
<u>REGION 6</u>	Sioux Falls	Elko
Colorado	Wyoming	Ely
Colorado Springs	Casper	Las Vegas
Denver	Cheyenne	Reno
Grand Junction	Lander	Winnemucca
Pueblo	Sheridan	Oregon
Iowa	<u>REGION 7</u>	Astoria
Burlington	Arizona	Eugene
Des Moines	Phoenix	Meacham
Dubuque	Prescott	Medford
Sioux City	Tucson	Pendleton
Waterloo	Winslow	Portland
Kansas	Yuma	Roseburg
Concordia	California	Salem
Dodge City	Bakersfield	Utah
Goodland	Burbank	Salt Lake City
Topeka	Eureka	Washington
Wichita	Fresno	Olympia
Minnesota	Los Angeles	Seattle
Duluth	Oakland	Spokane
International Falls	Pomona	Walla Walla
Minneapolis	Red Bluff	Wenatchee
Rochester	Sacramento	Yakima
St. Cloud	San Diego	

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES

The task of developing civil defense preparedness against the possible use of modern atomic and hydrogen weapons is without precedent in the United States. Consequently basic policies, plans, and procedures had to be evolved and developed at all government levels. Training and practice exercises have been one means used to evaluate, test and further develop proposed plans. Many training exercises have taken place throughout the country as State and local civil defense organizations developed plans and projects in which testing was useful. Such exercises have been especially useful in testing evacuation plans, reception area plans, mass feeding and other mass care programs, warning

and communications systems, as well as in training specific groups of civil defense workers in the performance of their emergency duties.

The following table lists in summary form the State and local training exercises that have been reported to FCDA. The data are arranged by FCDA Region and State. While the list is not necessarily complete, it does indicate the nature of the exercises conducted to train and test certain civil defense elements. Some idea of magnitude can be obtained from the fact that over 200 exercises are listed below and more than 900 additional, are reported to have occurred in fiscal year 1957.

EXERCISES REPORTED By Region

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
<u>REGION 1</u>					
Connecticut					
State of Connecticut	"Alert" Jul 13-15, 1956	To train Control Center Operational staffs.	State-wide	10,000	3 days
Danbury - Redding	Oct 19, 1956	Mobile support test, including water rescue operation.	Local CD	200	1 day
State of Connecticut	Nov 26, 1956	Surprise staff mobilization for State and area Control Centers.	Area Control Center	750	4 hrs.
Newington - Cromwell	Mar 3, 1957	To test evacuation of two towns	2 towns	1,500	4 hrs.
State of Connecticut	Mar 11, 1957	To train State and area Control Center staffs.	5 areas	300	2 hrs.
State of Connecticut	May 19, 1957	Movement of mobile support units to New London.	State, East of New Haven	3,000	1 day
Norwalk	"Rescue Test" May 28, 1957	To train rescue teams and Frog Men.	City	100	½ day
New Haven	Jun 1, 1957	To train mass feeding teams.	City and Area	250	½ day
Hamden	Jun 4, 1957	To train mass feeding teams.	Town	125	½ day
Stamford - Greenwich	Jun 8, 1957	To train local CD personnel of two communities in mutual aid support.	Two cities	1,500	1 day
Naugatuck Valley towns	Jun 26, 1957	To test mobilization support of rescue teams from twelve towns.	Naugatuck Valley Area	350	1 day

(Continued)

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
State of Connecticut	"Operation Rescue"	Surprise test simulating 1955 flood conditions.	State, Area & Local Control Centers	2,500	1 day
State of Connecticut	Dec 15, 16, 1956	Civil Defense organizations operated during an ice storm, actually supplying generators, supplies and other equipment for relief, particularly to institutions, State prison, hospitals, etc., which were without electric power during this period.	State	-	36 hrs.
Hartford	Dec 31, 1956	State Office of Civil Defense made its facilities available during a disastrous fire which destroyed St. Joseph's Cathedral.	State CD Office	-	-

In addition to the exercises listed, each of the five areas in Connecticut held monthly communication drills between Area Headquarters and their local Civil Defense Control Centers throughout the year.

Maine

State of Maine	"Test Alert", Jul 10, 1956	To test effectiveness of the Air Raid Warning system of the entire State, operating quality of new sirens, and to provide the public an opportunity to hear the yellow and red alarms.	State-wide	80,000 CD Volunteers	1 day
Portland	"Homerun" Jul 19, 1956	Preliminary test of "go home" phase of Portland evacuation plan during non-school period.	City-wide	20,000	1 hr.
Cumberland County	"Wolfpack", Sept. 25, 1956	Surprise alert to test manning procedures and communications.	County-wide	200	7 hrs.
State of Maine	"Operational Readiness" Nov 29-Dec 10, 1956	To test operational readiness.	State-wide	5,000	11 days
State of Maine	"Test Alert", Jan 14, 1957	To test effectiveness of the Air Raid Warning system of the entire State, operating quality of new sirens, and to provide the public an opportunity to hear the yellow and red alarms.	State-wide	80,000 CD Volunteers	1 day
Cumberland County	"Natural Disaster" Feb 15, 1957	Preliminary test of natural disaster procedures and coordination with Brunswick Naval Air Station passive defense teams.	County-wide	75	4 hrs.
Cumberland County	"Snowdrift", Mar 22, 1957	Test of natural disaster procedures and coordination of county CD forces with Brunswick Naval Air passive defense teams.	County-wide	200	8 hrs.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Androscoggin County	"Poland Fires", Apr 21, 1957	Forest fires in town of Poland and vicinity afforded opportunity to test county and town CD capabilities of mobilization and action in natural disaster.	Androscoggin County	650	10 hrs.
Cumberland County	"Forest Fire" May 4, 1957	Test of CD forest fire fighting procedures and coordination with Maine Department of Forestry.	Cumberland, Androscoggin and York Counties	300	6 hrs.
Washington County	"Forest Fires", May 8 - 10, 1957	Extensive fires in Washington County (4500 acres of forest, 17 buildings) afforded opportunity to test county and town CD capabilities of mobilization and action in natural disaster, also cooperation with National Guard and local Federal agencies.	County-wide	500	3 days
York County	"Forest Fires", May 9-11, 1957	Extensive fires in York county (15,000 acres, 20 buildings) afforded opportunity to test State, county and town CD capabilities of mobilization and action in natural disaster; also tested coordination of State, county, and town CD organizations with State Forestry Department and American Red Cross.	State-wide	1,200	3 days
Limestone	"Evacuation", May 23, 1957	Evacuation of dependents from Loring Air Force Base.	Caribou, Ft. Fairfield, Limestone area.	100 CD, 1200 dependents	1½ hrs.
Androscoggin County	"Mayflower", May 26, 1957	To test capabilities of county and local CD organization in attack situation.	County-wide	650	5 hrs.
Bangor	"Homerun", Jun 25, 1957	Preliminary test of "go home" phase of City-wide Bangor evacuation plan during non-school period.	City-wide	18,000 citizens 850 CD volunteers	1½ hrs.
State of Maine	"Air Raid Warning" Jun 26, 1957	Test of fan-out plan for disseminating air raid warning.	State-wide	2,500	1 hr.
Massachusetts					
State of Massachusetts	"Communication Drill" Jul 9, 1956	To test effectiveness of Warning and Communications Network.	State-wide	1,200	3 hrs.
Boston	"Operation Beacon Hill" Jul 19, 1956	Evacuation of State government to alternate site at Framingham.	All State offices	200	3 hrs.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
State of Massachusetts	"Operation Alert 1956" Jul 20, 21, 22	National Exercise.	State-wide	1,500	3 days
Westover Field, Orange, Massachusetts	"Operation Orange" Sep 15, 1956	Evacuation of personnel from Westover Air Force Base 26 miles to Orange.	-	3,140	4 hrs.
State of Massachusetts	"Operation Scarlet" I, II, III, IV, Jan & Feb 1957	Test of Control Center at each area Headquarters.	State-wide	85	4 days
State of Massachusetts	"Operation Pre-Alert" May 1957	Preliminary test of operational capability of all services.	State-wide	1,200	3 days
New Hampshire					
Manchester	"Operation Alert" Jul 20, 21, 22, 1956	Relocation of city and county government during the National exercise.	City	40	2½ days
New Jersey					
State of New Jersey	"Operation Ready No. 1" Nov 29, 1956	To test the extent and value of intelligence which may be funneled into State Control immediately following an attack and the extent and nature of reliable information which can be disseminated during the first two-hour period. This session was confined to hours D 1 and 2.	State-wide	-	1 day
State of New Jersey	"Operation Ready No. 2" Jan 31, 1957	To develop methods of (1) determining type and size of burst, (2) determining restrictions imposed by radioactive fallout, (3) transmitting refined data to State Control Center, and (4) transmitting requests for assistance. This was a continuation of "Ready No. 1" and covered the period D 3 and 4 hours.	State-wide	-	1 day
State of New Jersey	"Operation Ready No. 3" Mar 14, 1957	This training session, a continuation of Ready 1 and 2, was designed to appraise the situations as of the end of the first 24 hours following an attack.	State-wide	-	1 day

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
State of New Jersey	"Operation Ready No. 4" Apr 29, 1957	This final exercise in the Ready series was designed for full public participation. Test sirens were sounded. All Control Centers were activated and the public took shelter during the 10-minute "Take Cover Period". Emphasis was placed on explanation of means to reach the public in shelter to apprise them of the situation.	State-wide	-	1 day
New York					
Broome County	- Jul through Dec, 1956	Field Operations - three days a week.	Warden Service	200	4 hrs.
Batavia, Genesee County	- Jul 1, 1956	Natural Disaster Operation.	Police, Fire and Public Works Service	200	10 hrs.
Broome County	- Aug 25, 1956	Field exercise.	Police Service	200	5 hrs.
Patchogue, Suffolk County	-	School evacuation.	Schools Service	500	30 min.
Oneida, Madison County	- Sep 12, 1956	Evacuation exercise.	Schools Service	400	1 hr.
Sidney, Delaware County	- Sep 12, 1956	Command Post exercise and physical demonstration.	All Services	500	5 hrs.
Mount Vernon, Westchester County	- Sep 13, 1956	Evacuation exercise.	Schools Service	13,400	-
Rye, Westchester County	- Sep 18, 1956	Evacuation exercise.	Schools Service	487	15 min.
Geneva, Ontario County	- Sep 19, 1956	Physical demonstration	All Services	200	2 hrs.
Watertown, Jefferson County	- Sep 28 & 29, 1956	Training exercise for support area participation.	All Services and Support Area	1,500	2 days
Buffalo, Erie County	- Oct 1956	Weekly training exercises.	Police Service	750	3 hrs. each
Broome County	- Oct 3, 1956	Test alert.	Operations Staff	200	20 min.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Brighton, Monroe County	- Oct 4, 1956	Field exercise.	Public Works, Rescue, Medical and Fire Services	400	2 hrs.
New York Mills, Oneida County	- Oct 5 & 6, 1956	Natural disaster exercise and field demonstration.	All Services of Oneida County and Utica Support Area	600	4 hrs.
North Tonawanda, Niagara County	- Oct 5 & 6, 1956	Natural disaster exercise and field demonstration.	All Services and Support Area	500	4 hrs.
New York City	- Oct 12, 1956	Military drill.	Warden Service	295	3 hrs.
New York City	- Oct 14, 1956	Emergency test.	Communications Test	300	3 hrs.
Elmira, Chemung County	- Oct 14 - 31, 1956	On the job training.	Police Service	200	7 hrs. daily
Moriches Center, Suffolk County	- Oct 15, 1956	Mutual aid, fire - physical demonstration.	Fire Service	300	6 hrs.
Babylon, Suffolk County	- Oct 18, 1956	Field exercise.	All Services	350	3 hrs.
Allegany County	- Oct 27, 1956	Command Post and field exercise.	All Services and Command Installations	325	4 hrs.
Pine Bush, Orange County	"Go Home" Nov 1, 1956	Go Home drill for school children and general public.	Local CD Staff	1,000	2 hrs.
Greece, Monroe County	- Nov 14, 1956	Field exercise.	Chaplain, Medical, Warden, Public Works, Rescue, Public Utilities and Fire Services	400	3 hrs.
Norwich, Chenango County	- Nov 15, 1956	High school evacuation exercise.	Schools Service	873	-
Chautauqua County	- Nov 24 & 25, 1956	Natural disaster operation	All Services	200	24 hrs.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Broome County	- Nov 28 & 29, 1956	Exhibition.	Medical Service	487	12 hrs.
Broome County	- Dec 4, 1956	Test alert.	Operation Staff	200	20 min.
Mount Vernon, Westchester County	- Dec 8, 1956	Public alert test and medical mobilization	Medical Service	250	2½ hrs.
Buffalo, Erie County	- Dec 12, 1956	Test of shelter plan in local plant.	Plant Protection Service	800	30 min.
Elmira, Chemung County	- Dec 12 & 13, 1956	Mobile hospital demonstration.	Medical Service	735	12 hrs.
Buffalo, Erie County	- Dec 17, 1956	Plant shelter drill	Plant Protection Service	800	30 min.
Nassau County	- Jan 21, 1957	Physical demonstration.	All Services	1,965	2½ hrs.
Nassau County	- Jan 23, 1957	Command Post exercise	All Services	646	2 hrs.
Rye, Westchester County	- Jan 24, 1957	School shelter drill	Schools Service	812	10 min.
City of New York, Bronx	- Jan 29, 1957	Physical training.	Warden, Rescue, Transportation, Public Works, Medical, Fire and Welfare Services.	300	3 hrs.
Erie County	- Feb 15, 1957	Demonstrations of evacuation and rescue.	Rescue Service and Schools Service	1,600	1 hr.
City of New York, Manhattan	- Mar 26, 1957	Physical exercise.	Fire, Warden, Rescue, Welfare, Transportation, Public Works, and Medical Services	275	3 hrs.
Jamestown, Chautauqua County	- Apr 1 - Jun 30, 1957	Field exercises	All Services	550	-
Mount Vernon, Westchester County	- Apr 27, 1957	Physical demonstration	All Services	500	3 hrs.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Binghamton - Deposit, Broome County.	"Evac 12" May 5, 1957	Mass evacuation.	All Services	3,600	6 hrs.

The above list for New York includes only those exercises in which there were 200 or more participants. In addition, there were approximately 418 smaller exercises in the State during FY 1957, most of them lasting only a part of one day and designed for the training of some specific technical group, or for testing and practice on some particular aspect of civil defense work. The State Office of Medical Defense, the civil defense arm of the Department of Health, also exhibited a 200-bed civil defense emergency hospital in 22 cities with an attendance of approximately 15,000 persons, many of whom were from the medical profession.

Rhode Island

State of Rhode Island	Jul 20, 1956	To test setting up and operation of emergency hospital.	Support Area for City of Warwick	70	3 days
State of Rhode Island	Sep 1956	Operational evaluation of radiological training.	State and Local Areas	69	1 day
State of Rhode Island	"Operation Alert" Jul 20 - 22, 1956	Testing entire CD facilities for State.	State CD Center	198	3 days
Foster	"Operation Alert" Aug 20, 1956	To test disaster teams and communications.	Mobile Radio Ambulance Fire Truck	20	2 hrs.
Narragansett	"Operation Alert" 1956	To test communications.	Communications	5	4 hrs.

Vermont

Springfield	"Operation Alert" Jul 22, 1956	To test local CD Communications. Wardens, Fire, Police and Messenger Services participated.	City	225	2 hrs.
Manchester	Mar 5, 1957	To demonstrate 200-bed improvised hospital and use of medical stockpile.	City	55	4 hrs.

REGION 2

Delaware

Wilmington

During FY 1957, the City of Wilmington conducted exercises to train volunteers in warden responsibilities, emergency mass feeding and auxiliary police and firemen activities. Approximately 35 to 150 participated in each exercise and received from 8 to 60 hours of training.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
New Castle County		New Castle County conducted training exercises to train people in the fields of communications, special weapons defense, auxiliary police, rescue, fire, wardens, and basic CD duties, with participation ranging from 40 to 300.			
Delaware City	"Alert" - Jul 20 - 24, 1956	Rehearsal of operational procedures.	State Control Center	200	57 hrs.
	Jul 20 - 21, 1956	Ground observer capability test.	State-wide	408	36 hrs.

In addition to the exercises listed, the State of Delaware conducted a number of training exercises at the State Control Center to provide training in communications, mass feeding, explosive ordnance reconnaissance, and police work. It conducted three State-wide tests of Ground Observer capabilities and three short administrative training exercises for Ground Observer supervisors. There were exhibitions of 200-bed FCDA Emergency Hospitals in Delaware cities during the year, which were viewed by over 100,000 persons. Exercises were conducted to train some 150 people in various aspects of emergency hospital operation.

District of Columbia

D. C.	"Alert" Jul 1956	Command Post Exercise. Relocation of Command Post to Olney, Md.	Alternate Command Post at Olney, Md.	-	36 hrs.
	Sep 1956	Surprise curb evacuation drill by personnel of Department of Agriculture and shelter drill by personnel of Justice Department.	Justice Dept. and Agriculture Dept. buildings	All employees	-

Kentucky

Frankfort	"Blackout" Jul 20, 1956	Token evacuation and blackout.	City	400 evacuees	1 hr.
Paducah, Ashland, Bowling Green, Louis- ville, Lexington	- Feb 25, 1957	To test integrated communications.	State	181	2½ hrs.
Paducah, Ashland, Bowling Green, Louisville, Lexington	- Apr 22, 1957	Training of staff at all levels in control center operations and problem solution.	State	181	2½ hrs.

Maryland

Entire State	"Operation Flame" May 26, 1957	To test operational readiness of the Fire and Rescue Services in Maryland.	State-wide	1,300	6 hrs.
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Ohio

Columbus	- Jul 20, 1956	Governor, his cabinet, and elected officials of the State moved to alternate sites of government.	State Offices	-	24 hrs.
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CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Canton	- Jul 20, 1956	To ascertain ability of hospital personnel to evacuate patients in emergency and the needs for additional training and planning. Children and hospital personnel were used as simulated patients.	Mercy Hospital	313	1½ hrs.
Columbus	- Aug 26, 1956	Training exercise for 51st and 52nd Mobile Support Groups from home stations in the Painesville and Findlay areas to Columbus in order to provide training in actual convoy operations.	State Fair Founds	1,500	20 hrs.
Lucasville	- Aug 26, 1956	11th Mobile Support Group from Cincinnati area in convoy exercise demonstration and mass feeding exercise.	County Fair Grounds	750	20 hrs.
Columbus	"Walk Home Alert" Dec 10, 1956	Christ The King School elementary school students sent home in practice evacuation utilizing "Buddy System".	School	750	20 hrs.
Columbus	"Walk Home Alert" Dec 13, 1956	Huy Road School sent students home in practice evacuation utilizing the "Buddy System."	School	752	-
Columbus	"Walk Home Alert" Jan 15, 1957	Saint Gabriel School sent elementary school students home in practice evacuation utilizing the "Buddy System".	School	500	-
State of Ohio	- Apr 8, May 13 and 27, Jun 10, 1957	Series of Control Center Exercises involving Radio personnel in the techniques of message handling. State, Area and Critical Target City Control Centers participated.	State-wide	450 ea.	2½ hrs.
Gahanna	- Apr 15, 1957	Evacuation of entire school system to point 11.5 miles distant and return. School buses and autos of teachers utilized for transportation.	City-wide	1,700	63 min.
State of Ohio	- Apr 22, 1957	Training Exercise involving all control center personnel at State and Area levels in Command Post Exercise.	State-wide	300	2½ hrs.
Gahanna	- May 6, 1957	Evacuation of entire school system to point 15 miles distant where children disembarked from transportation and then remounted after about 15 minutes and returned to classes. All children were out of school and aboard transportation in 3 minutes.	Schools	1,700	1 hr. 45 min.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
<u>Pennsylvania</u>					
Erie	- Jul 20, 1956	Simulated hospital evacuation, mass care center placed in operation, Police, Welfare and Medical Services participated in mobile support exercise.	7 Northwestern Counties	2,000	4 hrs.
Lower Merion Township	- Mar 1957	Activation and exercise of mass care center and personnel.	Township	1,000	1 day
Summit Hill	- Apr 1, 1957	Alert and exercise of county and borough to test CD plans.	County and Borough	500	3 hrs.
Greenburg	- May 15, 1957	Mass care demonstration, culmination of five-week course in mass feeding.	County	225	6 hrs.
Venango County	- May 1957	Test of operation and coordination of Fire, Rescue, Police Services and communications.	County	359	1 day
Watsonstown	- Jun 1, 1957	Test of Radiological Defense organization.	Borough	100	2 days
Lehigh County	-	Monthly exercise to test Control Center procedures and rescue capability.	County	100	1 evening per month
<u>Virginia</u>					
Clifton Forge	"Alert" Jul 20, 1956	To test civil defense plans and take cover exercise.	Town	All residents	-
Martinsville	"Alert" Jul 20, 1956	To test recovery operations, personnel and emergency units of evacuated city.	85 Emergency Units	150 persons	-
Portsmouth	"Alert" Jul 20, 1956	Evacuation, housing, feeding and medical care for youths transported 10 miles from city to local airport.	Airport	599	5 hrs.
Culpeper	"Alert" Jul 20, 1956	Take cover exercise.	Entire town	All residents	-
<u>West Virginia</u>					
St. Albans	- Jul 21, 1956	To test evacuation plan.	Holiday Park	8,000 2,058 vehicles	4 hrs.
<u>REGION 3</u>					
<u>Florida</u>					
Tallahassee	- Jul 20, 1956	Evacuation of downtown area.	City	22,000	30 min.
Valparaiso	- Jul 20, 1956	Evacuation and mass feeding.	Town	160	30 min.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Hillsborough County	- Jul 20, 1956	Evacuation - first aid and lunch stands for dependents of Air Force Base.	MacDill Air Force Base	1,050	-
Duval County	- Jul 20, 1956	Evacuation of employees and clients of Florida Employment Service.	Office building	250	-
Orange County	"Operation School-out" Jan 30, 1957	Evacuation of all Orange County schools.	Schools	-	1 hr.
Leon County	- Mar 9, 1957	Emergency Hospital Training for doctors and nurses.	School	300	-
Hillsborough County	- Mar and Apr 1957	Evacuation of eleven schools.	Schools	8,650	-
Hillsborough County	- May 1957	Radio Communications Exercise.	County-wide	-	-

Georgia

Atlanta	- Apr 30, 1957	School evacuation.	122 Schools 6,400 vehicles	62,550	-
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In addition, the State of Georgia conducted five public demonstrations, following Basic Rescue Courses, which included participation of fire, police, nurses aid, rescue, and engineering groups.

North Carolina

Charlotte	"Alert" Jul 20, 1956	Evacuation of City Hall and County Court House to test time and means of transportation to Pineville.	All city and county offices	-	1 hr.
Forsyth County - Vienna Community	- Oct 1956	Exercise involving Rescue, Fire-fighting, Motorcycle Corps, Ambulance and First Aid.	-	100	-
Salisbury	- Oct 4, 1956	Test of 8 CD services under simulated attack on residential area.	50 residential blocks	800	2 hrs.
Charlotte-Mecklenburg & Union County	- Dec 7, 1956	Evacuation of Sharon School - Mecklenburg County to Indian Trail School - Union County.	School	655 116 vehicles	-
Greensboro, Guilford County	- Apr 1957	Evacuation of Peck School to test time and transportation.	School	650 100 vehicles	-
Greensboro, Guilford County	- Apr 9, 1957	Evacuation of Porter School to test time and transportation.	School	240 40 vehicles	-

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Greensboro, Guilford County	- Apr 10, 1957	Evacuation of J. Y. Yoyner School to test time and transportation.	School	320 70 vehicles	-
Charlotte, Mecklenburg County	"Interstate" Apr 10, 1957	Evacuation of O'Donaghue School to Lancaster, S. C., testing life saving crew and other services.	School	-	-
Greensboro, Guilford County	- Apr 29, 1957	Test for service heads and staff only.	Control Center	-	-
Raleigh, Wake County	"Operation 21" May 21, 1957	Test of all services involved in evacuation of Wiley School.	School	440	-
Greensboro	"City Block" May 25, 1957	To test family participation in evacuation.	One residential block	18 families	-
Winston-Salem	- May 28, 1957	John Moore Elementary School evacuated. Drove out 2 miles, registered children and returned.	School	625	-
Greensboro, Guilford County	- Mar 11, 1957	To test time required and best method to remove 700 college students from class and residence buildings.	Guilford College	700	-
Greensboro, Guilford County	- Spring 1957	To find the best way to evacuate the faculty and student body of Women's College, U.N.C., with attention to ramps, ventilation, capacity and loading in freight cars.	College	Selected group of students	-

REGION 4

Indiana

Richmond	"Surprise Alert" Oct 24, 1956	Disaster relief exercise, with participation by the public and all local civil defense organizations.	City	-	1 hr.
State of Indiana	"Warm-up" Mar 30, 1957	Exercise participated in by State headquarters and a number of counties, to test the effectiveness of amateur radio communication.	-	200	-
Rush County	- May 4, 1957	A paper exercise to plan reception of evacuees.	-	-	-
Gary	"Help" Jun 2, 1957	Police, Communications and Welfare Service exercise.	City	-	-

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
<u>Michigan</u>					
Oxford	- Sep 17, 1956	A natural disaster operation involving all local facilities, personnel and equipment.	Township Hall, RACES, CAP and Red Cross equipment	200 volunteers	2½ hrs.
East Detroit	- Jan 20, 1957	An evacuation exercise in which a one-half square mile area was 90% evacuated and routed northward.	City police, cruisers, men and radio equipment	4000 evacuees 150 volunteers	1 hr.
West Bloomfield Township	- Jan 20, 1957	Demonstrations of all local disaster operations in a large public building. Purpose: Recruiting and public education.	Township personnel, police and fire units	300 volunteers and officials, 5000 observers	4 hrs.
Zeeland	- Mar 4, 1957	Simulated natural disaster with traffic, rescue and medical problems.	Police units, private station wagons	100 CD volunteers	1 hr.
Kent County	- Mar 9, 1957	RACES units dispatched to report on "disaster" conditions over a wide area. Reports sent back to control center.	50 mobile and fixed RACES radio units	100	2 hrs.
East Detroit	- Mar 24, 1957	Another sector evacuation test - with simulated natural disaster problems -- medical, traffic control, etc.	Police units, 60 private station wagons	3000 evacuees, 150 CD volunteers	1 hr.
State of Michigan	- Mar 26, 1957	Test alert sent to all "primary receivers" in cities over 1000 population. Reports on local fan-outs sent back to State CD Control Center.	Michigan Defense Warning System	200 local CD directors and their staff personnel	3 hrs.
<u>Missouri</u>					
University City	- Apr 26, 1957	Evacuation of pupils and teachers of Delmar Harvard School to safety zone and return.	School	531 pupils 112 adults	32 min.
St. Louis	- May 9, 1957	Evacuation of Bemis Bros. Bag Co. employees to safety zone and return.	Industrial Plant	100	17 min.
St. Louis	- Jun 11, 1957	Test evacuation of the Aeronautical Chart Plant.	Entire plant	2,700	18 min.
<u>Wisconsin</u>					
Plymouth	- Jul 22, 1956	Simulated emergency activities by medical teams from Sheboygan and Oshkosh. Emergency Welfare Service prepared meals for them.	City and Area	150	-

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Elkhorn	- Jul 22, 1956	Simulated emergency activities by medical teams from Lake Geneva and Stoughton. Emergency Welfare Service furnished meals for them.	City and Area	150	-

REGION 5

Louisiana

State of Louisiana	- Jun 10 - 15, 1957	Youth instruction in basic rescue techniques.	Boy Scout Camps	500	5 days
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Oklahoma

Training exercises, for which full details are not available, included an evacuation drill at Midwest City, June 12, 1957; continuous radiological drills at Midwest City; a warning test in Ponca City, June 1957, and several control center exercises and training activities throughout the State.

Texas

A&M College Station	- Jul 8 - 13, 1956	To test rescue and fire operations and first aid training, using experienced instructors, equipment and materials of various cities, industries and military installations, as well as those of the Firemen's Training School.	Firemen's Training School	1,383	6 days
State of Texas	"Alert, 1956" Jul 20 - 23, 1956	To test civil defense preparedness of State and local governments in coping with possible enemy attack.	All civil defense facilities of State and local governments	5 target cities	36 hrs.
Jefferson County	"Operation Dynamite" Nov 19 - 20, 1956	To test local civil defense operations.	County-wide	1,400	2 days
Galveston	"Air Attack Alert" Nov 25, 1956	To determine how much medical assistance could be supplied immediately, and ability to evacuate casualties to temporary hospital headquarters.	City hospitals	-	1 day
Beaumont and Jefferson County	"Operation Mercy" Feb 29, 1957	To test evacuation plans and health and emergency medical services as result of simulated sabotage explosion in hospital.	Hotel Dieu Hospital	350	1 day
Harris, Galveston, Brazoria, Matagorda and Wharton Counties	"Operation Rebound" Mar 30 - 31, 1957	To test usefulness of 200-bed hospital units; to provide students and faculty of University of Texas Medical Branch and Baylor University College of Medicine a practical problem as part of the MEND program; and to conduct a medical disaster exercise in support of a devastated metropolitan area.	5 counties	1,000	22½ hrs.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Fort Worth and Tarrant County	- Apr 4, 1957	Simulated evacuation of all school children of city and county, with help of PTA, school administrative staff, Texas Education Agency, and Department of Public Safety.	106 Schools 9,830 cars	58,960	1 day
Lamesa	"Civil Defense Muster" May 9, 1957	To test civil defense communications and air raid warning system.	Entire city civil defense organization	City-wide project	1 day

REGION 6

Colorado

Jefferson County	"Kids" May 15, 1957	Mass evacuation of school children	58 Schools	23,000	2½ hrs.
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Wyoming

Training exercises during FY 1957 included: 4 public participation exercises in Operation Alert 1956; 4 public participation exercises in First Aid, and Registration & Information fields, and 1 State-wide GOC exercise with 10,500 persons participating.

REGION 7

California

State of California	"Operation Alert" Jul 20, 1956	Exercises were held in approximately 24 cities to test their Emergency Operations plan.	State Control Centers	1,965	6 hrs. ea.
San Buenaventura	- Nov 7, 1956	To train citizens in activating Emergency Call plan.	City	375	1 hr.
Bay Area	"Operation Quiver" Nov 8, 1956	A Natural Disaster test exercise - a simulated major earthquake equal to the one in San Francisco in 1906. Participation of all county and city civil defense personnel of area, under the coordination and direction of California Disaster Office regional Control Center. Cooperative participation between Red Cross Chapters and CD organizations, pointing out the responsibilities of each during a natural disaster.	16 counties 104 cities	4,000	6 hrs.
Humboldt County	"Operation Quiver" Nov 8, 1956	To test operational readiness of county-wide CD organizations to handle an earthquake situation and coordination of CD and Red Cross.	County	153 CD personnel 25 Red Cross personnel	6 hrs.
State of California	"Operation Flood" Nov 15, 1956	Exercises were held in approximately 5 cities to train personnel in evacuation and mass care in a natural disaster.	Cities	-	5 hrs. ea.
State of California	"Operation Shakedown" Nov 29, 1956	Exercises held in sixteen cities to train personnel in major disaster operations.	Control Centers	1,059	4½ hrs. ea.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Oakland	- Dec 19, 1956	To test the evacuation of plant of Continental Can Company and train their volunteer firemen.	Plant	400	-
Oakland	"March Hare" Mar 10, 1957	To test coordination between CD personnel and auxiliary fire, police and communications personnel.	Control Center and 3 Schools	350	7 hrs.
Monrovia	- Mar 14, 1957	Simulated series of disaster incidents to train CD personnel.	All CD Services	200	3 hrs.
Oakland	"May Day" May 5, 1957	City-wide preparedness test including auxiliary police, firemen and Ham operators.	City	400	5 hrs.
Oakland	- Jun 7, 1957	To test evacuation of plant of Continental Can Company and train their volunteer firemen.	Plant	460	-
Richmond	"Walkout" -	Evacuated school children to nearest crossing for dispersal to loading points or homes.	5 Schools	300 - 400 per school	-
Walnut Creek	"Walkout" -	Using "buddy" system (older students teaming up with younger ones) evacuated Murwood School and walked home about 3 miles.	School	525 Students, Block Mothers	-
Lafayette	-	Mock-loaded students of Acalanes High School to assigned transportation.	School	800	12 min.
Walnut Creek	-	Students of Las Lomas High School proceeded to loading areas and mock-loaded, 16 vehicles at a time.	School	1,050 600 to be evacuated	10 min.
Lafayette	-	Parents' cars were on hand for evacuation of Elementary School children.	School	750 pupils 125 drivers	24 min.
Richmond	-	Students of Junior High School evacuated and taken to loading points to be picked up by parents' cars.	School	1,400 students	10 min.
Orinda	-	Evacuated Elementary School children - led by teachers to six staging areas, then driven by parents over prescribed routes.	School	450 students	9 min.
Oakland	"Operation Pill Hill" -	Mock catastrophe - commercial airplane crash into apartment house. Practice sorting, treating and transporting 200 victims of the disaster, by doctors, nurses, CD personnel and volunteers.	Lakeside Park	1,500	-

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
San Francisco	"Operation Drop Everything" -	A tactical demonstration of an evacuation of Terminal Annex Building to show the benefits of proper planning and training.	Office Building	500	8 min.

The above list for California includes only a small portion of more than 150 exercises held in the State during FY 1957. Other exercises were for the training of specific technical groups or for testing and practice on some particular aspect of civil defense work.

Oregon

Estacada	- Sep 9, 1956	To demonstrate mass feeding techniques to public.	-	3,000	6 hrs.
Portland	- Sep 17, 1956	To test evacuation of Good Samaritan Hospital. Some patients and volunteers acting as patients.	Hospital	175	3 hrs.
Roseburg	- Nov 28, 1956	Public demonstration to train Welfare and Medical personnel in mass care, shelter, feeding and medical methods.	County	250	6½ hrs.
Medford	- Apr 3, 1957	Camp White Civil Defense group set up CD emergency hospital for demonstration and display to Jackson County Medical Society.	-	185	12 hrs.
Oak Grove	- May 9, 1957	Evacuation of school children from two schools, using buses and volunteers' vehicles.	Schools	730 students 100 volunteers	9 min.
Oak Grove	- May 20, 1957	Evacuation of students and teachers, by private cars, assembled by sounding a surprise alert.	Schools	630 students 135 volunteers	13 min.

Washington*

King County	"Evacuation" Feb 21, 1956	Test of loading zone plan, student traffic control and assignment of teachers for evacuation.	4 schools	1,280	16 min.
Richland	- Mar 5, 1956	Clearing schools, loading, transportation out of city, then returning.	Schools	7,200	40 min.
Clallam County	- Mar 8, 1956	Receiving simulated caravans of evacuees and casualties from Seattle and Bremerton.	County	300	3 hrs.
Clark County	"Medical" May 9, 1956	Testing of hospital facilities for handling casualties from natural disaster; doctors, other hospital personnel, Red Cross, and other volunteers took part, with 150 high school students as casualties.	Hospitals	600	4 hrs.

* List includes some FY 1956 exercises not previously published.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Richland	- May 10, 1956	Testing evacuation plans of hospital.	Hospital	150	11 min.
Pacific County	"Education" May 14, 1956	Testing county's readiness to receive evacuees, emergency operations in hospitals, and emergency welfare operations in schools.	County	500	3 hrs.
Yakima County	- May 19, 1956	Simulated hospital set up at school with sections for shock, surgery, burns, and radiation.	School	75	3 hrs.
Coulee Dam Area	- May 25, 1956	Test evacuation of schools and hospital.	Schools and Hospital	550	1 hr.
Seattle	- Jun 6, 1956	Evacuation of civilian and military personnel by boat and automobile. Personnel secured classified material, turned out lights and set up blackout facilities.	Seattle Army Terminal	1,500	12 min.
Cowlitz County	- Jul 21, 1956	Training and testing of two hospitals in handling simulated emergency casualties.	Two Hospitals	300	2 hrs.
Richland	- Jul 21, 1956	Mass evacuation of Richland residents in autos and buses to four staging areas, where they were registered by Red Cross and returned.	City	2,700	3 hrs.
Pierce County	- Jul 21, 1956	Token evacuation drill from 23 CD areas to emergency headquarters at Eatonville. Evacuees registered, fed, given decontamination treatment. All 61 county traffic control points manned. Four emergency hospital units set up.	County	700	3 hrs.
Seattle	- Jul 21, 1956	Evacuation drill of school district. 133 cars simulated picking up school children.	School District	700	2 hrs.
Seattle	- Jul 22, 1956	Demonstration of emergency hospital 50 beds used. Personnel furnished by 19 hospitals, Red Cross, Welfare Services, government agencies, trucking companies. Boy and Girl Scouts provided patients.	West Seattle	300	6 hrs.
Tieton	- Oct 30, 1956	Assuming 7,000 refugees evacuated to Tieton Zone of Yakima county, mass care, medical and traffic problems were handled.	Yakima County	100	4 hrs.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
Seattle	- Dec 7, 1956	Evacuation of children in two schools to loading zones where they were picked up by autos. Block wardens issued instructions.	2 Schools	1,100	1 hr.
Seattle	- Jan 17, 1957	Testing feasibility of evacuating school children by moving van.	Elementary School	400	15 min.
Sunnyside	- Feb 8, 1957	Practice exercise for traffic control, reception and mass care for 12,000 evacuees. County staff was also engaged in over-all problems.	Yakima County	100	3 hrs.
Whatcom, Skagit, Island Counties	"Tri-County Exercise" Mar 10, 1957	Test of reception facilities for more than 100,000 evacuees from Seattle, from the standpoint of traffic control, communications, emergency welfare, and medical facilities. Test of arrangements with Canada for crossing border through customs and immigration authorities.	3 Counties	750	5 hrs.
Bremerton	- Apr 10, 1957	Testing of school evacuation. Hour and day previously unannounced. Pupils went home, had slip of paper signed by parents, and returned to school.	School	400	25 min.
College Place	"Starlight" May 14, 1957	Emergency hospital set up. Casualties taken from field to hospital, processed through all sections. Bombs set off, fires extinguished by firemen. Monitoring team detected hidden radioactive object.	Walla Walla County	3,000 (including spectators)	3 hrs.
Everett	- May 15, 1957	Testing disaster medical plan of hospital, assuming school bus accident in which 50 students were injured. Doctors and hospital staff processed them through sections.	Hospital	150	2 hrs.
College Place	- May 17, 1957	School evacuation; students loaded in private cars and buses; returned to school.	School	300	32 min.
Everett	- May 18, 1957	125 beds of emergency hospital set up. 170 casualties transported across town to hospital and processed through sections. Short wave radio communications used to substitute for "inoperative" telephone system.	Snohomish County	500	4½ hrs.

CIVIL DEFENSE IN THE U.S.

TRAINING EXERCISES (Continued)

Location	Operation Name and Date	Object or Description	Area or Facilities Involved	Approximate Number of Participants	Time
<u>TERRITORIES and POSSESSIONS</u>					
Alaska					
Anchorage	"Operation Alert" Jul 21, 22, 23, 1956	Full scale test including evacuation	City	5,000	-
Fairbanks	"Operation Alert" Jul 22, 1956	Staff exercise without evacuation.	-	40	-
Juneau Area	"Operation Alert" Jul 22, 1956	Staff and skeleton force exercise without evacuation.	-	120	-
Juneau Territorial Headquarters	"Operation Alert" Jul 22, 1956	Staff exercise with emphasis on participating Federal and Territorial agency representatives working as an emergency government impact team. Governor in personal charge.	Juneau Headquarters	50	-
Canal Zone					
<p>During the fiscal year, the Canal Zone Civil Defense organization participated in "Operation Alert" in July 1956, in which approximately 200 top-echelon members of the Civil Defense Corps participated; also in operation "Jackpot" in October 1956 in which local Armed Forces and approximately 1,500 civilians participated. The Canal Zone Schools Division trained approximately 10,500 school children in knowledge of and response to the public warning signals, by repeated drills.</p>					
Guam					
Agana	- Jul 25, 1956	Alert and take cover exercise in cooperation with National CD Alert of 1956.	City	-	-
Agana	-	Evacuation of elementary schools to test effectiveness of communication, Police, Welfare and Transportation Services.	Schools	1,000	-
Hawaii					
Territory of Hawaii	"Alert" Jul 20 - 22, 1956	Operational test of CD organization in conjunction with military passive defense system.	All Hawaii	1,507	60 hrs.
Oahu	"Eversharp 14" Nov 15, 1956	Drill and test of emergency recovery units.	Military installations	930	8 hrs.
Oahu	"Eversharp 15" Mar 8, 1957	Drill and test of emergency recovery units.	Military installations	930	8 hrs.

CIVIL DEFENSE IN THE U.S.

NATURAL DISASTERS

Under authority of Public Law 875, 81st Congress, and Executive Order 10427, the Federal Civil Defense Administration is responsible for controlling the disaster relief funds of the Executive Office of the President and for coordinating the activities of Federal agencies in providing disaster assistance. The intent of Congress, as expressed in Public Law 875, is to provide an orderly and continuing means of assistance by the Federal Government to States and local governments in major disasters. Federal funds are made available after the President has declared the existence of a major disaster in any State or area following certification by the Governor of the need for disaster assistance and assurance of the expenditure of a reasonable amount of State or local funds. Funds appropriated by Congress for disaster relief are made available to the President; authority to coordinate Federal activities in this field and to direct the disbursement of these funds has been

delegated to FCDA.

Since the issuance of Executive Order 10427 on January 16, 1953, a total of over \$18½ million has been disbursed by FCDA to assist the States and Territories. Other funds have been allocated for disaster assistance projects which are currently in process. Actual disbursements on these projects will be made as the contracts or portions of contracts are completed and bills are submitted to FCDA for payment. A list of 84 major disaster areas, with the Presidential allocation and the funds disbursed for each, as of June 30, 1957, appears below. In a few cases areas have been declared major disaster areas by the President without allocation of funds under Public Law 875. This is usually done in order to provide extraordinary credit rather than direct grants for rehabilitation purposes. Such credit may be provided directly or guaranteed by Federal Agencies.

NATURAL DISASTER AREAS AIDED BY FCDA

Date of Declaration	State	Nature of Disaster	Presidential Allocation	FCDA Disaster Aid	
				Net Disbursements (Projects Still Open)	Net Disbursements (Projects Closed)
May 2, 1953	Georgia	Tornado	\$ 175,000	\$	\$ 175,000
May 15, 1953	Texas	Tornado	357,700		210,366
May 29, 1953	Louisiana	Flood	416,000		388,351
Jun 2, 1953	Michigan	Tornado	51,000		31,884
Jun 6, 1953	Montana	Flood	315,000		305,753
Jun 9, 1953	Michigan	Tornado	140,900		134,452
Jun 11, 1953	Iowa	Flood	170,259		119,155
Jun 11, 1953	Massachusetts	Tornado	500,000		490,209
Jun 19, 1953	Texas	Flood	40,000		40,000
Jul 2, 1953	New Hampshire	Forest Fire	149,933		149,933
Oct 22, 1953	Florida	Flood	363,559		363,559
Oct 30, 1953	Alaska	Severe Hardship	50,000		6,565
Dec 6, 1953	Mississippi	Tornado	164,000		116,224
Feb 5, 1954	California	Flood and Erosion	587,000	367,243	
Mar 17, 1954	Georgia	Tornado	150,000		34,255
Jun 23, 1954	Iowa	Flood	175,000		115,128
Jul 1, 1954	Texas	Flood	877,500 1/2	650,268	
Jul 14, 1954	Nevada	Earthquake	194,345 1/2		193,892
Jul 21, 1954	South Dakota	Flood	40,000		33,500
Aug 4, 1954	West Virginia	Flood	61,500		58,506
Sep 2, 1954	Massachusetts	Hurricane	2,500,000		2,500,000
Sep 2, 1954	Rhode Island	Hurricane	2,500,000		1,590,211
Sep 13, 1954	Maine	Hurricane	1,003,027		1,003,027
Sep 17, 1954	Connecticut	Hurricane	500,000		158,180
Oct 7, 1954	New York	Hurricane	300,000		145,967
Oct 13, 1954	New Mexico	Flood	50,000		8,004
Oct 17, 1954	North Carolina	Hurricane	1,500,000	1,275,965	
Oct 17, 1954	South Carolina	Hurricane	750,000	697,503	
Oct 18, 1954	Maryland	Hurricane	-		
Oct 22, 1954	Pennsylvania	Hurricane	-		
Oct 26, 1954	Indiana	Flood	175,000		125,146
Nov 10, 1954	Alaska	Severe Hardship	-		9,026 2/3

(Continued)

CIVIL DEFENSE IN THE U.S.

NATURAL DISASTER AREAS AIDED BY FCDA (Continued)

Date of Declaration	State	Nature of Disaster	Presidential Allocation	FCDA Disaster Aid	
				Net Disbursements (Projects Still Open)	Net Disbursements (Projects Closed)
Apr 1, 1955	Hawaii	Volcano	\$ 100,000	\$	\$ 76,890
May 25, 1955	Colorado	Flood	175,000 ^{1/}		33,495
May 27, 1955	Kansas	Tornado	325,000		288,991
Jun 1, 1955	Oklahoma	Flood and Tornado	210,000	189,320	
Jun 21, 1955	Nevada	Flood	200,000	90,990	
Aug 13, 1955	North Carolina	Hurricane	3,200,000 ^{1/}	2,479,045	
Aug 15, 1955	New Mexico	Flood	118,000	97,810	
Aug 20, 1955	Pennsylvania	Hurricane and Flood	1,000,000 ^{3/}	122,553	
Aug 20, 1955	Connecticut	Hurricane and Flood	1,000,000 ^{1/}	50,399	
Aug 20, 1955	Massachusetts	Hurricane and Flood	1,000,000 ^{3/}		
Aug 20, 1955	New Jersey	Hurricane and Flood	1,000,000		2,637
Aug 20, 1955	Rhode Island	Hurricane and Flood	1,000,000 ^{3/}	5,766	
Aug 20, 1955	South Carolina	Hurricane	400,000	228,853	
Aug 22, 1955	New York	Hurricane and Flood	500,000 ^{4/}		
Dec 22, 1955	Alaska	Severe Hardship	25,000 ^{4/}		
Dec 23, 1955	California	Flood	9,500,000	124,817	
Dec 24, 1955	Nevada	Flood	370,000		
Dec 29, 1955	Oregon	Flood	1,350,000	24,056	
Feb 25, 1956	Washington	Flood	250,000		
Mar 15, 1956	Pennsylvania	Flood	50,000	23,626	
Mar 29, 1956	New York	Flood	50,000		23,988
Apr 5, 1956	Michigan	Tornadoes	135,000	61,528	
Apr 7, 1956	Oklahoma	Tornado	65,000	21,593	
Apr 9, 1956	Tennessee	Tornado	-		
Apr 18, 1956	Alabama	Tornado	-		
Apr 21, 1956	Idaho	Flood Threat	600,000		
Apr 24, 1956	North Carolina	Severe Storm	200,000	106,786	
May 17, 1956	Ohio	Wind Storm	1,250,000	85,856	
May 21, 1956	Pennsylvania	Storm	100,000	5,257	
Jun 12, 1956	Colorado	Flood	50,000		
Jun 23, 1956	Missouri	Water Shortage	-		
Jul 20, 1956	Oregon	Torrential Rains	126,000		
Aug 9, 1956	Pennsylvania	Storm	300,000	26,116	
Aug 18, 1956	Puerto Rico	Hurricane	3,500,000	2,607,210	
Aug 31, 1956	Nevada	Flash Flood	30,000		
Oct 4, 1956	Louisiana	Hurricane	260,000		
Dec 29, 1956	California	Fires	100,000		
Jan 31, 1957	Kentucky	Floods	2,000,000 ^{1/}		
Jan 31, 1957	West Virginia	Floods	200,000		
Feb 1, 1957	Virginia	Floods	300,000		
Mar 1, 1957	Oregon	Floods	300,000		
Mar 6, 1957	Washington	Floods	300,000		
Mar 16, 1957	Hawaii	Tidal Waves	60,000		
Apr 29, 1957	Texas	Hurricane and Floods	1,000,000		
May 16, 1957	Louisiana	Hurricane and Floods	200,000		
May 18, 1957	Oklahoma	Floods	1,000,000		
May 22, 1957	Missouri	Tornado and Floods	2,000,000		
May 27, 1957	Idaho	Floods	-		
May 29, 1957	Arkansas	Floods	400,000		
Jun 22, 1957	Illinois	Floods	-		
Jun 22, 1957	Minnesota	Floods	-		
Jun 22, 1957	North Dakota	Tornado	-		
Reimbursements to Other Federal Agencies					291,692
<u>TOTAL</u>			<u>\$50,555,723</u>	<u>\$ 9,342,560</u>	<u>\$ 9,223,986</u>

^{1/} A portion of these funds were made available to other Federal Agencies.

^{2/} Alaska authorized to expend unused funds from Presidential allocation of October 30, 1953.

^{3/} Presidential allocation subsequently reduced.

^{4/} Presidential allocation subsequently withdrawn.

PROGRESS OF DELEGATE AGENCIES

SUMMARY

As of June 30, 1957 considerable progress had been made by the delegate agencies in carrying out their delegated responsibilities. This progress is summarized on the following pages. Since Congress did not appropriate any part of the \$6,300,000 in delegations funds requested by FCDA for FY 1958, program developments in this area have suffered during the last quarter of FY 1957.

The delegate agencies were allocated a total of \$3,559,000 for delegation programs in FY 1957 out of a total appropriation of \$4,000,000. Allocation of funds from FCDA to the various agencies for FY 1956 and FY 1957, together with the funds obligated in each fiscal year, are shown in the following table:

CIVIL DEFENSE FUNDS OF DELEGATE AGENCIES

Delegate Agency	Transferred by FCDA for FY 1956	Obligated During FY 1956	Transferred by FCDA for FY 1957	Obligated During FY 1957
Department of Agriculture	-	-	\$ 307,000	\$ 256,909
Department of Commerce	\$ 190,000	\$ 163,813	417,000	365,368
Dept. of Health, Educ. & Welfare	1,240,000	1,214,794	2,195,000	2,127,733
Department of the Interior	20,000	10,328	55,000	49,669
Department of Justice	-	-	60,000	39,336
Department of Labor	64,397	64,252	375,000	373,990
Housing and Home Finance	<u>25,000</u>	<u>24,853</u>	<u>150,000</u>	<u>59,808</u>
<u>Total</u>	<u>\$1,539,397</u>	<u>\$1,478,040</u>	<u>\$3,559,000</u>	<u>\$3,272,813</u>

The delegated responsibility of each department or agency and the progress reported for the

periods ending June 30, 1956, and June 30, 1957 are summarized on the following pages.

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF AGRICULTURE</u></p> <p>Plan a national program and direct Federal activities concerned with research, diagnosis, strengthening of defensive barriers, and control or eradication of diseases, pests or chemical introduced as agents of biological or chemical warfare against animals and crops.</p>	<p style="text-align: center;"><u>Agricultural Research Service</u></p> <p>A series of two-day meetings were held in various States with veterinarians, livestock sanitary officials, college veterinary faculties and others on the recognition and handling of foreign animal diseases including emergency plans for coping with outbreaks.</p> <p>A total of 107 Regional meetings were held on disease problems and control programs.</p> <p>Work continued on developing new diagnostic techniques and improving performance and control procedures.</p>	<p>Regional meetings were held during the year to discuss major insect and plant disease problems. "Proceedings of the 1956 Regional Meetings on Foreign Animal Diseases" were distributed to Federal and State regulatory personnel, veterinary colleges, and veterinary departments of land-grant colleges. Progress reports were made to the U. S. Public Health Service's Biennial Conference at Atlanta on the development of rapid diagnostic procedures, insect control measures, epidemiological techniques, and the problems of diseases of animals transmissible to the human being. Plans were completed for meetings on radiological defense as it applies to agriculture and animal-derived foods.</p>
<u>Agricultural Marketing Service and Commodity Stabilization Service</u>		
<p>Plan and direct Federal activities, and provide technical guidance to States, in connection with an over-all food program aimed at maintaining adequate emergency food supplies for attack or support areas.</p>	<p>A guidebook for food processing and distributing establishments presenting factors for reducing vulnerability of industrial food plants was developed and distributed to trade associations and other industry representatives for comment.</p> <p>A proposed set of guidelines for determining food and food facility resources in reception areas was under development.</p> <p>A draft of an order prescribing the general rules of a good priority system has been developed and reviewed.</p> <p>Development of a course in radiological training for inspection personnel to assist in identifying radioactive foods and processing equipment was under study.</p> <p>Emergency processing storage and distribution methods were being studied.</p>	<p>Newly appointed field staff of the Food Distribution Division devoted full time to the program of providing technical guidance to the States on emergency food problems. Conferences were held with State civil defense officials in the majority of States.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF AGRICULTURE</u> (Continued)</p> <p>Plan a national program, direct Federal activities, and provide technical guidance to States concerned with the prevention and control of fire caused by enemy attack in rural areas of the United States.</p>	<p style="text-align: center;"><u>Forest Service</u></p> <p>State committees for Rural Fire Defense planning have been established, assignments have been made and the inventory, operating procedure, and correlation phases of plans have been partially completed for the wild lands.</p> <p>Plans were being made to establish Regional level (CD) Rural Fire Defense Committees. One Civil Defense Regional Meeting on fire defense planning was held and two more were scheduled.</p> <p>Supplemental guidelines containing new principles and schedules have been developed by the National Rural Fire Defense Committee as an aid to Regional and State Committees.</p>	<p>Technicians assigned to fire defense planning worked with State Civil Defense officials and State Survival Projects in developing plans for rural fire defense.</p>
<p><u>DEPARTMENT OF COMMERCE</u></p> <p>Provide advice and guidance to State Highway Departments in the designation of State Civil Defense emergency highway routes.</p> <p>Coordinate interstate and State designated civil defense highway systems to assure uniformity of designation for civil defense emergency purposes.</p> <p>Plan a national program, develop technical guidance for States, and direct Federal activities concerning emergency clearance and res-</p>	<p style="text-align: center;"><u>Bureau of Public Roads</u></p> <p>A revised draft of the preliminary report on civil defense highway needs was completed and reviewed.</p> <p>A standard design for evacuation route signs was recommended.</p> <p>A manual was prepared discussing techniques to be used in evacuation planning and full utilization of highway systems in an emergency.</p> <p>Official CD program assistance was established in the Commissioner's office.</p> <p>A conference was held for orientation and instruction required to</p>	<p>A brochure entitled "U. S. Department of Commerce and Civil Defense"; outlining the program delegations to the Department was published during the year. Representatives of the Department participated in a series of FCDA regional conferences held for the purpose of promoting the concept of "government in emergency."</p> <p>Basic evacuation data was developed by the Bureau in cooperation with State highway departments and highway user groups and a brochure entitled "Highway Needs for Civil Defense" was published. Revision of FCDA Technical Manual BM-13-3 "Clearance and Restoration of Streets and Highways in Civil Defense Emergencies" was practically completed.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF COMMERCE</u> (Continued)</p> <p>toration of highways, streets, and bridges in damaged areas. Provide technical guidance to States concerning highway traffic control problems which may be created during a civil defense emergency.</p> <p>Determine and evaluate, with the cooperation of the States, counties and cities, and assist in the planning needs for highway improvement to meet civil defense requirements.</p> <p>Prepare an analysis of past data, conduct research, and develop techniques and capabilities leading to improved forecasts of radiological fallout patterns.</p> <p>Prepare and issue currently, as well as in an emergency, forecasts and estimates of areas likely to be covered by fallout as a result of enemy attack. Such information is to be made available to Federal, State, and local civil defense authorities for public information.</p>	<p><u>Bureau of Public Roads (Continued)</u></p> <p>determine the highway needs for evacuation.</p> <p style="text-align: center;"><u>U. S. Weather Bureau</u></p> <p>Since June 1955 coded fallout messages have been transmitted twice daily on teletypewriter circuits. When decoded and plotted, these messages yield fallout bulletins for 52 locations covering the entire country. The 500 drops on the circuit insure messages being available to all required officials and industrial groups. A simplified coding procedure was put into effect so that local civil defense personnel could decode the forecasts with maximum accuracy.</p> <p>Arrangements were concluded with the Canadian Government to provide the same information in twice daily forecasts from eight locations in Southern Canada. Honolulu and Alaska also report daily fallout forecasts.</p> <p>Work continued on the establishment of a fallout standard. Tabulation and analysis of data was completed. Working up trajectories of particles from these is now in progress.</p> <p>A survey was conducted by the Weather Bureau Central Office to determine the use being made of the fallout messages. Tabulated results were given to FCDA National and Regional Offices.</p> <p>Experimental work was initiated in the use of an analogue computer to produce fallout forecasts.</p> <p>Full time meteorologists were</p>	<p>The Bureau continued the program inaugurated in July 1955 of preparing fallout forecasts twice daily and transmitting them throughout the United States and Canada. Messages are now available to CD officials in many areas where there is no Weather Bureau office. Research was continued on fallout forecasting with attention directed to machine computation. Work was begun on a flood manual which would relate flood stages at various high points throughout the United States with known damage in each case, in order to assist FCDA Regional offices to determine whether flood stages are likely to cause serious damage.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF COMMERCE</u> (Continued)</p>	<p style="text-align: center;"><u>Weather Bureau (Continued)</u></p> <p>assigned to FCDA National and Regional Offices.</p> <p>A brief study of the reliability of persistence assumptions in fall-out predictions for a summer and winter situation was made.</p> <p>Templates from mean wind charts for extrapolating soundings to accommodate the UF network were prepared for winter and spring conditions. The remaining ones were being prepared.</p>	
<p>Provide data and assist the States in conducting analyses of potential target and support areas for the purpose of providing basic statistics and maps essential to the completion of Federal, State and local civil defense operating plans.</p>	<p style="text-align: center;"><u>Area Development</u></p> <p>Nothing was done due to lack of funds.</p>	<p>The Special Projects staff of this office initiated a project of assembling, plotting on maps, locating by grid coordinates, and reproducing in appropriate form, existing industrial locations and other pertinent data for aiming area determinations.</p>
<p><u>DEPARTMENT OF HEALTH, EDUCATION AND WELFARE</u></p>	<p style="text-align: center;"><u>Public Health Service</u></p>	
<p>Plan a national program, develop technical guidance for States, and direct Federal activities concerned with financial assistance for the temporary relief or aid of civilians injured or in want as the result of attack.</p> <p>Plan, program, and develop technical guidance for the States and direct Federal activities concerned with the acquisition, transportation, and payment for clothing of civilians in want as a result of attack.</p> <p>Plan a national program, develop technical guidance for States, and direct Federal civil defense activities concerned with research with respect to, and detection, identification,</p>	<p>Projects on the rapid identification of BW agents were under way. A report summarizing available information on potential chemical warfare agents was being prepared.</p> <p>Data on public water supply facilities developed in the bomb damage assessment studies were forwarded to FCDA.</p> <p>Ten nationally known waterworks experts were appointed consultants to PHS to advise on the essential municipal water supplies in defense emergency and natural disaster.</p> <p>Training courses on Public Health in CD were given in Pennsylvania, Maryland, Texas, Oklahoma, Massachusetts, Virginia, Maine, Washington and Louisiana.</p> <p>A course entitled "The Role of the Public Health Laboratory in Civil Defense" was given to a group of key laboratory personnel from eight States.</p>	<p>A Special Weapons Protection Branch was established during the year to develop guidance for existing and proposed hospitals on incorporating protective construction features.</p> <p>A start was made on actual laboratory work in immunization and chemoprophylaxis investigations designed to counter chemical and biological warfare agents. Considerable progress was also reported in codifying methods of rapidly identifying biological and chemical warfare agents.</p> <p>Experimental data useful on the protection of water supplies were obtained by batch coagulation tests. Studies in methods for determining vulnerability of food supplies to contamination were also continued during the year.</p> <p>Visits were made to various water supply systems throughout</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF HEALTH, EDUCATION AND WELFARE</u> (Continued)</p> <p>and control of: (1) communicable diseases in humans, (2) biological warfare against humans, (3) chemical warfare against humans, and (4) other public health hazards.</p> <p>Plan, develop, and direct Federal activities concerned with a national program designed to provide Public Health Service reserve professional personnel from support areas to those damaged by enemy attack.</p> <p>Plan, develop, and distribute through appropriate channels, training materials for incorporation in the curricula of schools and colleges throughout the United States in order to integrate the teaching, in all possible courses, of civil defense skills, and knowledge and fundamentals of behavior during emergencies.</p> <p>Plan, develop, and distribute, through appropriate channels, technical guidance concerning the provision of shelter and other protective measures, designed to minimize injury to personnel and reduce damage to vital functional components of educational institutions and hospitals and of water, sewer, and other public health facilities.</p> <p>Plan a national program, develop technical guidance for States and direct Federal activities concerned with the emergency restoration of community facilities essential to health or functional components thereof for which the Public Health Service normally has regular operating programs.</p> <p>Plan a national program, conduct research, develop</p>	<p style="text-align: center;"><u>Public Health Service</u> (Continued)</p> <p>Staff members participated in many courses, meetings and conferences for the purpose of presenting material on the various aspects of civil defense.</p> <p>The strength of the Commissioned Reserve Pool of Professional Personnel was 2263 on March 31.</p> <p>Fifty Commissioned Reserve officers attended the fourth headquarters course on "Public Health Activities in National Emergencies."</p> <p>A course on "Epidemiology in Civil Defense" was developed for presentation to Commissioned Reserve physicians.</p> <p>Three sanitary engineer officers were given orientation and training and assigned to full time CD work in D/H.E.W. Regions III, IV and IX.</p> <p>Emergency operations plan and natural disaster relief operations plan were being prepared.</p> <p>Courses, lectures and training materials for "Sanitary Engineering Problems in CD Disaster" were prepared and used in a pilot course conducted at the Sanitary Engineering Center. It was also given in Salt Lake City, Utah.</p> <p>Plans were being developed to assist the deans of the medical schools in solving CD problems.</p>	<p>the country for the purpose of developing methods of keeping up-to-date figures on water supply facilities for bomb damage assessment purposes.</p> <p>Coordinators were set up in ten regions to survey national laboratory resources needed in the event of an emergency.</p> <p>The key public health personnel in seven States were given the general course "Public Health in Civil Defense." The strength of the Commissioned Reserve Pool of professional personnel was increased to 2,909 during the year. Assistance was given to State Health agencies in the field of public health in relation to civil defense at an accelerated rate.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF HEALTH, EDUCATION AND WELFARE</u> (Continued)</p> <p>technical guidance for States, and direct Federal activities designed to meet the extraordinary needs for food and drug inspection and control in attacked areas.</p> <p>During a civil defense emergency, employ temporarily additional personnel without regard to the civil service laws and incur such obligations on behalf of the United States as may be required to meet the civil defense requirements of an attack or of an anticipated attack.</p> <p>Disseminate such civil defense information as may be approved from time to time by the Federal Civil Defense Administration.</p> <p>Conduct a program of donation of Federal surplus personal property for civil defense purposes (including research) with the following-described responsibilities:</p> <ol style="list-style-type: none"> 1. The promulgation and issuance, upon approval of the Federal Civil Defense Administrator, of minimum standards of operations for State agencies for the acquiring, warehousing, use and transfer of Federal surplus personal property for civil defense purposes. 2. The issuance of regulations, in accordance with the criteria developed by the Federal Civil Defense Administrator, governing the program for the donation of property for civil defense purposes. 3. The development and issuance of forms and procedures to be utilized in freezing, allocating, requesting, distributing, and retransferring donable surplus personal property for civil defense purposes. 4. The maintaining of 	<p style="text-align: center;"><u>Social Security Administration</u> (Bureau of Public Assistance)</p> <p>Considerable time was spent in discussing and defining major policy fields falling under the Department's Delegations.</p> <p>A manual for instruction and guidance was being prepared. A condensed version of policies and procedures to be included in it were released to the States.</p> <p>A committee on emergency clothing, representing leaders in the retail clothing field, professional associations and Federal agencies, was selected and was scheduled to meet in the fall.</p> <p>Material for estimates of clothing resources in the Milwaukee Area was prepared and a methodology for estimating these resources was worked out.</p> <p>Material for a special FCDA Staff College Welfare Course was developed.</p> <p>Extensive work was done to encourage the participation of national private agencies and professional associations in planning for the delegated programs including the appointment of a temporary consultant to deal exclusively with the matter.</p> <p>Agreements with the States were being signed which will form a basis for the planning of the emergency financial assistance and clothing programs and will provide authority for them to operate in an emergency.</p> <p>A memo of understanding was drawn up and widely distributed covering:</p> <ol style="list-style-type: none"> a. The payment of financial assistance during an emergency is 100% Federal responsibility. b. State Public Welfare Offices will be the focal point around which delegated welfare function will take place. c. BPA will work with State Public Welfare Departments. <p>Defense welfare planning material</p>	<p>Forty-three agreements were signed with the States and Territories providing a basis for planning emergency financial assistance and clothing programs and authority for them to operate in an emergency.</p> <p>A manual concerning these programs was prepared for early release.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF HEALTH, EDUCATION AND WELFARE</u> (Continued)</p> <p>liaison, directly with and through State agencies with all Federal installations, for the purpose of locating, inspecting, screening, and freezing reported and non-reported Federal surplus personal property usable and necessary for civil defense purposes.</p> <p>5. The maintaining of liaison with GSA Regional Offices for the purpose of inspecting, screening, and freezing reported Federal surplus personal property usable and necessary for civil defense purposes.</p> <p>6. The maintaining of liaison with Headquarters offices of the Executive Branch, and with other Federal agencies, for the purpose of coordinating policy and resolving problems or difficulties encountered in connection with the donation of Federal surplus personal property for civil defense purposes.</p> <p>7. The allocation in conformance with criteria developed by the Federal Civil Defense Administrator, and based upon State certification of need and usability for civil defense purposes, of Federal surplus property.</p> <p>8. The processing of applications for surplus personal property for civil defense purposes, based upon certification of the State Agency for Surplus Property and under regulations issued by FCDA concerning need and usability of such property for civil defense purposes; and the development of forms of applications to incorporate conditions regulating donations for civil defense purposes, and the routing and distribution of these forms.</p>	<p><u>Social Security Administration</u> (Bureau of Public Assistance) (Continued)</p> <p>was received from 46 States. Tentative criteria and cost tables were so developed for a 50-50 matching with the States on administrative costs for planning DW services.</p> <p style="text-align: center;"><u>Office of Education</u></p> <p>The Civil Defense Education Project manuscript "Education for National Survival" was printed. CD pilot project centers were established by agreements with California, Connecticut, and Michigan State Departments of Education to work out methods and material for introducing civil defense instruction into the curriculum. Requests were received from each of the centers for the continuation of the pilot projects in 1957, with emphasis on general adult education. A total of 46 States and 6 territories established CD Coordinators in their respective Departments of Education to work with local Schools in developing and coordinating CD educational progress. Information sheets were developed specifically for educators based on CD technical information; 36 were published. A national curriculum of CD publications was being evolved incorporating the best features of each of the 3 State pilot project center bulletins. This will be distributed nationally through regular educational channels.</p>	<p>The three pilot centers in California, Connecticut, and Michigan, continued the program of developing methods and materials designed to introduce civil defense education in the schools. Staff associates conducted nuclear science demonstrations and laboratory exercises, and exhibited teaching aids to a number of science teacher institutes with demands for this service increasing.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF HEALTH, EDUCATION AND WELFARE</u> (Continued)</p> <p>9. The maintaining of liaison with holding agencies and the General Services Administration for the purpose of assuring prompt removal of property approved for donations, reporting shortages, overages, and resolving difficulties encountered.</p> <p>10. The inspection of State agency warehouses to insure that property is promptly distributed to eligible civil defense claimants consistent with policies mutually developed by and agreeable to the Federal Civil Defense Administrator and the Secretary of Health, Education, and Welfare.</p>	<p style="text-align: center;"><u>Food and Drug Administration</u></p> <p>The preliminary report on tests of food at Nevada was published. The final report was declassified and to be printed.</p> <p>Reports on the extent of penetration of bacterial agents into foods in wholesale containers and on gaseous decontamination of small lots of critical foods and drugs were completed.</p> <p>FCDA training program for State and local food and drug officials had reached 53 cities and more than 1600 people had received certificates of attendance.</p> <p>Work progressed on a revision of the training handbook, "<u>Civil Defense Information for Food and Drug Officials</u>" to include new material and improvements suggested by experience.</p>	<p style="text-align: center;"><u>Office of Field Administration</u> (<u>Office of Surplus Property Utilization</u>)</p> <p>Policies governing the operation of the civil defense donation program were formulated and issued as part of the Surplus Property manual. Forty-seven State plans for surplus property utilization were received. Forty-three of these have been reviewed, and are in operation. A booklet entitled "Acquiring Surplus Property for Health, Education or Civil Defense" was prepared and distributed widely.</p> <p>Training courses for State and local food and drug officials were held in a large number of cities. The results of the food tests at Nevada were made available for public distribution, as were the results of a study on the effects of biological warfare on packaged food.</p>
<p><u>DEPARTMENT OF THE INTERIOR</u></p> <p>Plan and direct Federal activities designed to procure, store, transport and distribute adequate fuel supplies to attacked areas and reception centers, consistent with the national-emergency fuel program.</p>	<p style="text-align: center;"><u>Office of Minerals Mobilization</u></p> <p>Conferences were held with State Civil Defense Directors in three States and detailed plans of operation developed to integrate the national program of fuels distribution into the local organizational setup.</p> <p>Plans were being developed for establishing regional and local area distribution managers for fuel. Initial contact with industry representatives and coor-</p>	<p>Conferences were held with State authorities and nominations were made for the appointment of members of Local Emergency Solid Fuel Committees.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF THE INTERIOR</u> (Continued)</p>	<p style="text-align: center;"><u>Office of Minerals Mobilization</u> (Continued)</p> <p>dination meetings with some Regional Administrators have been arranged.</p>	
<p>Same as above.</p>	<p style="text-align: center;"><u>Office of Oil and Gas</u></p> <p>A preliminary survey of five FCDA Regions and a representative group of States was undertaken to determine what was being done to cope with petroleum and gas problems in a civil defense emergency.</p>	<p>An outline plan for handling petroleum and gas during a national emergency was developed and was found to have wide acceptance at the local level.</p>
<p>Plan a national program, provide technical guidance to the States and direct Federal activities concerned with the emergency restoration of electric utility service to attacked areas and provision of adequate electric utility service to support areas.</p>	<p style="text-align: center;"><u>Office of Water and Power Development</u></p> <p>Meetings were held in fourteen different sections of the country to enlist cooperation and support of the utilities. All of the United States covered with good results.</p>	<p>The United States has been divided into 16 electric supply areas. Appointment of voluntary officials with alternates is progressing satisfactorily. An emergency operations handbook begun during the year is nearing completion.</p>
<p><u>DEPARTMENT OF JUSTICE</u></p>	<p style="text-align: center;"><u>Bureau of Prisons</u></p> <p>No report.</p>	<p>A memorandum of understanding was agreed to by FCDA and the Bureau of Prisons, and an Emergency Planning Staff was created to supervise the carrying out of the delegated responsibilities. A manual entitled "The Model Civil Defense Plans for Federal and Penal Correctional Institutions" was revised and submitted to the Civil Defense Advisory Council to the Bureau of Prisons, for approval. The Emergency Planning Staff conducted briefings in a large number of correctional institutes throughout the United States.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF LABOR</u></p> <p>Plan and develop a national program relating to the utilization of the labor force, during a civil defense emergency, consistent with the responsibilities of the Department of Labor with respect to manpower mobilization.</p>	<p style="text-align: center;"><u>Activity #1</u></p> <p>A regional conference on manpower and postattack mobilization was held in Boston covering Maine, New Hampshire, Vermont, Rhode Island, Massachusetts, and Connecticut.</p> <p>A plan for the preorganizing and pretraining of a task force trained in civil defense skills so that they can quickly be shifted to CD jobs in an emergency was drafted and discussed. Pilot operations will be undertaken.</p> <p>Identification and description of key skills needed for CD was undertaken with NY State Civil Defense.</p>	<p>The pilot study for creating civil defense task forces from the labor force was launched successfully at Grand Rapids, Michigan, with enthusiastic cooperation from all elements involved.</p> <p>Work was continued on developing with FCDA detailed Memorandum of Understanding covering various points in the delegated responsibilities.</p>
<p>Conduct research and provide a method of estimating survivors by occupational and social characteristics, and for determining their availability for employment during a civil defense emergency.</p>	<p style="text-align: center;"><u>Activity #2</u></p> <p>Work was started to determine and provide the basic data on population and work force characteristics for use in the electronic damage assessment system.</p> <p>Rough outlines of the types of information to be collected on the spot in a postattack period were developed.</p>	<p>Staff members were selected and assigned to the Bomb Damage Assessment Group to work on manpower aspects of preattack and post-attack defense planning.</p>
<p>Provide technical guidance to the States and direct Federal activities concerned with coordination of the Nation-wide system of employment service offices for determining requirements of, and recruiting, referring, and utilizing workers to meet civil defense needs.</p>	<p style="text-align: center;"><u>Activity #3</u></p> <p>All field offices had received interim instructions and procedures to follow in an emergency. Some elements of these procedures were tested in practice exercises and flood disasters.</p> <p>Planning was progressing to develop coordinated technical guidance for State employment service emergency activities.</p> <p>Standards on defense manpower plans were being developed for inclusion in agreements between State employment services and State civil defense agencies.</p> <p>A study of the New York State civil defense program was under way to determine its suitability for developing standards for other State agencies in setting up necessary organization and occupational structures for emergency</p>	<p>Plans were completed for development of a handbook for State Employment Security agencies in preattack planning and postattack guidance. A manual of occupational titles, codes and definitions has been developed for FCDA review and approval. A Field Studies Unit was established in New York City to perform research, study and testing in the state of readiness of the field activities of the Department.</p>

PROGRESS OF DELEGATE AGENCIES

PROGRESS REPORTS (Continued)

Agency and Delegation	Progress Through June 30, 1956	Progress Through June 30, 1957
<p><u>DEPARTMENT OF LABOR</u> (Continued)</p>	<p style="text-align: center;"><u>Activity #3</u> (Continued)</p> <p>recruitment, selection, referral and allotment of manpower.</p>	
<p>Plan a national program, develop technical guidance for the States, and direct Federal activities concerned with the methods of compensation for authorized workers in a civil defense emergency.</p>	<p style="text-align: center;"><u>Activity #4</u></p> <p>Drafts of plans covering each of these three problems were prepared and discussed with the Labor Advisory Committee on Civil Defense.</p>	<p>A study was completed of the legislative history of bills introduced into Congress, providing for death and disability benefits for civil defense workers. A previously developed plan for income maintenance was revised and entitled "The Federal Emergency Unemployment Payments Plan".</p>
<p>Plan a national program, develop technical guidance for States, and direct Federal activities concerned with the provision of compensation payments for the injury or death of authorized workers while engaged in civil defense activities.</p>	<p style="text-align: center;"><u>Activity #5</u></p>	<p>Basic responsibilities of the Department under this item of the Delegation were reviewed, and drafts prepared for FCDA approval.</p>
<p><u>HOUSING AND HOME FINANCE AGENCY</u></p> <p>Conduct research and provide technical guidance to the States concerning protective standards for new housing construction and temporary shelter in existing housing facilities.</p> <p>Plan a national program, provide technical guidance to the States, and direct Federal activities concerned with the provision of temporary emergency housing in support of areas subjected to enemy attack.</p> <p>Plan a national program, develop technical guidance for States, and direct Federal activities concerned with the emergency restoration of essential housing and those related community facilities damaged by enemy action for which the agency normally has legal responsibility.</p>	<p>Defense Planning Committees were appointed in each Constituent Agency and Unit, as recommended by the HHFA Defense Council.</p> <p>The effects of the nuclear explosion at Nevada in 1955 on residential structures exposed were being studied.</p> <p>Proposals were submitted for nuclear tests of dwelling units in connection with the Spring 1957 Nevada Test program.</p>	<p>A Memorandum of Understanding with FCDA covering points two and three of the delegation was signed. It provides for a field staff to be recruited and assigned.</p> <p>Constituent agencies were allocated funds and directed to develop plans for emergency lodging and restoration, and to provide advice and guidance to State and local civil defense organizations in this field.</p>

FEDERAL CONTRIBUTIONS PROGRAM

SUMMARY

The Federal Contributions Program is designed to help the States and their political subdivisions to acquire essential civil defense materials and equipment and help them promote civil defense education and training. The objective is to assist the States in their efforts to develop adequately trained and equipped organizations which will assure a minimum loss of life and property in an emergency. The program operates under authority of the Federal Civil Defense Act of 1950 (Public Law 920, 81st Congress) which authorized financial contributions to the States for civil defense purposes on the basis of programs and projects approved by the Administrator.

The program became operative in Fiscal Year 1952. Appropriations by Congress for the program have been as follows:

Available for Use in Fiscal Year(s)	Amount of Appropriation
1952	\$22,350,000
1953	15,000,000
1954	10,500,000
1955	1,300,000*
1955-56	12,000,000
1956-57	12,400,000
1957-58	17,000,000

* Reappropriation of unused 1954 funds for use in the Attack Warning program only in FY - 1955.

Federal contributions are made to the States on the basis of individual project applications submitted to and approved by FCDA Regional Administrators in accordance with uniform pro-

grams and standards established by the Agency. All States, Territories and Possessions, except Alaska, are required to match Federal funds on a 50 - 50 basis. The matching ratio for Alaska is 70 percent Federal and 30 percent local.

The time for using the 1956/57 appropriation expired June 30, 1957. The unused portion of the 1957/58 appropriation is available until June 30, 1958. (Congress has also appropriated \$17,000,000 for the Federal Contributions Program to be available over the two-year period FY 1958/59).

Federal contributions or obligations under this program, from its inception through fiscal year 1957, amounted to \$65,362,736 as of June 30, 1957. The amount obligated out of each appropriation was as follows:

FY Appropriation	Amount Obligated
1952	\$18,035,492
1953	12,867,598
1954	7,132,183
1955 (Reappropriation)	1,096,602
1955/56	11,069,810
1956/57	12,182,579
1957/58	2,978,472
Total	\$65,362,736

Original obligations under the various appropriations have been reduced over the years as project applications formerly approved have been cancelled or amended.

FEDERAL FUNDS OBLIGATED - BY PROGRAM FY 1952 thru FY 1957

As shown in the following table the Communications Program received over 35 percent of the total funds, and the Health and Special Weapons Defense Program received 23 percent. Warning and Fire Service each received between 10 and 15 percent and the other programs received lesser amounts. The Fire Service Program was in effect only in fiscal years 1952 and 1953.

Program	Federal Funds Obligated FY 1952 through FY 1957	
	Amount	Percent of Total
Total-All Programs	\$65,362,736	100.0
Communications	23,158,411	35.4
Control Centers	8,583	.1

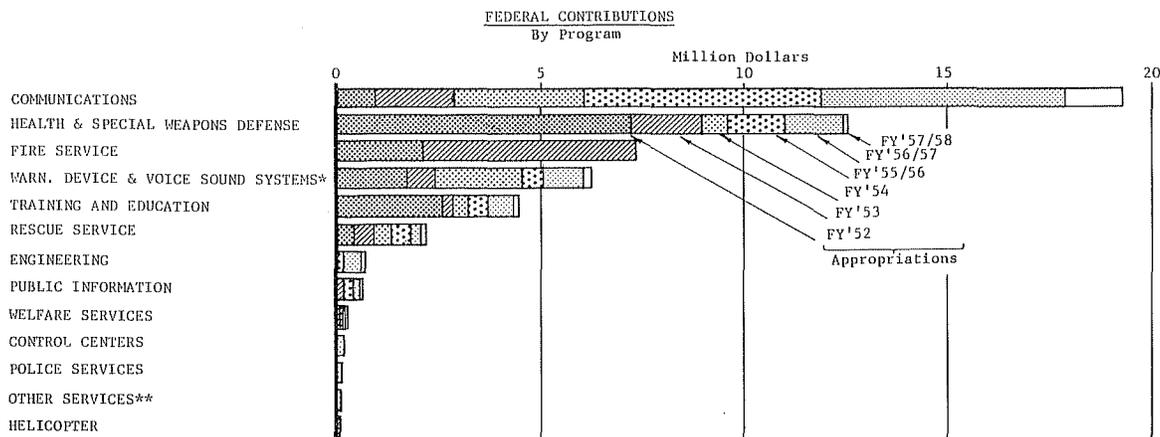
(Continued)

Program	Federal Funds Obligated FY 1952 through FY 1957	
	Amount	Percent of Total
Engineering	\$ 890,485	1.4
Fire Service	8,851,285	13.5
Health & Spec.Weap. Defense	15,083,827	23.1
Helicopter	101,734	.1
Police Services	185,220	.3
Public Information	824,034	1.3
Rescue Service	2,671,641	4.1
Training & Education	5,588,434	8.5
Warning Device & Voice Sound Systems	7,562,989	11.6
Welfare Services	334,137	.5
Other Services	101,956	.1

FEDERAL CONTRIBUTIONS PROGRAM

FEDERAL FUNDS OBLIGATED - BY PROGRAM (Continued)

Health and Special Weapons Defense was the largest program during the early years, as shown by the following chart. In later years, however, the Communications Program moved ahead to become the largest in terms of funds obligated.



* Data for FY 1954 include obligations from the reappropriation in FY 1955.

** Includes Engineering and Police items in 1953 and Evacuation Studies in 1955/56 and 1956/57.

FEDERAL FUNDS OBLIGATED - BY REGION FY 1952 thru FY 1957

Nearly three-fourths of the total Federal Contributions went to the States in FCDA Regions 1, 2 and 7. These are the States with heavy concentrations of population in the Northeastern United States and on the West Coast. New York, California and Pennsylvania, in that order, were the three States receiving the largest amounts of Federal funds. During FY 1957 Federal Funds were not allocated to the States in advance. The Regional Administrators were authorized to approve project applications from the States on a first-come first-served basis in order to permit the States, ready with funds and projects, to move ahead.

FCDA Region	Federal Funds Obligated FY 1952 thru FY 1957	
	Amount	Per cent of Total
Total	\$65,362,736	100.0
Region 1	21,240,465	32.5
Region 2	15,616,125	23.9
Region 3	4,419,004	6.8
Region 4	6,621,733	10.1
Region 5	3,325,317	5.1
Region 6	1,975,205	3.0
Region 7	10,777,874	16.5
Terr. & Poss.	1,387,013	2.1

FEDERAL FUNDS OBLIGATED - PER CAPITA FY 1952 thru FY 1957

Federal funds contributed to the States, Territories and Possessions amounted to 38.4 cents per capita on a national average from the beginning of the Federal Contributions Program through June 30, 1957. An equal amount has been spent, of course, by the States and their political subdivisions. On a per capita basis Delaware, with a figure of \$2.176, received more Federal funds than any other State. New York, Connecticut and Pennsylvania, in that order, re-

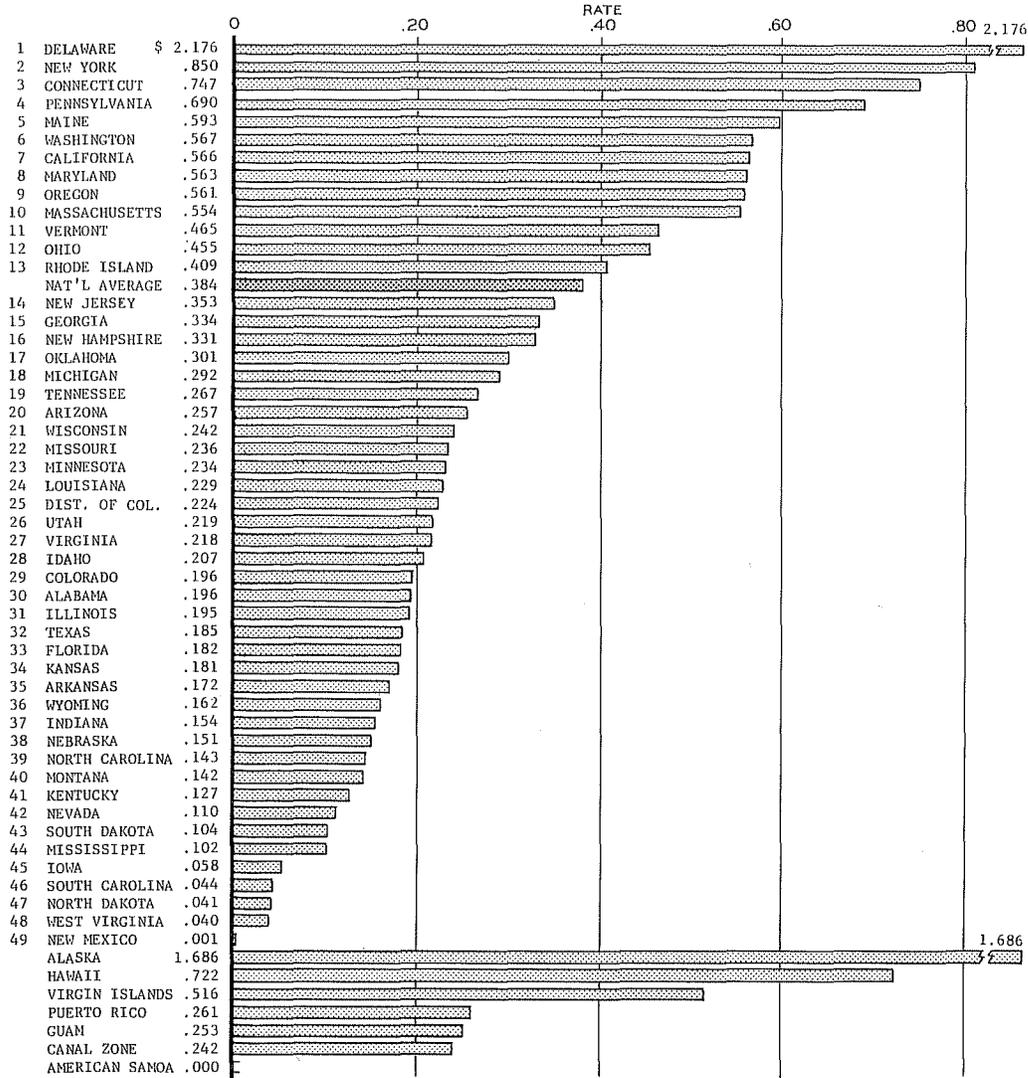
ceived 85.0, 74.7 and 69.0 cents per capita. Nine States received between 40 and 60 cents per capita, 14 States and the District of Columbia received between 20 and 40 cents, 16 States received 10 but less than 20 cents, and 5 States have received less than 10 cents per capita.

The following chart ranks the States according to Federal funds obligated from FY 1952 through FY 1957.

FEDERAL CONTRIBUTIONS PROGRAM

FEDERAL FUNDS OBLIGATED PER CAPITA*

FY 1952 THRU FY 1957



* Based on total Federal Contributions, FY 1952 through June 30, 1957, and U. S. Bureau of the Census estimates of population as of July 1, 1956.

DETAILED STATISTICS

In the tables which follow, detailed statistics on the Federal Contributions Program are presented showing the extent of Federal funds obli-

gated from the inception of the program through fiscal year 1957. Data are given for each program broken down by FCDA Region and State.

FEDERAL CONTRIBUTIONS PROGRAM

SUMMARY - ALL PROGRAMS

Region and State	Dollar Value of Federal Funds Obligated * by FY Appropriation					
	Total	1957/1958	1956/1957	1955/1956	1955	1954, 1953 & 1952
TOTAL	65,362,736	2,978,472	12,182,579	11,069,810	1,096,602	38,035,273
REGION 1	21,240,465	515,793	4,213,966	3,378,716	239,762	12,892,228
Connecticut	1,667,829	187,876	405,274	174,020	24,974	875,685
Maine	540,025	25,205	262,427	117,648	7,674	127,071
Massachusetts	2,668,251	144,683	612,292	246,162	34,662	1,630,452
New Hampshire	185,400	24,815	49,440	35,686	9,335	66,124
New Jersey	1,905,783	522	217,572	276,801	17,026	1,393,862
New York	13,762,650	108,457	2,548,345	2,449,187	144,230	8,512,431
Rhode Island	338,420	15,240	28,602	49,035	-	245,543
Vermont	172,107	8,995	90,014	30,177	1,861	41,060
REGION 2	15,616,125	675,624	2,746,798	3,134,278	450,929	8,608,496
Delaware	874,556	19,951	203,386	164,612	26,809	459,800
District of Columbia	194,490	-	2,481	34,759	7,000	150,250
Kentucky	384,236	55,156	37,940	159,139	-	132,001
Maryland	1,583,643	106,766	320,778	151,302	25,095	979,702
Ohio	4,142,055	154,219	462,678	1,247,406	42,008	2,235,744
Pennsylvania	7,563,064	306,946	1,599,828	1,236,391	316,470	4,103,429
Virginia	794,440	26,648	82,195	135,485	33,547	516,565
West Virginia	79,639	5,938	37,512	5,184	-	31,005
REGION 3	4,419,004	629,392	954,749	941,661	70,882	1,822,320
Alabama	614,088	43,094	102,394	125,842	10,289	332,469
Florida	687,368	52,602	231,412	263,363	4,399	135,592
Georgia	1,238,134	198,899	259,629	238,806	16,921	523,879
Mississippi	216,905	3,099	43,111	74,919	180	95,596
North Carolina	633,192	265,072	185,838	80,065	11,282	90,935
South Carolina	104,307	9,779	5,837	18,040	20	70,631
Tennessee	925,010	56,847	126,528	140,626	27,791	573,218
REGION 4	6,621,733	217,016	1,545,029	911,682	127,258	3,820,748
Illinois	1,837,154	68,809	284,449	130,638	43,280	1,309,978
Indiana	679,316	22,558	260,957	79,385	22,116	294,300
Michigan	2,191,150	74,550	662,130	293,882	20,474	1,140,114
Missouri	1,002,741	13,172	136,433	257,062	6,208	589,866
Wisconsin	911,372	37,927	201,060	150,715	35,180	486,490
REGION 5	3,325,317	304,606	832,305	777,761	41,743	1,368,902
Arkansas	312,404	22,030	96,858	123,587	-	69,929
Louisiana	686,468	7,522	165,489	125,681	12,940	374,836
New Mexico	6,501	560	5,941	-	-	-
Oklahoma	672,981	69,020	158,708	128,943	1,964	314,346
Texas	1,646,963	205,474	405,309	399,550	26,839	609,791
REGION 6	1,975,205	169,948	296,488	316,975	62,708	1,129,086
Colorado	315,908	8,673	56,250	76,202	5,305	169,478
Iowa	156,308	11,638	8,307	33,660	11,000	91,703
Kansas	379,758	40,775	21,572	31,959	-	285,452
Minnesota	758,194	81,591	142,917	78,173	46,403	409,110
Nebraska	214,144	7,990	40,775	34,932	-	130,447
North Dakota	26,876	9,964	8,207	647	-	8,058
South Dakota	72,108	9,280	14,121	42,344	-	6,363
Wyoming	51,909	37	4,339	19,058	-	28,475
REGION 7	10,777,874	369,132	1,457,820	1,434,019	93,168	7,423,735
Arizona	271,161	3,369	121,757	52,953	-	93,082
California	7,604,439	159,412	619,746	893,538	52,153	5,879,590
Idaho	129,656	8,453	85,323	27,408	-	8,472
Montana	90,984	4,123	11,119	39,434	2,575	33,733
Nevada	27,254	412	-	13,562	-	13,280
Oregon	964,399	41,562	110,641	246,269	10,813	555,114
Utah	177,511	5,536	47,131	14,095	12,764	97,985
Washington	1,512,470	146,265	462,103	146,760	14,863	742,479
TERRITORIES & POSSESSIONS	1,387,013	96,961	135,424	174,718	10,152	969,758
Alaska	352,274	306	14,332	5,231	6,515	325,890
American Samoa	-	-	-	-	-	-
Canal Zone	12,803	142	1,158	1,407	1,560	8,536
Guam	14,898	-	-	665	-	14,233
Hawaii	404,356	21,859	7,099	56,398	-	319,000
Puerto Rico	590,309	69,950	107,222	109,988	2,077	301,072
Virgin Islands	12,373	4,704	5,613	1,029	-	1,027

* Adjusted for firm contracts, cancellations and amendments as of June 30, 1957.

FEDERAL CONTRIBUTIONS PROGRAM

COMMUNICATIONS

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)				
	Total	1957/1958	1956/1957	1955/1956	1954, 1953 & 1952
TOTAL	<u>23,150,411</u>	<u>1,704,404</u>	<u>7,200,794</u>	<u>7,003,809</u>	<u>7,249,404</u>
REGION 1	<u>4,964,744</u>	<u>218,201</u>	<u>1,566,189</u>	<u>1,359,350</u>	<u>1,821,004</u>
Connecticut	318,432	25,244	217,931	118,447	156,810
Maine	210,181	21,151	106,343	57,552	25,135
Massachusetts	849,919	125,464	367,371	159,168	197,916
New Hampshire	113,627	24,415	39,122	26,819	24,271
New Jersey	452,317	-	143,792	106,506	202,019
New York	2,605,583	6,820	608,713	845,094	1,144,956
Rhode Island	121,892	14,865	18,371	26,614	62,042
Vermont	92,793	242	65,546	19,150	7,855
REGION 2	<u>5,761,447</u>	<u>357,301</u>	<u>1,732,468</u>	<u>2,267,152</u>	<u>1,424,526</u>
Delaware	327,545	10,181	116,367	107,515	93,482
District of Columbia	16,717	-	1,834	13,455	1,428
Kentucky	207,224	45,150	15,552	117,272	29,250
Maryland	402,361	21,182	175,942	52,730	152,507
Ohio	1,605,064	87,978	240,927	1,072,872	203,287
Pennsylvania	2,969,718	191,418	1,145,481	816,524	816,295
Virginia	236,338	1,392	32,739	83,148	119,059
West Virginia	16,480	-	3,626	3,636	9,218
REGION 3	<u>2,604,637</u>	<u>461,892</u>	<u>782,976</u>	<u>707,271</u>	<u>652,498</u>
Alabama	328,669	38,097	92,443	91,102	107,027
Florida	477,017	38,841	191,603	187,838	58,735
Georgia	699,674	111,722	193,105	186,208	208,639
Mississippi	162,846	2,346	40,783	42,434	77,283
North Carolina	461,908	227,039	167,118	55,781	11,970
South Carolina	81,096	9,035	-	17,659	54,402
Tennessee	393,427	34,812	97,924	126,249	134,442
REGION 4	<u>2,805,550</u>	<u>75,868</u>	<u>1,197,551</u>	<u>622,961</u>	<u>909,170</u>
Illinois	575,930	42,649	192,955	92,776	247,550
Indiana	286,651	494	232,300	26,359	27,498
Michigan	1,160,747	19,154	578,272	217,235	346,086
Missouri	488,780	5,267	111,593	226,005	145,915
Wisconsin	293,442	8,304	82,431	60,586	142,121
REGION 5	<u>2,123,445</u>	<u>203,383</u>	<u>591,340</u>	<u>609,691</u>	<u>713,031</u>
Arkansas	256,486	9,536	79,461	111,584	55,905
Louisiana	302,805	6,807	109,195	77,804	108,999
New Mexico	5,176	560	4,616	-	-
Oklahoma	373,159	31,079	76,916	72,122	193,042
Texas	1,185,819	161,401	321,152	348,181	355,085
REGION 6	<u>800,610</u>	<u>114,638</u>	<u>197,855</u>	<u>244,814</u>	<u>243,303</u>
Colorado	186,676	5,920	51,467	62,810	66,479
Iowa	75,396	11,550	6,807	33,660	23,379
Kansas	109,648	33,863	10,709	21,784	43,292
Minnesota	182,377	41,000	86,524	40,018	14,835
Nebraska	138,857	5,723	25,156	31,130	76,848
North Dakota	16,478	9,964	6,078	436	-
South Dakota	64,909	6,581	10,726	41,657	5,945
Wyoming	26,269	37	388	13,319	12,525
REGION 7	<u>3,676,498</u>	<u>261,157</u>	<u>1,020,593</u>	<u>1,072,798</u>	<u>1,321,950</u>
Arizona	186,731	-	109,945	40,954	35,832
California	1,999,276	93,696	293,142	710,453	901,985
Idaho	120,836	3,048	82,309	27,254	8,225
Montana	64,279	4,123	10,902	39,326	9,928
Nevada	12,831	-	-	12,831	-
Oregon	519,572	17,307	83,992	184,499	233,774
Utah	107,879	3,700	42,983	10,392	50,804
Washington	665,094	139,283	397,320	47,089	81,402
TERRITORIES & POSSESSIONS	<u>401,480</u>	<u>5,964</u>	<u>111,822</u>	<u>119,772</u>	<u>163,922</u>
Alaska	71,665	-	2,295	-	69,370
American Samoa	-	-	-	-	-
Canal Zone	-	-	-	-	-
Guam	1,874	-	-	-	1,874
Hawaii	33,429	1,260	900	24,166	7,103
Puerto Rico	283,594	-	103,480	94,992	85,122
Virgin Islands	10,918	4,704	5,147	614	453

FEDERAL CONTRIBUTIONS PROGRAM

COMMUNICATIONS

Region and State	Dollar Value of Recurring Charges Approved * (by FY Appropriation)				
	Total	1957/1956	1956/1957	1955/1956	1954
<u>TOTAL:</u>	<u>733,331</u>	<u>84,931</u>	<u>202,328</u>	<u>232,720</u>	<u>213,352</u>
<u>REGION 1</u>	<u>309,658</u>	<u>8,930</u>	<u>72,720</u>	<u>122,791</u>	<u>105,217</u>
Connecticut	29,220	1,755	18,342	8,901	222
Maine	4,037	1,730	1,362	925	-
Massachusetts	24,531	467	13,111	3,553	7,400
New Hampshire	-	-	-	-	-
New Jersey	5,531	-	2,190	1,500	1,841
New York	242,105	4,978	35,948	107,023	94,156
Rhode Island	3,613	-	1,126	889	1,598
Vermont	621	-	621	-	-
<u>REGION 2</u>	<u>161,117</u>	<u>41,699</u>	<u>46,848</u>	<u>31,183</u>	<u>41,387</u>
Delaware	5,140	819	2,387	1,581	353
District of Columbia	4,474	-	1,850	1,455	1,169
Kentucky	255	-	255	-	-
Maryland	11,955	297	4,649	4,017	2,992
Ohio	57,649	25,943	22,204	7,386	2,116
Pennsylvania	77,675	14,385	13,773	15,933	33,584
Virginia	3,969	255	1,730	811	1,173
West Virginia	-	-	-	-	-
<u>REGION 3</u>	<u>11,592</u>	<u>1,591</u>	<u>3,408</u>	<u>4,422</u>	<u>2,171</u>
Alabama	-	-	-	-	-
Florida	4,037	-	1,645	972	1,420
Georgia	3,044	1,239	988	704	113
Mississippi	836	-	-	836	-
North Carolina	1,041	-	-	831	210
South Carolina	-	-	-	-	-
Tennessee	2,634	352	775	1,079	428
<u>REGION 4</u>	<u>57,934</u>	<u>8,522</u>	<u>12,892</u>	<u>27,697</u>	<u>8,823</u>
Illinois	25,803	-	5,125	18,063	2,615
Indiana	-	-	-	-	-
Michigan	17,426	6,031	1,002	7,517	2,876
Missouri	5,285	143	1,468	1,427	2,247
Wisconsin	9,420	2,348	5,297	690	1,085
<u>REGION 5</u>	<u>7,459</u>	<u>186</u>	<u>3,064</u>	<u>1,011</u>	<u>3,198</u>
Arkansas	-	-	-	-	-
Louisiana	2,466	-	131	-	2,335
New Mexico	-	-	-	-	-
Oklahoma	1,522	186	759	577	-
Texas	3,471	-	2,174	434	863
<u>REGION 6</u>	<u>10,388</u>	<u>-</u>	<u>5,979</u>	<u>3,619</u>	<u>790</u>
Colorado	2,230	-	1,325	905	-
Iowa	-	-	-	-	-
Kansas	3,497	-	-	2,714	783
Minnesota	606	-	606	-	-
Nebraska	4,048	-	4,048	-	-
North Dakota	-	-	-	-	-
South Dakota	-	-	-	-	-
Wyoming	7	-	-	-	7
<u>REGION 7</u>	<u>175,132</u>	<u>24,003</u>	<u>57,417</u>	<u>41,997</u>	<u>51,715</u>
Arizona	-	-	-	-	-
California	169,182	22,761	56,320	40,239	49,862
Idaho	-	-	-	-	-
Montana	-	-	-	-	-
Nevada	-	-	-	-	-
Oregon	226	-	226	-	-
Utah	-	-	-	-	-
Washington	5,724	1,242	871	1,758	1,853
<u>TERRITORIES & POSSESSIONS</u>	<u>51</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>51</u>
Alaska	-	-	-	-	-
American Samoa	-	-	-	-	-
Canal Zone	-	-	-	-	-
Guam	-	-	-	-	-
Hawaii	51	-	-	-	51
Puerto Rico	-	-	-	-	-
Virgin Islands	-	-	-	-	-

* Included in the communications figures on the preceding page.

FEDERAL CONTRIBUTIONS PROGRAM

CONTROL CENTERS & ENGINEERING

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)					
	CONTROL CENTERS		ENGINEERING			
	Total	1957/1958	Total	1957/1958	1956/1957	1955/1956
TOTAL	<u>8,583</u>	<u>8,563</u>	<u>890,485</u>	<u>164,413</u>	<u>471,936</u>	<u>254,136</u>
REGION 1	-	-	<u>192,713</u>	<u>10,639</u>	<u>140,399</u>	<u>41,675</u>
Connecticut	-	-	56,370	-	52,268	4,102
Maine	-	-	8,444	-	3,364	5,080
Massachusetts	-	-	39,992	2,856	33,207	3,929
New Hampshire	-	-	-	-	-	-
New Jersey	-	-	13,471	-	5,030	8,441
New York	-	-	51,867	-	34,920	16,947
Rhode Island	-	-	3,077	-	715	2,362
Vermont	-	-	19,492	7,783	10,895	814
REGION 2	<u>1,100</u>	<u>1,100</u>	<u>229,868</u>	<u>20,452</u>	<u>118,714</u>	<u>90,702</u>
Delaware	1,100	1,000	6,913	-	6,538	375
District of Columbia	-	-	-	-	-	-
Kentucky	-	-	34,380	1,193	20,687	12,500
Maryland	-	-	23,268	-	20,134	3,134
Ohio	-	-	21,149	-	19,171	1,978
Pennsylvania	-	-	142,911	19,259	51,144	72,508
Virginia	-	-	1,247	-	1,040	207
West Virginia	-	-	-	-	-	-
REGION 3	<u>800</u>	<u>800</u>	<u>69,316</u>	<u>41,768</u>	<u>18,915</u>	<u>8,633</u>
Alabama	400	400	556	-	556	-
Florida	-	-	11,888	-	11,888	-
Georgia	400	400	17,987	8,400	2,391	7,196
Mississippi	-	-	-	-	-	-
North Carolina	-	-	37,895	33,368	3,090	1,437
South Carolina	-	-	-	-	-	-
Tennessee	-	-	990	-	990	-
REGION 4	-	-	<u>145,671</u>	-	<u>118,764</u>	<u>26,907</u>
Illinois	-	-	26,192	-	21,662	4,530
Indiana	-	-	18,512	-	8,179	10,333
Michigan	-	-	41,542	-	35,692	5,850
Missouri	-	-	4,750	-	4,750	-
Wisconsin	-	-	54,675	-	48,481	6,194
REGION 5	-	-	<u>7,027</u>	<u>910</u>	<u>4,556</u>	<u>1,561</u>
Arkansas	-	-	-	-	-	-
Louisiana	-	-	-	-	-	-
New Mexico	-	-	-	-	-	-
Oklahoma	-	-	-	-	-	-
Texas	-	-	7,027	910	4,556	1,561
REGION 6	-	-	<u>35,028</u>	<u>14,260</u>	<u>11,442</u>	<u>9,326</u>
Colorado	-	-	136	-	-	136
Iowa	-	-	-	-	-	-
Kansas	-	-	7,959	4,528	3,034	397
Minnesota	-	-	25,557	8,356	8,408	8,793
Nebraska	-	-	1,376	1,376	-	-
North Dakota	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-
REGION 7	<u>6,683</u>	<u>6,683</u>	<u>138,325</u>	<u>6,434</u>	<u>56,559</u>	<u>75,332</u>
Arizona	-	-	-	-	-	-
California	-	-	45,408	3,065	10,593	31,750
Idaho	-	-	1,333	-	1,179	154
Montana	-	-	-	-	-	-
Nevada	-	-	-	-	-	-
Oregon	6,683	6,683	4,405	2,764	-	1,641
Utah	-	-	-	-	-	-
Washington	-	-	87,179	605	44,787	41,787
TERRITORIES & POSSESSIONS	-	-	<u>72,537</u>	<u>69,950</u>	<u>2,587</u>	-
Alaska	-	-	2,587	-	2,587	-
American Samoa	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-
Guam	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-
Puerto Rico	-	-	69,950	69,950	-	-
Virgin Islands	-	-	-	-	-	-

FEDERAL CONTRIBUTIONS PROGRAM

FIRE SERVICE & HELICOPTER

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)					
	FIRE SERVICE*			HELICOPTER		
	Total	1953	1952	Total	1957/1958	1956/1957
TOTAL	8,851,285	6,362,415	2,488,870	101,734	20,838	80,896
REGION 1	2,408,081	1,594,411	813,670	-	-	-
Connecticut	168,805	135,910	32,895	-	-	-
Maine	-	-	-	-	-	-
Massachusetts	205,280	108,724	96,556	-	-	-
New Hampshire	-	-	-	-	-	-
New Jersey	466,766	270,168	196,598	-	-	-
New York	1,472,457	1,017,167	455,290	-	-	-
Rhode Island	71,043	38,834	32,209	-	-	-
Vermont	23,730	23,608	122	-	-	-
REGION 2	2,354,064	1,776,620	577,444	-	-	-
Delaware	221,516	221,516	-	-	-	-
District of Columbia	-	-	-	-	-	-
Kentucky	72,340	46,007	26,333	-	-	-
Maryland	17,529	17,529	-	-	-	-
Ohio	480,188	281,602	198,586	-	-	-
Pennsylvania	1,441,704	1,111,875	329,829	-	-	-
Virginia	120,787	98,091	22,696	-	-	-
West Virginia	-	-	-	-	-	-
REGION 3	496,792	428,188	68,604	62,919	20,838	42,081
Alabama	113,849	97,185	16,664	-	-	-
Florida	1,503	1,503	-	-	-	-
Georgia	160,399	160,399	-	20,760	-	20,760
Mississippi	-	-	-	-	-	-
North Carolina	11,528	11,528	-	-	-	-
South Carolina	-	-	-	-	-	-
Tennessee	209,513	157,573	51,940	42,159	20,838	21,321
REGION 4	1,380,401	951,281	429,120	-	-	-
Illinois	754,815	574,920	179,895	-	-	-
Indiana	143,772	137,946	5,826	-	-	-
Michigan	271,727	109,643	162,084	-	-	-
Missouri	201,453	128,772	72,681	-	-	-
Wisconsin	8,634	-	8,634	-	-	-
REGION 5	316,855	265,459	51,396	-	-	-
Arkansas	12,437	12,437	-	-	-	-
Louisiana	165,009	113,613	51,396	-	-	-
New Mexico	-	-	-	-	-	-
Oklahoma	53,078	53,078	-	-	-	-
Texas	86,331	86,331	-	-	-	-
REGION 6	179,857	131,469	48,388	-	-	-
Colorado	18,141	6,781	11,360	-	-	-
Iowa	25,787	25,787	-	-	-	-
Kansas	68,529	59,452	9,077	-	-	-
Minnesota	67,400	39,449	27,951	-	-	-
Nebraska	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-
South Dakota	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-
REGION 7	1,489,506	1,085,503	404,003	38,815	-	38,815
Arizona	3,545	3,545	-	-	-	-
California	1,284,032	917,502	366,530	38,815	-	38,815
Idaho	-	-	-	-	-	-
Montana	11,701	11,701	-	-	-	-
Nevada	-	-	-	-	-	-
Oregon	73,020	62,016	11,004	-	-	-
Utah	4,935	4,935	-	-	-	-
Washington	112,273	85,804	26,469	-	-	-
TERRITORIES & POSSESSIONS	225,729	129,484	96,245	-	-	-
Alaska	129,638	33,393	96,245	-	-	-
American Samoa	-	-	-	-	-	-
Canal Zone	-	-	-	-	-	-
Guam	-	-	-	-	-	-
Hawaii	5,709	5,709	-	-	-	-
Puerto Rico	90,382	90,382	-	-	-	-
Virgin Islands	-	-	-	-	-	-

* The Fire Service Program was in effect only in fiscal years 1952 and 1953.

FEDERAL CONTRIBUTIONS PROGRAM

HEALTH & SPECIAL WEAPONS DEFENSE

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)				
	Total	1957/1958	1956/1957	1955/1956	1954, 1953 & 1952
TOTAL	15,083,827	121,671	1,668,018	1,771,292	11,522,846
REGION 1	8,424,056	45,075	1,417,453	1,393,021	5,568,507
Connecticut	366,355	107	6,767	6,752	352,729
Maine	99,853	-	60,126	11,136	28,591
Massachusetts	802,733	1,509	20,314	14,756	766,154
New Hampshire	24,623	-	3,218	3,046	18,359
New Jersey	415,827	522	2,176	2,860	410,269
New York	6,699,660	42,937	1,324,173	1,353,654	3,978,896
Rhode Island	13,954	-	222	223	13,509
Vermont	1,051	-	457	594	-
REGION 2	2,774,467	4,442	152,456	143,855	2,473,714
Delaware	124,263	-	58,296	7,472	58,495
District of Columbia	78,050	-	335	1,449	76,266
Kentucky	14,416	-	603	-	13,813
Maryland	486,205	2,431	40,674	40,525	402,575
Ohio	754,612	119	35,666	63,801	655,026
Pennsylvania	1,201,385	1,787	6,067	17,668	1,175,863
Virginia	111,094	105	10,420	12,620	87,949
West Virginia	4,442	-	395	320	3,727
REGION 3	176,861	9,681	17,177	40,855	109,148
Alabama	1,908	-	1,370	278	260
Florida	24,609	8,761	301	12,651	2,896
Georgia	21,914	798	15,506	4,589	1,021
Mississippi	15,863	-	-	15,863	-
North Carolina	26,435	122	-	6,880	19,433
South Carolina	91	-	-	-	91
Tennessee	86,041	-	-	594	85,447
REGION 4	622,524	40,384	19,330	85,929	476,881
Illinois	25,371	86	2,400	12,247	10,638
Indiana	60,614	978	3,403	1,418	54,815
Michigan	260,590	39,118	1,449	22,871	197,152
Missouri	12,632	-	585	-	12,047
Wisconsin	263,317	202	11,493	49,393	202,229
REGION 5	42,581	610	3,714	19,740	18,517
Arkansas	294	-	-	294	-
Louisiana	27,386	-	3,424	18,032	5,930
New Mexico	-	-	-	-	-
Oklahoma	12,726	-	-	449	12,277
Texas	2,175	610	290	965	310
REGION 6	165,919	416	6,668	16,274	142,561
Colorado	19,002	-	655	383	17,964
Iowa	580	-	-	-	580
Kansas	62,289	-	2,125	3,898	56,266
Minnesota	64,741	416	2,221	5,862	56,242
Nebraska	12,054	-	1,369	-	10,685
North Dakota	1,035	-	-	211	824
South Dakota	687	-	-	687	-
Wyoming	5,531	-	298	5,233	-
REGION 7	2,470,496	15,202	39,445	36,399	2,379,450
Arizona	535	-	132	126	277
California	2,050,374	12,140	36,229	7,838	1,994,167
Idaho	750	750	-	-	-
Montana	-	-	-	-	-
Nevada	731	-	-	731	-
Oregon	114,311	2,137	903	1,094	110,177
Utah	8,202	175	539	656	6,832
Washington	295,593	-	1,642	25,954	267,997
TERRITORIES & POSSESSIONS	406,923	5,861	11,775	35,219	354,068
Alaska	77,721	108	5,775	3,777	68,061
American Samoa	-	-	-	-	-
Canal Zone	7,349	-	450	-	6,899
Guam	696	-	-	106	590
Hawaii	270,907	5,753	5,550	25,314	234,290
Puerto Rico	50,250	-	-	6,022	44,228
Virgin Islands	-	-	-	-	-

FEDERAL CONTRIBUTIONS PROGRAM

POLICE SERVICE

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)			
	Total	1957/1958	1956/1957	1955/1956
TOTAL	<u>185,220</u>	<u>47,722</u>	<u>119,762</u>	<u>17,736</u>
REGION 1	<u>54,397</u>	<u>10,069</u>	<u>44,328</u>	-
Connecticut	16,814	3,109	13,705	-
Maine	3,901	43	3,858	-
Massachusetts	13,236	4,035	9,201	-
New Hampshire	146	-	146	-
New Jersey	4,114	-	4,114	-
New York	13,747	2,882	10,865	-
Rhode Island	1,735	-	1,735	-
Vermont	704	-	704	-
REGION 2	<u>72,547</u>	<u>25,543</u>	<u>29,974</u>	<u>17,030</u>
Delaware	9,588	-	-	9,588
District of Columbia	-	-	-	-
Kentucky	-	-	-	-
Maryland	2,940	2,125	815	-
Ohio	11,783	3,875	7,908	-
Pennsylvania	45,207	19,438	18,327	7,442
Virginia	3,029	105	2,924	-
West Virginia	-	-	-	-
REGION 3	<u>5,783</u>	<u>737</u>	<u>4,478</u>	<u>568</u>
Alabama	3,286	609	2,677	-
Florida	661	-	661	-
Georgia	-	-	-	-
Mississippi	128	128	-	-
North Carolina	-	-	-	-
South Carolina	704	-	704	-
Tennessee	1,004	-	436	568
REGION 4	<u>27,261</u>	<u>2,590</u>	<u>24,533</u>	<u>138</u>
Illinois	937	218	581	138
Indiana	875	-	875	-
Michigan	1,345	595	750	-
Missouri	2,092	429	1,663	-
Wisconsin	22,012	1,348	20,664	-
REGION 5	<u>8,808</u>	-	<u>8,808</u>	-
Arkansas	-	-	-	-
Louisiana	-	-	-	-
New Mexico	-	-	-	-
Oklahoma	-	-	-	-
Texas	8,808	-	8,808	-
REGION 6	<u>3,555</u>	<u>1,172</u>	<u>2,383</u>	-
Colorado	-	-	-	-
Iowa	-	-	-	-
Kansas	180	-	180	-
Minnesota	3,375	1,172	2,203	-
Nebraska	-	-	-	-
North Dakota	-	-	-	-
South Dakota	-	-	-	-
Wyoming	-	-	-	-
REGION 7	<u>12,869</u>	<u>7,611</u>	<u>5,258</u>	-
Arizona	2,563	2,563	-	-
California	4,273	-	4,273	-
Idaho	3,813	3,813	-	-
Montana	-	-	-	-
Nevada	-	-	-	-
Oregon	985	-	985	-
Utah	-	-	-	-
Washington	1,235	1,235	-	-
TERRITORIES & POSSESSIONS	-	-	-	-
Alaska	-	-	-	-
American Samoa	-	-	-	-
Canal Zone	-	-	-	-
Guam	-	-	-	-
Hawaii	-	-	-	-
Puerto Rico	-	-	-	-
Virgin Islands	-	-	-	-

FEDERAL CONTRIBUTIONS PROGRAM

PUBLIC INFORMATION

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)				
	Total	1957/1958	1956/1957	1955/1956	1954*, 1953 & 1952*
TOTAL	824,034	69,446	238,489	243,753	272,346
REGION 1	313,011	12,530	115,005	72,690	112,786
Connecticut	11,363	1,088	3,985	3,348	2,942
Maine	29,934	2,962	16,229	10,743	-
Massachusetts	41,664	-	33,537	2,470	5,657
New Hampshire	400	400	-	-	-
New Jersey	30,505	-	10,271	2,908	17,326
New York	195,960	7,110	50,166	52,515	86,169
Rhode Island	425	-	-	-	425
Vermont	2,760	970	817	706	267
REGION 2	237,057	2,457	62,684	84,131	66,785
Delaware	8,126	2,661	2,194	3,271	-
District of Columbia	19,855	-	-	19,855	-
Kentucky	5,724	3,338	215	1,012	559
Maryland	26,538	2,750	11,118	3,500	9,170
Ohio	75,695	5,442	15,550	23,655	31,141
Pennsylvania	85,313	5,867	29,983	28,042	21,481
Virginia	15,159	2,952	3,302	4,683	4,222
West Virginia	647	-	322	113	212
REGION 3	73,589	6,838	13,930	20,540	32,281
Alabama	5,685	771	1,377	1,956	1,581
Florida	7,799	1,782	3,474	2,543	-
Georgia	46,961	2,017	5,307	12,166	27,471
Mississippi	2,072	625	710	285	452
North Carolina	4,852	1,268	2,957	461	166
South Carolina	35	-	-	-	35
Tennessee	6,185	375	105	3,129	2,576
REGION 4	75,394	8,669	15,980	34,678	16,067
Illinois	8,186	712	517	6,957	-
Indiana	10,980	495	1,475	3,733	5,277
Michigan	23,585	5,032	4,828	8,988	4,737
Missouri	14,457	501	1,934	8,509	3,513
Wisconsin	18,186	1,929	7,226	6,491	2,540
REGION 5	37,124	2,498	6,573	11,766	16,287
Arkansas	295	-	105	190	-
Louisiana	13,298	105	2,357	8,109	2,727
New Mexico	-	-	-	-	-
Oklahoma	1,732	1,106	413	-	213
Texas	21,799	1,287	3,698	3,467	13,347
REGION 6	27,128	4,239	6,771	13,081	3,037
Colorado	15,375	2,753	1,365	10,168	1,089
Iowa	-	-	-	-	-
Kansas	4,024	495	2,195	1,334	-
Minnesota	6,203	867	1,944	1,474	1,918
Nebraska	1,456	124	1,227	105	-
North Dakota	-	-	-	-	-
South Dakota	-	-	-	-	-
Wyoming	70	-	40	-	30
REGION 7	48,012	9,464	16,672	245	21,631
Arizona	1,006	806	-	-	200
California	35,024	6,151	12,055	245	16,573
Idaho	-	-	-	-	-
Montana	-	-	-	-	-
Nevada	442	412	-	-	30
Oregon	5,502	125	2,752	-	2,625
Utah	3,296	1,443	131	-	1,722
Washington	2,742	527	1,734	-	481
TERRITORIES & POSSESSIONS	12,719	1,751	874	6,622	3,472
Alaska	2,259	198	21	1,324	716
American Samoa	-	-	-	-	-
Canal Zone	850	142	708	-	-
Guam	-	-	-	-	-
Hawaii	4,312	1,411	145	-	2,756
Puerto Rico	5,298	-	-	5,298	-
Virgin Islands	-	-	-	-	-

* Included under Training and Education in 1954 and 1952.

FEDERAL CONTRIBUTIONS PROGRAM

RESCUE SERVICE

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)				
	Total	1957/1958	1956/1957	1955/1956	1954, 1953 & 1952
<u>TOTAL</u>	<u>2,671,641</u>	<u>150,180</u>	<u>335,972</u>	<u>536,880</u>	<u>1,648,609</u>
<u>REGION 1</u>	<u>825,170</u>	<u>24,714</u>	<u>128,980</u>	<u>151,893</u>	<u>519,583</u>
Connecticut	83,881	9,681	33,726	1,222	39,252
Maine	64,097	-	28,724	16,950	18,423
Massachusetts	164,057	6,391	34,862	28,081	94,723
New Hampshire	4,963	-	-	542	4,421
New Jersey	139,389	-	10,379	53,123	75,887
New York	340,119	8,642	16,949	42,179	272,349
Rhode Island	19,173	-	-	5,179	13,994
Vermont	9,491	-	4,340	4,617	534
<u>REGION 2</u>	<u>833,504</u>	<u>69,258</u>	<u>114,146</u>	<u>224,170</u>	<u>425,930</u>
Delaware	38,678	-	115	20,252	18,311
District of Columbia	-	-	-	-	-
Kentucky	5,165	-	658	-	4,507
Maryland	138,360	13,080	32,128	36,805	56,347
Ohio	221,991	6,272	15,791	30,603	169,325
Pennsylvania	321,768	25,269	49,257	110,418	136,824
Virginia	97,841	19,311	16,197	26,092	36,241
West Virginia	9,701	5,326	-	-	4,375
<u>REGION 3</u>	<u>119,063</u>	<u>7,585</u>	<u>9,841</u>	<u>28,376</u>	<u>73,261</u>
Alabama	-	-	-	-	-
Florida	11,696	-	2,090	9,606	-
Georgia	46,738	5,199	2,840	-	38,699
Mississippi	20,823	-	-	9,000	11,823
North Carolina	23,429	2,386	4,911	6,666	9,466
South Carolina	-	-	-	-	-
Tennessee	16,377	-	-	3,104	13,273
<u>REGION 4</u>	<u>235,277</u>	<u>23,405</u>	<u>28,631</u>	<u>41,626</u>	<u>141,615</u>
Illinois	77,629	8,300	12,144	2,243	54,942
Indiana	33,964	8,800	6,165	14,538	4,461
Michigan	73,413	6,305	6,533	6,984	53,591
Missouri	10,333	-	-	1,993	8,340
Wisconsin	39,938	-	3,789	15,868	20,281
<u>REGION 5</u>	<u>89,605</u>	<u>386</u>	<u>21,949</u>	<u>26,245</u>	<u>41,025</u>
Arkansas	5,569	-	2,181	2,558	830
Louisiana	32,572	-	14,278	6,053	12,241
New Mexico	-	-	-	-	-
Oklahoma	11,406	386	3,250	6,869	901
Texas	40,058	-	2,240	10,765	27,053
<u>REGION 6</u>	<u>149,718</u>	<u>14,555</u>	<u>9,398</u>	<u>14,819</u>	<u>110,946</u>
Colorado	-	-	-	-	-
Iowa	113	-	-	-	113
Kansas	686	-	-	686	-
Minnesota	142,895	12,031	5,898	14,133	110,833
Nebraska	-	-	-	-	-
North Dakota	-	-	-	-	-
South Dakota	2,524	2,524	-	-	-
Wyoming	3,500	-	3,500	-	-
<u>REGION 7</u>	<u>395,908</u>	<u>10,277</u>	<u>23,027</u>	<u>44,393</u>	<u>318,211</u>
Arizona	8,074	-	-	7,132	942
California	262,330	-	13,817	3,750	244,763
Idaho	242	242	-	-	-
Montana	-	-	-	-	-
Nevada	-	-	-	-	-
Oregon	80,434	7,624	9,210	32,941	30,659
Utah	570	-	-	570	-
Washington	44,258	2,411	-	-	41,847
<u>TERRITORIES & POSSESSIONS</u>	<u>23,396</u>	<u>-</u>	<u>-</u>	<u>5,358</u>	<u>18,038</u>
Alaska	14,757	-	-	-	14,757
American Samoa	-	-	-	-	-
Canal Zone	-	-	-	-	-
Guam	3,281	-	-	-	3,281
Hawaii	5,358	-	-	5,358	-
Puerto Rico	-	-	-	-	-
Virgin Islands	-	-	-	-	-

FEDERAL CONTRIBUTIONS PROGRAM

TRAINING & EDUCATION

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)				
	Total	1957/1958	1956/1957	1955/1956	1954, 1953 & 1952
TOTAL	5,588,434	341,959	706,838	650,484	3,889,153
REGION 1	1,906,710	164,849	350,965	137,416	1,253,480
Connecticut	258,665	137,978	30,660	28,350	61,677
Maine	40,602	950	9,720	3,485	26,447
Massachusetts	161,344	2,222	17,668	29,682	111,772
New Hampshire	21,780	-	4,264	1,294	16,222
New Jersey	165,997	-	18,440	37,262	110,295
New York	1,229,418	23,699	266,642	34,059	905,018
Rhode Island	14,135	-	333	427	13,375
Vermont	14,769	-	3,238	2,857	8,674
REGION 2	1,017,235	28,553	117,918	163,029	707,735
Delaware	61,888	5,122	13,482	13,303	29,981
District of Columbia	244	-	-	-	244
Kentucky	12,907	875	225	275	11,532
Maryland	144,161	6,397	9,419	6,071	122,274
Ohio	340,371	4,548	26,102	42,006	267,715
Pennsylvania	386,400	11,611	62,908	98,405	213,476
Virginia	68,680	-	4,952	2,969	60,759
West Virginia	2,584	-	830	-	1,754
REGION 3	372,502	73,042	29,422	95,029	175,009
Alabama	93,443	248	2,125	25,232	65,838
Florida	77,179	2,664	13,570	40,411	20,534
Georgia	124,361	69,560	10,508	20,343	23,950
Mississippi	2,957	-	468	2,010	479
North Carolina	2,847	82	409	76	2,280
South Carolina	8,986	-	-	-	8,986
Tennessee	62,729	488	2,342	6,957	52,942
REGION 4	348,900	6,997	24,518	29,292	288,093
Illinois	53,618	1,469	9,439	5,356	37,354
Indiana	23,085	545	2,115	5,904	14,521
Michigan	181,169	1,486	3,914	8,294	167,475
Missouri	43,489	674	7,580	2,855	32,380
Wisconsin	47,539	2,823	1,470	6,883	36,363
REGION 5	338,993	37,061	115,546	74,612	111,774
Arkansas	33,026	12,494	11,111	8,664	757
Louisiana	83,556	-	30,136	8,851	44,569
New Mexico	-	-	-	-	-
Oklahoma	169,434	23,907	62,853	47,803	34,871
Texas	52,977	660	11,446	9,294	31,577
REGION 6	251,470	3,612	22,487	9,006	216,365
Colorado	36,353	-	1,153	611	34,589
Iowa	11,349	88	-	-	11,261
Kansas	81,252	770	509	1,725	78,248
Minnesota	75,564	2,091	9,568	4,344	59,561
Nebraska	34,837	488	10,940	1,820	21,589
North Dakota	7,438	-	204	-	7,234
South Dakota	593	175	-	-	418
Wyoming	4,084	-	113	506	3,465
REGION 7	1,218,996	27,845	45,374	139,436	1,006,341
Arizona	21,744	-	-	4,741	17,003
California	936,942	22,470	32,086	87,561	794,825
Idaho	2,682	600	1,835	-	247
Montana	1,325	-	100	108	1,117
Nevada	13,250	-	-	-	13,250
Oregon	86,058	3,722	7,159	21,715	53,462
Utah	29,069	218	1,286	2,477	25,088
Washington	127,926	835	2,908	22,834	101,349
TERRITORIES & POSSESSIONS	133,628	-	608	2,664	130,356
Alaska	9,418	-	-	130	9,288
American Samoa	-	-	-	-	-
Canal Zone	77	-	-	-	77
Guam	5,766	-	-	559	5,207
Hawaii	47,941	-	-	1,560	46,381
Puerto Rico	68,971	-	142	-	68,829
Virgin Islands	1,455	-	466	415	574

FEDERAL CONTRIBUTIONS PROGRAM

WARNING DEVICE AND VOICE SOUND SYSTEMS*

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)					
	Total	1957/1958	1956/1957	1955/1956	1955	1954, 1953 & 1952
TOTAL	7,562,989	293,953	1,265,216	510,691	1,096,602	4,396,527
REGION 1	1,982,741	29,616	402,399	170,697	239,762	1,140,267
Connecticut	178,677	10,569	45,065	5,128	24,974	92,941
Maine	46,262	99	11,703	10,141	7,674	16,645
Massachusetts	373,719	2,206	84,087	6,972	34,662	245,792
New Hampshire	18,240	-	3,690	3,204	9,335	2,011
New Jersey	184,794	-	23,370	49,602	17,026	94,796
New York	1,090,601	16,367	223,241	89,836	144,230	616,927
Rhode Island	83,131	375	7,226	4,375	-	71,155
Vermont	7,317	-	4,017	1,439	1,861	-
REGION 2	2,163,635	93,217	400,945	128,693	450,929	1,089,851
Delaware	76,849	4,887	5,395	1,743	26,809	38,015
District of Columbia	79,624	-	312	-	7,000	72,312
Kentucky	28,080	-	-	28,080	-	-
Maryland	240,253	6,500	30,326	4,938	25,095	173,394
Ohio	592,155	46,078	85,291	4,707	42,008	414,071
Pennsylvania	961,287	32,357	236,661	83,007	316,470	292,792
Virginia	139,602	2,783	10,621	5,103	33,547	87,548
West Virginia	45,785	612	32,339	1,115	-	11,719
REGION 3	429,671	5,974	31,461	38,023	70,882	283,331
Alabama	66,142	2,969	1,696	7,274	10,289	43,914
Florida	70,698	554	3,507	10,314	4,399	51,924
Georgia	96,537	566	9,212	6,138	16,921	63,700
Mississippi	12,216	-	1,150	5,327	180	5,559
North Carolina	64,098	807	7,353	8,564	11,282	36,092
South Carolina	13,395	744	5,133	381	20	7,117
Tennessee	106,585	334	3,410	25	27,791	75,025
REGION 4	964,241	59,103	113,055	64,907	127,258	599,918
Illinois	314,152	15,375	44,751	6,067	43,280	204,679
Indiana	100,483	11,246	6,445	16,720	22,116	43,956
Michigan	172,322	2,860	30,592	19,498	20,474	98,898
Missouri	216,600	6,301	8,328	17,700	6,208	178,063
Wisconsin	160,684	23,321	22,939	4,922	35,180	74,322
REGION 5	360,762	53,758	79,819	34,029	41,743	151,413
Arkansas	4,297	-	4,000	297	-	-
Louisiana	61,725	610	6,099	6,715	12,940	35,361
New Mexico	1,325	-	1,325	-	-	-
Oklahoma	51,446	12,542	15,276	1,700	1,964	19,964
Texas	241,969	40,606	53,119	25,317	26,839	96,088
REGION 6	359,167	17,056	39,484	7,840	62,708	232,079
Colorado	37,971	-	1,610	279	5,305	30,777
Iowa	43,083	-	1,500	-	11,000	30,583
Kansas	44,692	1,119	2,820	2,135	-	38,618
Minnesota	190,082	15,658	26,151	3,549	46,403	98,321
Nebraska	25,564	279	2,083	1,877	-	21,325
North Dakota	1,925	-	1,925	-	-	-
South Dakota	3,395	-	3,395	-	-	-
Wyoming	12,455	-	-	-	-	12,455
REGION 7	1,192,171	21,794	190,295	61,419	93,168	825,495
Arizona	46,841	-	11,680	-	-	35,161
California	900,326	19,225	158,204	51,941	52,153	618,803
Idaho	-	-	-	-	-	-
Montana	13,679	-	117	-	2,575	10,987
Nevada	-	-	-	-	-	-
Oregon	59,919	1,200	4,946	1,973	10,813	40,987
Utah	23,348	-	2,192	-	12,764	8,392
Washington	148,058	1,369	13,156	7,505	14,863	111,165
TERRITORIES & POSSESSIONS	110,601	13,435	7,758	5,083	10,152	74,173
Alaska	44,229	-	3,654	-	6,515	34,060
American Samoa	-	-	-	-	-	-
Canal Zone	4,527	-	-	1,407	1,560	1,560
Guam	3,281	-	-	-	-	3,281
Hawaii	36,700	13,435	504	-	-	22,761
Puerto Rico	21,864	-	3,600	3,676	2,077	12,511
Virgin Islands	-	-	-	-	-	-

* Designated as Attack Warning Program in prior years.

FEDERAL CONTRIBUTIONS PROGRAM

WARNING DEVICE AND VOICE SOUND SYSTEMS

Region and State	Dollar Value of Recurring Charges Approved* (by FY Appropriation)					
	Total	1957/1958	1956/1957	1955/1956	1955	1954
TOTAL	1,076,716	86,227	512,826	65,337	236,807	175,519
REGION 1	326,860	16,508	141,652	5,552	86,480	76,668
Connecticut	48,321	6,432	20,565	2,033	9,245	10,046
Maine	-	-	-	-	-	-
Massachusetts	13,786	-	8,968	1,780	275	2,763
New Hampshire	789	-	559	-	230	-
New Jersey	2,611	-	2,611	-	-	-
New York	261,353	10,076	108,949	1,739	76,730	63,859
Rhode Island	-	-	-	-	-	-
Vermont	-	-	-	-	-	-
REGION 2	396,075	22,188	230,165	16,535	89,560	37,627
Delaware	144	144	-	-	-	-
District of Columbia	385	-	325	-	-	60
Kentucky	-	-	-	-	-	-
Maryland	83,592	-	66,273	4,788	5,706	6,825
Ohio	73,530	17,900	21,375	5,794	12,539	15,922
Pennsylvania	217,610	1,100	135,035	3,729	66,260	11,486
Virginia	19,045	2,432	7,157	1,067	5,055	3,334
West Virginia	1,769	612	-	1,157	-	-
REGION 3	29,268	4,050	10,539	4,275	7,591	2,813
Alabama	7,903	1,939	-	2,433	3,267	264
Florida	2,691	396	456	1,101	50	688
Georgia	8,645	483	5,638	333	1,089	1,102
Mississippi	180	-	-	-	180	-
North Carolina	1,135	253	582	12	288	-
South Carolina	1,671	645	450	396	180	-
Tennessee	7,043	334	3,413	-	2,537	759
REGION 4	105,914	24,461	20,465	17,881	19,702	23,405
Illinois	18,098	3,519	2,477	3,717	3,861	4,524
Indiana	6,949	552	2,702	1,498	1,488	709
Michigan	10,554	2,297	1,100	2,908	1,731	2,518
Missouri	30,415	2,546	6,325	8,646	6,163	6,735
Wisconsin	39,898	15,547	7,861	1,112	6,459	8,919
REGION 5	16,841	182	5,006	5,825	5,204	624
Arkansas	-	-	-	-	-	-
Louisiana	12,447	-	4,422	4,417	3,608	-
New Mexico	-	-	-	-	-	-
Oklahoma	-	-	-	-	-	-
Texas	4,394	182	584	1,408	1,596	624
REGION 6	12,795	3,226	5,598	383	1,193	2,395
Colorado	3,280	-	741	-	743	1,796
Iowa	283	-	-	-	-	283
Kansas	-	-	-	-	-	-
Minnesota	8,101	2,947	4,553	-	450	151
Nebraska	1,106	279	279	383	-	165
North Dakota	25	-	25	-	-	-
South Dakota	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-
REGION 7	173,519	8,502	95,747	13,326	25,517	30,427
Arizona	-	-	-	-	-	-
California	160,864	7,005	90,703	12,338	22,863	27,955
Idaho	-	-	-	-	-	-
Montana	92	-	92	-	-	-
Nevada	-	-	-	-	-	-
Oregon	3,147	1,200	1,212	-	568	167
Utah	-	-	-	-	-	-
Washington	9,416	297	3,740	988	2,086	2,305
TERRITORIES & POSSESSIONS	15,444	7,110	3,654	1,560	1,560	1,560
Alaska	3,654	-	3,654	-	-	-
American Samoa	-	-	-	-	-	-
Canal Zone	4,680	-	-	1,560	1,560	1,560
Guam	-	-	-	-	-	-
Hawaii	7,110	7,110	-	-	-	-
Puerto Rico	-	-	-	-	-	-
Virgin Islands	-	-	-	-	-	-

* Included in the Warning Device and Voice Sound Systems figures on the preceding page.

FEDERAL CONTRIBUTIONS PROGRAM

WELFARE SERVICES

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)				
	Total	1957/1958	1956/1957	1955/1956	1954 & 1953
TOTAL	<u>334,137</u>	<u>55,303</u>	<u>74,207</u>	<u>70,697</u>	<u>133,930</u>
REGION 1	<u>126,728</u>	<u>100</u>	<u>47,797</u>	<u>45,070</u>	<u>33,761</u>
Connecticut	1,893	100	716	548	529
Maine	36,751	-	22,360	2,561	11,830
Massachusetts	16,307	-	12,045	1,104	3,158
New Hampshire	840	-	-	-	840
New Jersey	32,603	-	-	16,099	16,504
New York	28,479	-	12,676	14,903	900
Rhode Island	9,855	-	-	9,855	-
Vermont	-	-	-	-	-
REGION 2	<u>148,148</u>	<u>52,301</u>	<u>17,493</u>	<u>15,516</u>	<u>62,838</u>
Delaware	2,092	-	999	1,093	-
District of Columbia	-	-	-	-	-
Kentucky	-	-	-	-	-
Maryland	102,028	52,301	222	3,599	45,906
Ohio	35,994	-	16,272	7,784	11,938
Pennsylvania	7,371	-	-	2,377	4,994
Virginia	663	-	-	663	-
West Virginia	-	-	-	-	-
REGION 3	<u>5,510</u>	<u>237</u>	<u>4,468</u>	<u>805</u>	-
Alabama	150	-	150	-	-
Florida	4,318	-	4,318	-	-
Georgia	842	237	-	605	-
Mississippi	-	-	-	-	-
North Carolina	200	-	-	200	-
South Carolina	-	-	-	-	-
Tennessee	-	-	-	-	-
REGION 4	<u>8,044</u>	-	<u>2,667</u>	<u>5,244</u>	<u>133</u>
Illinois	324	-	-	324	-
Indiana	380	-	-	380	-
Michigan	4,395	-	100	4,162	133
Missouri	-	-	-	-	-
Wisconsin	2,945	-	2,567	378	-
REGION 5	-	-	-	-	-
Arkansas	-	-	-	-	-
Louisiana	-	-	-	-	-
New Mexico	-	-	-	-	-
Oklahoma	-	-	-	-	-
Texas	-	-	-	-	-
REGION 6	<u>851</u>	-	-	<u>412</u>	<u>439</u>
Colorado	851	-	-	412	439
Iowa	-	-	-	-	-
Kansas	-	-	-	-	-
Minnesota	-	-	-	-	-
Nebraska	-	-	-	-	-
North Dakota	-	-	-	-	-
South Dakota	-	-	-	-	-
Wyoming	-	-	-	-	-
REGION 7	<u>44,856</u>	<u>2,665</u>	<u>1,782</u>	<u>3,650</u>	<u>36,759</u>
Arizona	-	-	-	-	-
California	3,736	2,665	532	-	539
Idaho	-	-	-	-	-
Montana	-	-	-	-	-
Nevada	-	-	-	-	-
Oregon	13,008	-	694	2,059	10,255
Utah	-	-	-	-	-
Washington	28,112	-	556	1,591	25,965
TERRITORIES & POSSESSIONS	-	-	-	-	-
Alaska	-	-	-	-	-
American Samoa	-	-	-	-	-
Canal Zone	-	-	-	-	-
Guam	-	-	-	-	-
Hawaii	-	-	-	-	-
Puerto Rico	-	-	-	-	-
Virgin Islands	-	-	-	-	-

FEDERAL CONTRIBUTIONS PROGRAM

OTHER SERVICES

Region and State	Dollar Value of Federal Funds Obligated (by FY Appropriation)			
	Total	1956/1957*	1955/1956*	1953*
TOTAL	<u>101,956</u>	<u>20,451</u>	<u>10,332</u>	<u>71,173</u>
REGION 1	<u>42,114</u>	<u>451</u>	<u>6,904</u>	<u>34,759</u>
Connecticut	6,574	451	6,123	-
Maine	-	-	-	-
Massachusetts	-	-	-	-
New Hampshire	781	-	781	-
New Jersey	-	-	-	-
New York	34,759	-	-	34,759
Rhode Island	-	-	-	-
Vermont	-	-	-	-
REGION 2	<u>3,053</u>	-	-	<u>3,053</u>
Delaware	-	-	-	-
District of Columbia	-	-	-	-
Kentucky	-	-	-	-
Maryland	-	-	-	-
Ohio	3,053	-	-	3,053
Pennsylvania	-	-	-	-
Virginia	-	-	-	-
West Virginia	-	-	-	-
REGION 3	<u>1,561</u>	-	<u>1,561</u>	-
Alabama	-	-	-	-
Florida	-	-	-	-
Georgia	1,561	-	1,561	-
Mississippi	-	-	-	-
North Carolina	-	-	-	-
South Carolina	-	-	-	-
Tennessee	-	-	-	-
REGION 4	<u>8,470</u>	-	-	<u>8,470</u>
Illinois	-	-	-	-
Indiana	-	-	-	-
Michigan	315	-	-	315
Missouri	8,155	-	-	8,155
Wisconsin	-	-	-	-
REGION 5	<u>117</u>	-	<u>117</u>	-
Arkansas	-	-	-	-
Louisiana	117	-	117	-
New Mexico	-	-	-	-
Oklahoma	-	-	-	-
Texas	-	-	-	-
REGION 6	<u>1,902</u>	-	<u>1,403</u>	<u>499</u>
Colorado	1,403	-	1,403	-
Iowa	-	-	-	-
Kansas	499	-	-	499
Minnesota	-	-	-	-
Nebraska	-	-	-	-
North Dakota	-	-	-	-
South Dakota	-	-	-	-
Wyoming	-	-	-	-
REGION 7	<u>44,739</u>	<u>20,000</u>	<u>347</u>	<u>24,392</u>
Arizona	122	-	-	122
California	43,903	20,000	-	23,903
Idaho	-	-	-	-
Montana	-	-	-	-
Nevada	-	-	-	-
Oregon	502	-	347	155
Utah	212	-	-	212
Washington	-	-	-	-
TERRITORIES & POSSESSIONS	-	-	-	-
Alaska	-	-	-	-
American Samoa	-	-	-	-
Canal Zone	-	-	-	-
Guam	-	-	-	-
Hawaii	-	-	-	-
Puerto Rico	-	-	-	-
Virgin Islands	-	-	-	-

* These funds were principally for police items in 1953 and evacuation studies in 1955/56 and 1956/57.

FCDA STOCKPILING PROGRAM

FINANCIAL SUMMARY

The Federal Civil Defense Act of 1950 authorizes the FCDA Administrator to "procure by condemnation or otherwise, construct, lease, transport, store, maintain, renovate or distribute materials and facilities for civil defense,"...Under this authorization FCDA has proceeded to buy and store large quantities of emergency supplies and equipment for use in time of need.

Congressional appropriations available for this program have totalled nearly \$219,000,000 up through fiscal year 1957. Through June 30, 1957 nearly \$215,000,000 of these funds had been obligated--approximately \$208,000,000 for medical supplies and equipment and nearly \$7,000,000 for engineering supplies. No engineering supplies

were purchased under this program in FY 1954 and 1955. Small amounts were ordered in fiscal years 1956 and 1957 and additional funds were spent for maintenance and relocation of equipment purchased in former years.

Contracts were awarded for the full amount of funds obligated (nearly \$215,000,000). Materials costing approximately \$174,000,000 had been delivered by June 30, 1957.

There will be no stockpiling procurement program during Fiscal Year 1958 because Congress appropriated no funds for this purpose. A small amount appropriated was for warehousing and maintenance.

STATEMENT AS OF JUNE 30, 1957

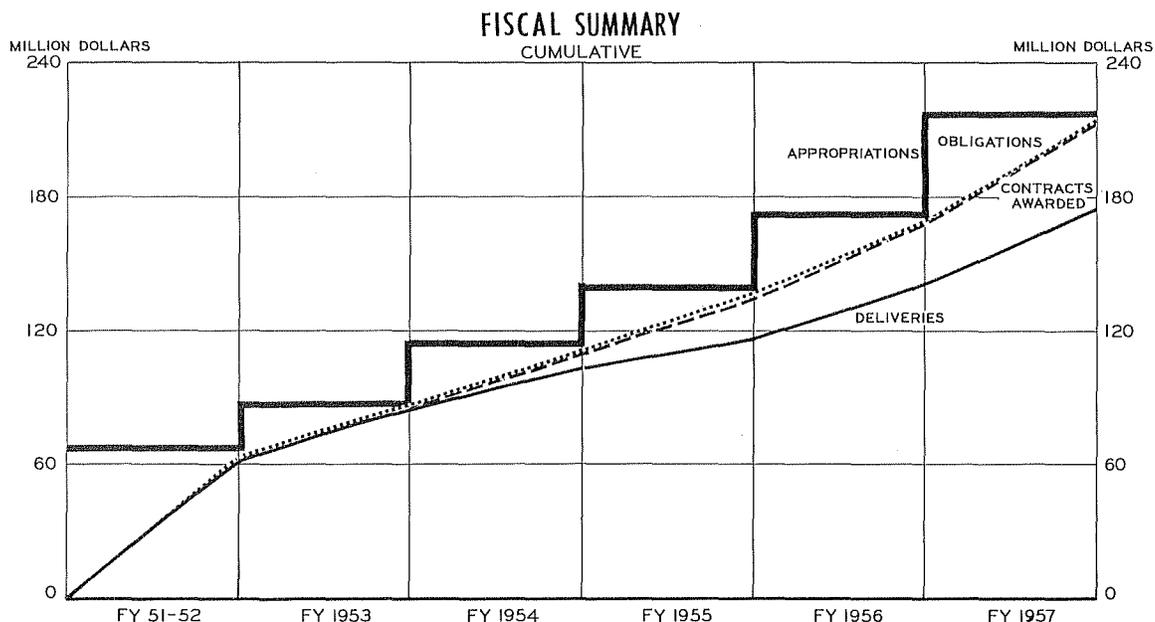
Description	Program		Total
	Medical Supplies and Equipment	Engineering Supplies	
Appropriations			
FY 1951-1952			\$ 66,400,000
FY 1953			20,000,000
FY 1954			27,500,000
FY 1955			26,000,000
FY 1956			32,248,000 ^{1/}
FY 1957			46,783,886 ^{2/}
<u>Total</u>			<u>\$218,931,886</u>
Funds Obligated			
FY 1951-1952	\$ 60,277,311	\$5,544,979	\$ 65,822,290
FY 1953	18,386,664	982,497	19,369,161
FY 1954	26,796,867	10,951 ^{3/}	26,807,818
FY 1955	25,569,301		25,569,301
FY 1956	31,789,532	264,511 ^{3/}	32,054,043
FY 1957	45,140,185	89,504 ^{3/}	45,229,689
<u>Total</u>	<u>\$207,959,860</u>	<u>\$6,892,442</u>	<u>\$214,852,302</u>
Contracts Awarded			
FY 1951-1952	\$ 60,277,311	\$5,544,979	\$ 65,822,290
FY 1953	18,386,664	982,497	19,369,161
FY 1954	26,796,867	10,951 ^{3/}	26,807,818
FY 1955	25,569,301		25,569,301
FY 1956	31,789,532	264,511 ^{3/}	32,054,043
FY 1957	45,140,185	89,504 ^{3/}	45,229,689
<u>Total</u>	<u>\$207,959,860</u>	<u>\$6,892,442</u>	<u>\$214,852,302</u>
Deliveries			
FY 1951-1952	\$ 60,277,311	\$5,544,979	\$ 65,822,290
FY 1953	18,386,664	982,497	19,369,161
FY 1954	26,796,029	10,951 ^{3/}	26,806,980
FY 1955	24,717,965		24,717,965
FY 1956	26,902,011	251,509 ^{3/}	27,153,520
FY 1957	10,307,672	30,915 ^{3/}	10,338,587
<u>Total</u>	<u>\$167,387,652</u>	<u>\$6,820,851</u>	<u>\$174,208,503</u>

1/ Original appropriation was \$32,650,000; \$402,000 was transferred to other appropriations -- \$362,000 for FCDA Operations, and \$40,000 for Civil Defense functions of other Federal Agencies.

2/ Original appropriation was \$47,000,000; \$216,114 was transferred to other Federal agencies for civil defense purposes.

3/ For maintenance of equipment purchased in prior years.

FCDA STOCKPILING PROGRAM



PROCUREMENT - FY 1957

For the stockpiling program in fiscal year 1957 FCDA had an appropriation of \$46,783,886. (The original appropriation was \$47,000,000 but \$216,114 was transferred to other Federal agencies for Civil Defense activities.) About \$45,230,000 of these funds were obligated in FY 1957. Nearly \$17½ million were obligated for 1,000 emergency hospitals and nearly \$13 million for backup supplies of medical items and equipment, making a total of over \$30 million obli-

gated for casualty care items. Nearly \$7 million went into the blood and shock therapy program for procurement of whole blood sets, plasma expanders, blood derivatives and oral and intravenous solutions. Nearly \$4 million were for radiological defense items and smaller amounts were for other segments of the program as indicated in the following table. Over \$3 million were required for transportation, procurement service, packaging, relocation, maintenance, etc.

FUNDS OBLIGATED FY 1957

Item	Amount
<u>Total</u>	<u>\$45,229,689</u>
Casualty Care - Emergency Hospitals and Backup Supplies	30,621,931
Blood and Shock Therapy	6,844,393
Biological Warfare & Disease Control	545,935
Chemical Warfare	106,019
Radiological Defense	3,989,615
Engineering Supplies	2,597
Transportation, procurement, packaging, etc.	3,032,292
Relocation & maintenance of engineering materials	86,907

FCDA STOCKPILING PROGRAM

PROCUREMENT OF SELECTED ITEMS

Stockpiling of medical supplies and equipment has been in progress almost since the creation of FCDA as a Federal agency. With continued changes in the destructive power of nuclear weapons and in the ability of potential enemies to deliver them, it has become practically impossible to estimate with any degree of accuracy the number of casualties which may result from a mass attack. Consequently it is impossible to establish meaningful requirements for such an eventuality. However, some progress has been made in procuring a large number of items which, in the judgment of FCDA officials, form a balanced program to take care of the most likely needs, in the event of attack. The program has been limited, of course, by the amount of funds made available by Congress.

Progress in the procurement of some of the more important selected items is shown in the following table. There is of necessity a sizable lag between orders and deliveries of most items. Deliveries of several items have kept pace reasonably well with orders but in some cases deliveries are far behind. Of 1932 emergency hospitals ordered, the components of 932 have been delivered. Some hospitals have been completely assembled and others are in process of being assembled, so that they may be available for immediate use. The components of the 1,000 procured in Fiscal Year 1957 are in process of delivery to FCDA warehouses. Although 32,500 gas masks had been ordered, only 1,482 of them had been delivered by June 30, 1957.

PROCUREMENT PROGRESS -- SELECTED ITEMS

Item	Unit of Measure	Number of Items -- Cumulative**					
		Ordered			Delivered		
		FY 1955	FY 1956	FY 1957	FY 1955	FY 1956	FY 1957
Civil Defense Emergency Hospitals	Each	732	932	1,932	1	201	932
Burn dressings (large and small)	Each	7,199,460	8,495,000	10,317,500	6,678,518	7,784,972	9,134,695
Blood recipient sets	Each	2,059,796	2,625,140	3,187,460	2,025,573	2,089,596	2,567,221
Blood derivatives (Plasma & Serum albumin)	Unit	1,579,475	1,591,427	1,666,396	1,535,647	1,510,013	1,536,137
Plasma expanders (PVP & Dextran)	Unit	3,832,378	4,294,146	4,621,770	3,497,810	3,770,277	4,150,715
Gas masks	Each	2,000	32,500	32,500	-	-	1,482
Radiological dosimeters	Each	116,650	344,000	413,000	19,260	102,624	175,707
Radiological survey meters	Each	30,125	124,593	272,533	2,000	30,020	96,758
Atropine	Dose	500,000	637,036	6,188,776	500,000	500,000	5,900,787
Vaccines & antitoxins	Dose	26,192,500	54,412,500	58,658,400	25,050,000*	26,080,000*	41,914,994*
Paper blankets	Each	1,597,611	1,597,611	1,584,555	1,511,417	1,584,555	1,584,555
Litters	Each	190,146	227,402	321,152	152,900	152,900	307,121

* Stored in custody of manufacturers.

** From beginning of program to end of fiscal year.

FCDA STOCKPILING PROGRAM

DISTRIBUTION OF RADIOLOGICAL INSTRUMENTS

LOANED OR GRANTED TO STATES

Under authority from Congress, FCDA has purchased substantial quantities of radiological instruments and made them available to the States for training and educational purposes. Certain equipment has been granted to each State for continuing use and additional quantities are loaned to States scheduling several radiological training courses concurrently.

As of June 30, 1957 a total of 6,045 radiological items of equipment were on loan and 29,285 items had been granted to the States. Quarterly trends in the progress of this program are indicated in the table below, and a distribution of the items, by State, as of June 30, 1957 appears in the larger table which follows:

QUARTERLY TRENDS IN DISTRIBUTION OF RADIOLOGICAL INSTRUMENTS

Category and Date	Number of Items (Cumulative)			
	Dosimeters	Dosimeter Chargers	Survey Meters	Training Kits
<u>Items Loaned:</u>				
Jun 30, 1956	417	190	3,133	-
Sep 30, 1956	342	319	4,508	-
Dec 31, 1956	544	405	4,878	-
Mar 31, 1957	520*	492*	5,567*	13
Jun 30, 1957	462*	489*	5,048*	46
<u>Items Granted:</u>				
Jun 30, 1956	6,672	713	6,379	-
Sep 30, 1956	9,040	2,229	7,496	-
Dec 31, 1956	10,488	4,638	8,536	18
Mar 31, 1957	12,022	5,443	9,481	38
Jun 30, 1957	12,303	5,691	11,246	45

* Totals include instruments loaned to three foreign countries -- Australia, Denmark, and England. Each of these countries has on loan 4 dosimeters, 2 dosimeter chargers, and 4 survey meters.

FCDA STOCKPILING PROGRAM

RADIOLOGICAL INSTRUMENTS

LOANED OR GRANTED TO STATES

Region and State	Dosimeters		Dosimeter Chargers		Survey Meters		Training Kits**	
	Loaned	Granted	Loaned	Granted	Loaned	Granted	Loaned	Granted
TOTAL	462*	12,303	489*	5,691	5,048*	11,246	46	45
REGION 1	34	5,539	33	2,794	270	4,862	5	8
Connecticut	-	320	9	163	125	460	3	1
Maine	-	600	-	303	-	800	-	1
Massachusetts	-	1,400	-	703	-	1,460	-	1
New Hampshire	-	199	3	103	25	310	-	1
New Jersey	-	800	6	403	50	529	-	1
New York	4	2,000	6	1,003	50	1,048	2	1
Rhode Island	-	120	-	63	-	170	-	1
Vermont	30	100	9	53	20	85	-	1
REGION 2	210	712	204	377	2,214	1,118	13	7
Delaware	-	16	3	11	86	80	-	1
District of Columbia	-	12	-	9	9	62	-	1
Kentucky	-	28	18	17	150	66	5	1
Maryland	58	200	8	103	60	250	-	1
Ohio	152	400	157	203	1,488	460	8	1
Pennsylvania	-	24	18	15	360	100	-	1
Virginia	-	32	-	19	42	100	-	1
West Virginia	-	-	-	-	19	-	-	-
REGION 3	48	580	103	308	845	486	9	6
Alabama	-	100	12	53	140	110	4	1
Florida	48	4	16	5	10	27	-	1
Georgia	-	400	27	203	225	225	-	1
Mississippi	-	32	21	19	245	41	-	1
North Carolina	-	40	27	23	225	45	5	1
South Carolina	-	4	-	5	-	38	-	1
Tennessee	-	-	-	-	-	-	-	-
REGION 4	-	2,184	3	1,105	264	2,493	1	5
Illinois	-	900	3	453	148	1,062	1	1
Indiana	-	28	-	17	-	85	-	1
Michigan	-	236	-	119	71	202	-	1
Missouri	-	940	-	473	45	1,000	-	1
Wisconsin	-	80	-	43	-	144	-	1
REGION 5	26	304	36	170	206	383	4	4
Arkansas	10	28	2	20	60	85	-	1
Louisiana	-	28	15	17	12	39	-	-
New Mexico	-	20	1	13	14	85	-	1
Oklahoma	16	100	9	53	45	85	1	1
Texas	-	128	9	67	75	89	3	1
REGION 6	-	1,260	8	654	191	1,286	3	8
Colorado	-	44	-	28	-	155	-	2
Iowa	-	-	-	-	26	-	-	-
Kansas	-	32	3	19	61	82	-	1
Minnesota	-	940	-	473	44	579	-	1
Nebraska	-	200	3	103	50	250	1	1
North Dakota	-	4	2	5	5	65	1	1
South Dakota	-	-	-	3	-	45	1	1
Wyoming	-	40	-	23	5	110	-	1
REGION 7	132	1,716	96	273	1,036	518	11	5
Arizona	-	28	12	17	205	78	-	1
California	6	1,500	4	153	142	160	-	1
Idaho	-	80	27	43	230	105	-	1
Montana	-	-	-	-	5	-	-	-
Nevada	-	-	-	-	25	-	-	-
Oregon	-	80	15	40	264	100	5	-
Utah	126	24	35	15	125	37	5	1
Washington	-	4	3	5	40	38	1	1
TERRITORIES & POSSESSIONS	-	8	-	10	10	100	-	2
Alaska	-	-	-	-	-	-	-	-
American Samoa	-	-	-	-	-	-	-	-
Canal Zone	-	4	-	5	-	38	-	1
Guam	-	-	-	-	-	-	-	-
Hawaii	-	4	-	5	8	54	-	1
Puerto Rico	-	-	-	-	-	8	-	-
Virgin Islands	-	-	-	-	2	-	-	-

* Totals include instruments loaned to three foreign countries -- Australia, Denmark, and England. Each of these countries has on loan 4 dosimeters, 2 dosimeter chargers, and 4 survey meters.

** This kit contains radioactive sources and necessary supplies for classroom demonstration.

FCDA STOCKPILING PROGRAM

CIVIL DEFENSE EMERGENCY HOSPITALS

FCDA has ordered 1,000 civil defense emergency hospitals during FY 1957. These, together with 932 ordered in preceding years, make a total of 1,932 emergency hospitals ordered to date. These 200-bed hospitals are designed to be set up in schools, churches or other suitable buildings in time of emergency. They are not purchased as complete units. Large numbers of individual items are procured and assembled after which the components are sorted, grouped and packaged in a unitization process until each complete hospital unit is packed in containers and stored in a specific location, ready for emergency use or shipment.

A total of 932 of these hospitals have been assembled and delivered. Of this number, 766 were in FCDA warehouses or other facilities as of June 30, 1957; 46 were on loan to the States for training and display purposes and 120 were stored out in the States under a pre-positioning program. A summary distribution, by FCDA Regions, is indicated in the accompanying table.

DISTRIBUTION OF CD EMERGENCY HOSPITALS
By Region

FCDA Jurisdiction	Number of Hospitals			
	Totals	On Loan for Training and Display	Pre-positioned	In FCDA Custody
<u>Total</u>	<u>932</u>	<u>46</u>	<u>120</u>	<u>766</u>
Nat'l Hdqrs.	2	1*		1
Region 1	207	5	42	160
Region 2	185	8	13	164
Region 3	39	3	9	27
Region 4	331	8	50	273
Region 5	38	5	-	33
Region 6	37	7	-	30
Region 7	93	9	6	78

* On loan to Arnprior, Ontario, Canada

CD EMERGENCY HOSPITALS ON LOAN TO STATES

The program for distributing emergency hospitals to the States for purposes of display, education and training, continued during FY 1957. Principal objectives are to develop in the field an understanding of techniques, requirements and staffing patterns for setting up these hospitals in event of emergency. A State can obtain one or more of these hospitals by signing a formal loan agreement under which it accepts custody of the hospital for civil defense display, educational and training purposes, agrees to pay

charges for transportation from one city to another within the State, and accepts responsibility for loss or damage to the hospital or any of its components. Under this arrangement one-half the costs to a State may be returned under the Federal Contributions Program.

As of June 30, 1957, 46 hospitals were on loan under this program. There was one hospital in each of the locations shown in the following list:

LOCATIONS OF CD EMERGENCY HOSPITALS ON LOAN FOR TRAINING AND DISPLAY

June 30, 1957

<p>Arnprior, Ontario, Canada</p> <p><u>REGION 1</u> Connecticut State CD, Torrington, Conn. Massachusetts State CD, North Reading, Mass. New Jersey State CD, Somerville, N. J. Rhode Island State CD, Providence, R. I. Vermont State CD, Barre, Vt.</p> <p><u>REGION 2</u> Delaware State CD, Wilmington, Del. Dist. of Columbia CD, Washington, D. C. Ohio State CD, Chillicothe, Ohio Ohio State CD, Marietta, Ohio Pennsylvania State CD, Altoona, Pa. Pennsylvania State CD, Butler, Pa. Pennsylvania State CD, Reading, Pa. West Virginia State CD, Charleston, W. Va.</p>	<p><u>REGION 3</u> Alabama State CD, Montgomery, Ala. Florida State CD, Tallahassee, Fla. South Carolina State CD, Greenville, S. C.</p> <p><u>REGION 4</u> Illinois State CD, Chicago, Ill. Illinois State CD, Evanston, Ill. Illinois State CD, Skokie, Ill. Black Hawk State Park, Rock Island, Ill. Indiana State CD, Indianapolis, Ind. Michigan State CD, Detroit, Mich. Missouri State CD, Rolla, Mo. Wisconsin State CD, Madison, Wis.</p> <p><u>REGION 5</u> Arkansas State CD, Little Rock, Ark. Louisiana State CD, Lake Charles, La. Tulsa City-County CD, Tulsa, Okla.</p>
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FCDA STOCKPILING PROGRAM

LOCATIONS OF CD EMERGENCY HOSPITALS ON LOAN FOR TRAINING AND DISPLAY

June 30, 1957

(Continued)

REGION 5 (Continued)

Texas State CD, Baylor University, Houston, Tex.
Texas State CD, Houston, Tex.

REGION 6

Colorado State CD, Greeley, Colo.
Iowa State CD, Davenport, Iowa
Kansas State CD, Topeka, Kans.
Minnesota State CD, Moose Lake, Minn.
Minnesota State CD, Oak Terrace, Minn.
Nebraska State CD, Boys Town, Nebr.
North Dakota State CD, Jamestown, N. Dak.

REGION 7

Arizona State CD, Chandler, Ariz.
California State CD, San Francisco, Calif.
Idaho State CD, Boise, Idaho
Montana State CD, Warm Springs, Mont.
Nevada State CD, Reno, Nev.
Oregon State CD, Salem, Oreg.
Utah State CD, Salt Lake City, Utah
Washington State CD, Seattle, Wash.
Hawaii Territorial CD, Honolulu, T. H.

PRE-POSITIONING OF CIVIL DEFENSE EMERGENCY HOSPITALS

During 1956, FCDA announced a program for pre-positioning of Civil Defense Emergency Hospitals. The objective is to store these 200-bed hospitals at strategic points throughout the country in or near facilities which can be converted to hospital use in an emergency. The plan is designed for the safe permanent storage of hospitals in unopened original containers at or near the places of eventual use where they can be unpacked and put into operation, with a minimum of delay, in the event of an emergency. Storage sites are to be not closer than 15 miles to a critical target area nor farther than 50 miles from the area to be supported. At least 15,000 square feet of acceptable space must be available for hospital operations if the need arises. Actual storage space required for the packaged hospital is slightly over 1,800 cubic feet.

Each State could obtain one or several of these hospitals for storage within its borders by signing an agreement with FCDA under which the State accepts responsibility for adequate custo-

dial, maintenance and protective care according to established criteria. All acquisition and delivery costs are borne by the Federal Government. Subsequent costs for storage, care and protection are borne by the State. Title to the property remains in the Federal Government. It is the responsibility of the State to develop plans for the utilization of the hospitals during a civil defense emergency. Such plans are coordinated and approved by FCDA. Under terms and conditions prescribed by FCDA the hospitals may be made available for use in a natural disaster following declaration of a major disaster by the President under Public Law 875, 81st Congress.

As of June 30, 1957 a total of 120 emergency hospitals had been distributed under this plan. Locations of these hospitals are shown in the following list. In most cases there is only one hospital at each location. In a few cases, however, there are two and occasionally three hospitals stored in the same area, as indicated by footnotes to the list.

LOCATIONS OF PRE-POSITIONED HOSPITALS

June 30, 1957

REGION 1

Federal Correctional Institution,
Danbury, Conn.
Town Hall, Deep River, Conn.
Mansfield State Training School and Hospital,
Mansfield Depot, Conn.
North End School, New Hartford, Conn.
New Milford Hospital, New Milford, Conn.
Fairfield State Hospital, Newton, Conn.
Town Hall, Ridgefield, Conn.
Northeast School, Rockville, Conn.
Sharon Center School, Sharon, Conn.
American Thread Company, Willimantic, Conn.
Litchfield County Hospital, Winsted, Conn.
Plunkett Memorial Hospital, Adams, Mass.

REGION 1 (Continued)

Town Hall, Adams, Mass.
Phillip's Andover Academy, Andover, Mass.
Ashland Junior-Senior High School,
Ashland, Mass.
Maritime Academy-Dormitory Bldg.,
Barnstable, Mass.
Cohasset High School, Cohasset, Mass.
Easthampton High School, Easthampton, Mass.
Eldredge-Bourne Bonded Whse. & Lawrence High
School, Falmouth, Mass.
Burbank Hospital, Fitchburg, Mass.
North Parish School, Greenfield, Mass.
Plymouth County Hospital, Hanson, Mass.*
Ferris Memorial Hospital, Lowell, Mass.

(Continued)

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FCDA STOCKPILING PROGRAM

LOCATIONS OF PRE-POSITIONED HOSPITALS

June 30, 1957

(Continued)

REGION 1 (Continued)

Marshfield Grade School, Marshfield, Mass.
 Montague Center Elementary School,
 Montague, Mass.
 Cooley Dickenson Hospital, Northampton, Mass.
 Old Leeds School, Northampton, Mass.
 Norwell Elementary School, Norwell, Mass.
 Memorial Park School, Rockland, Mass.
 Harrington Memorial Hospital,
 Southbridge, Mass.
 Massachusetts Correctional Institution,
 South Bridgewater, Mass.*
 Tewksbury State Hospital, Tewksbury, Mass.**
 Mary Lane Hospital, Ware, Mass.
 Baxter Hall, Williams College,
 Williamstown, Mass.
 U. S. Government Post Office, Winchendon, Mass.
 Mary Hitchcock Hospital, Hanover, N. H.
 Zambiarano Memorial Hospital, Wallum Lake, R. I.
 Old Town Hall, Westerly, R. I.

REGION 2

County Warehouse, Frederick, Md.
 Arlington Electric Company, Arlington, Ohio
 Town Hall, Clarksburg, Ohio
 Community Building, Londonderry, Ohio
 Henry County Home, Napoleon, Ohio
 St. Mary's Spoke Works, St. Marys, Ohio
 Wapakoneta Electric Company, Wapakoneta, Ohio
 Clarion State Teachers College, Clarion, Pa.
 State Teachers College, East Stroudsburg, Pa.
 Sportsman's Hall, Latrobe, Pa.
 Lebanon Valley College, Lebanon, Pa.
 First Presbyterian Church, Warren, Pa.
 Children's Home, Waynesburg, Pa.

REGION 3

Altoona High School Gymnasium Annex,
 Altoona, Ala.
 Fort Byrd Armory, Citronelle, Ala.
 Municipal Building, Hartselle, Ala.
 Crenshaw County Court House, Luverne, Ala.
 Rock Springs Park, Apopka, Fla.
 Florida Development Commission Warehouse,
 Camp Blanding, Fla.
 Community Building, Crystal River, Fla.
 Old School Building, Islamorada, Fla.
 County Court House, Sarasota, Fla.

REGION 4

Alton State Hospital, Alton, Ill.
 Anna State Hospital, Anna, Ill.
 Carlinville Civil Defense Corps,
 Carlinville, Ill.
 V.F.W. Building, Centralia, Ill.
 City Hall, Chicago Heights, Ill.
 Dixon State School, Dixon, Ill.

REGION 4 (Continued)

Edwardsville Civil Defense Corps,
 Edwardsville, Ill.
 Elgin State Hospital, Elgin, Ill.*
 Galesburg State Research Hospital,
 Galesburg, Ill.*
 Knox County Court House, Galesburg, Ill.
 Township High School, Harrisburg, Ill.
 Illinois Braille and Sight Saving School,
 Jacksonville, Ill.
 Jacksonville State Hospital, Jacksonville, Ill.
 Williamson County Commodity Depot,
 Johnson City, Ill.*
 County Court House, Kankakee, Ill.
 Kankakee State Hospital, Kankakee, Ill.**
 Lincoln State Hospital, Lincoln, Ill.
 Manteno State Hospital, Manteno, Ill.
 Jefferson County Commodity Depot,
 Mt. Vernon, Ill.*
 Illinois Soldiers' and Sailors' Children's
 School Hospital, Normal, Ill.
 Richland Court House, Olney, Ill.
 UAW-CIO Regional Recreational Center,
 Ottawa, Ill.
 Illinois Soldiers' & Sailors' Home, Quincy, Ill.
 Christian County Commodity Depot,
 Taylorville, Ill.*
 1002 E. Cleveland Street, West Frankfort, Ill.
 Fifth Ward School, Big Rapids, Mich.
 Brighton City Fire Dept. Bldg., Brighton, Mich.
 County Court Building, Howell, Mich.
 Midland County Road Commission Garage,
 Midland, Mich.
 Putnam Township Hall, Pinckney, Mich.
 Tecumseh Police Department, Tecumseh, Mich.
 High School, Beaver Dam, Wis.
 Delavan School for the Deaf, Delavan, Wis.
 Safety Building, Fond du Lac, Wis.*
 Mercy Hospital, Janesville, Wis.
 Cherokee Heights School, Madison, Wis.
 Midvale School, Madison, Wis.
 Mercy Hospital, Oshkosh, Wis.*
 Plymouth High School, Plymouth Wis.
 Kohler School, Sheboygan, Wis.
 Wampun Memorial Hospital, Wampun, Wis.

REGION 7

Territorial Hospital, Kaneohe, Oahu, T. H.
 Mt. Angel Abbey, St. Benedict, Oregon
 Oregon State College, Corvallis, Oregon
 County Jail, McMinnville, Oregon
 Molalla High School, Molalla, Oregon
 Oregon State Hospital, Student Nurses' Home,
 Salem, Oregon

* Two hospitals

** Three hospitals

FCDA STOCKPILING PROGRAM

WAREHOUSING

Most of the emergency medical supplies and equipment stockpiled by FCDA are stored in 43 warehouses in Continental United States. Small quantities are stored in four warehouses: Hawaii 1, Puerto Rico 1, and Alaska 2. In addition, substantial quantities of vaccines and antibiotics are stored in storage branches of the manufacturers. Some radiological instruments and CD emergency hospitals are out in the States for training and educational purposes.

Stockpiled engineering supplies are stored in 32 storage sites throughout the country, as shown on the map, page 106.

Current criteria for F.C.D.A. warehousing provides for (1) minor storage locations within or adjacent to target and critical target areas, (2) major storage locations located to support one or more target or critical target areas, and (3) general reserve storage locations designed to furnish support to large geographic areas, while situated in strategic locations from the standpoint of security from bomb damage and availability of transportation. As of June 30, 1957, the F.C.D.A. warehousing locations (exclusive of engineering storage sites) were classified as follows: 8 minor storage locations, 32

major storage locations, and 3 general reserve warehouses located at Somerville, N. J., Clearfield, Utah, and Neosho, Mo. (underground).

During FY 1957 the following warehouses were activated: 1 general reserve storage location (underground), Neosho, Missouri, and 9 major storage warehouses, located at Columbus, Ohio; Granite City, Illinois; Horseheads, New York; Jeffersonville, Indiana; Lebanon, Pennsylvania; Marion, Ohio; Mira Loma, California; Montoursville, Pennsylvania; and Sidney, Nebraska. There were 3 major warehouses inactivated: Carrollton, Georgia; San Jose No. 1, California; and Savannah, Illinois. Two major warehouses were redesignated as General Reserve locations: Clearfield (Ogden), Utah, and Somerville, New Jersey.

The Agency's warehousing space available as of June 30, 1957, totaled 2,343,041 square feet*: of this space, materials in storage occupied 1,707,860 square feet.

Trends in FCDA warehousing space, including the gross allocated space and the net amounts available, occupied, and vacant, appear in the following table and chart.

F.C.D.A. WAREHOUSING SPACE
(Square Feet)

Date	Gross	Available and Usable Space*		
		Total	Occupied	Vacant
<u>FY 1953</u>				
Sep	394,088	275,862	57,471	218,391
Dec	394,088	275,862	114,942	160,920
Mar	492,610	344,827	182,298	162,529
Jun	779,967	545,977	229,885	316,092
<u>FY 1954</u>				
Sep	804,597	563,218	321,839	241,379
Dec	944,170	660,919	455,022	205,897
Mar	968,802	678,161	551,723	126,438
Jun	1,313,627	919,539	666,666	252,873
<u>FY 1955</u>				
Sep	1,379,310	965,517	747,126	218,391
Dec	1,428,591	1,000,000	804,597	195,403
Mar	1,518,882	1,063,218	862,068	201,150
Jun	1,880,295	1,316,206	888,390	427,816
<u>FY 1956</u>				
Sep	1,855,008	1,298,505	967,816	330,689
Dec	2,082,101	1,457,471	1,037,816	419,655
Mar	2,157,635	1,510,344	1,091,954	418,390
Jun	2,749,753	1,924,827	1,141,264	783,563
<u>FY 1957</u>				
Sep	2,818,719	1,973,103	1,237,011	736,092
Dec	2,807,224	1,965,057	1,341,264	623,793
Mar	3,106,347	2,196,565	1,567,878	628,687
Jun	3,373,015	2,343,041	1,707,860**	635,181

* Net usable square feet of storage space remaining after deducting for aisles, structural losses (elevator shafts, stair wells, fire walls, posts and columns, or similar items which are fixed parts of the building), equipment maintenance areas, offices, utility rooms, boiler rooms, receiving and shipping areas, etc. Available space equals approximately 70 per cent of gross storage space.

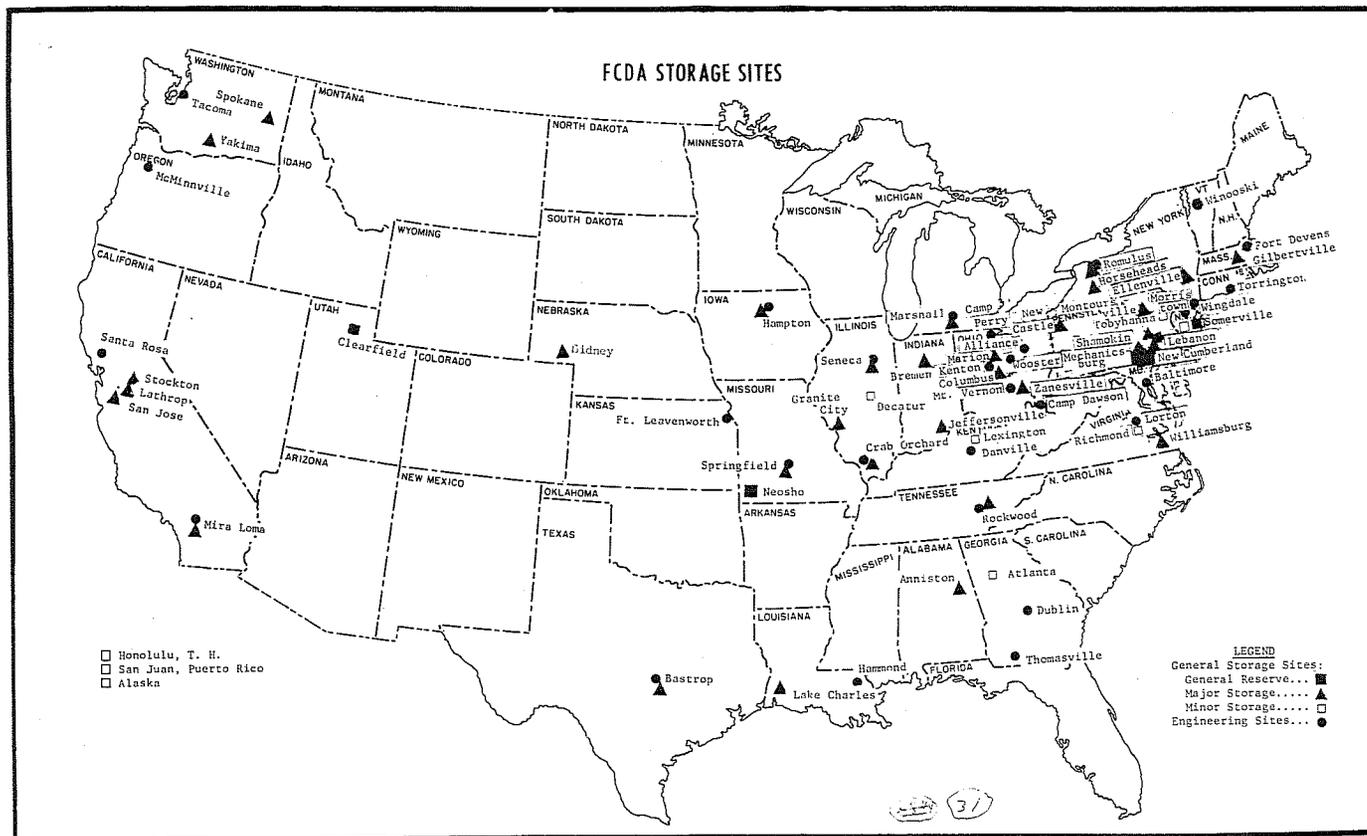
** Includes 54,308 square feet of emergency engineering stockpile equipment occupying floor space at eleven FCDA warehouses.

FCDA STOCKPILING PROGRAM

STORAGE - BY FACILITY (Continued)

Region and Warehouse Location	Square Feet			
	Gross	Available and Usable		
		Total	Occupied	Vacant
<u>REGION 2 (Continued)</u>				
Marion, Ohio	56,000	40,473	20,971	19,502
Mechanicsburg, Pa.	105,000	83,585	83,585	-
Montoursville, Pa.	47,365	31,187	13,172	18,015
New Castle, Pa.	134,900	71,777	65,947	5,830
New Cumberland, Pa.	22,370	15,433	13,333	2,100
Richmond, Va.	22,752	9,971	4,962	5,009
Shamokin, Pa.	53,504	34,110	34,110	-
Tobyhanna, Pa.	9,771	7,076	2,100	4,976
Williamsburg, Va.	126,400	92,800	81,947	10,853
Zanesville, Ohio	99,614	62,535	60,521	2,014
<u>REGION 3</u>	<u>120,775</u>	<u>83,910</u>	<u>74,502</u>	<u>9,408</u>
Anniston, Ala.	58,500	42,585	36,900	5,685
Atlanta, Ga.	10,275	8,000	4,277	3,723
Rockwood, Tenn.	52,000	33,325	33,325	-
<u>REGION 4</u>	<u>709,184</u>	<u>499,712</u>	<u>332,203</u>	<u>167,509</u>
Bremen, Ind.	74,400	59,430	54,780	4,650
Crab Orchard, Ill.	63,103	42,553	40,074	2,479
Decatur, Ill.	18,972	14,230	5,725	8,505
Granite City, Ill.	25,000	17,557	-	17,557
Jeffersonville, Ind.	50,000	33,813	23,150	10,663
Marshall, Mich.	85,000	57,322	50,873	6,449
Neosho, Mo.	130,000	91,000	1,700	89,300
Seneca, Ill.	112,788	82,912	67,150	15,762
Springfield, Mo.	149,921	100,895	88,751	12,144
<u>REGION 5</u>	<u>136,562</u>	<u>89,536</u>	<u>75,182</u>	<u>14,354</u>
Bastrop, Texas	90,337	58,041	45,587	12,454
Lake Charles, La.	46,225	31,495	29,595	1,900
<u>REGION 6</u>	<u>137,797</u>	<u>98,709</u>	<u>75,481</u>	<u>23,228</u>
Hampton, Iowa	80,120	57,328	36,792	20,536
Sidney, Nebr.	57,677	41,381	38,689	2,692
<u>REGION 7</u>	<u>630,910</u>	<u>428,703</u>	<u>321,861</u>	<u>206,842</u>
Clearfield, Utah	185,300	134,800	49,200	85,600
Lathrop, Calif.	104,915	75,333	38,394	36,939
Mira Loma, Calif.	86,189	50,833	16,458	34,375
San Jose, Calif.	100,000	64,612	42,751	21,861
Spokane, Wash.	44,282	32,700	27,882	4,818
Stockton, Calif.	40,400	28,341	17,105	11,236
Tacoma, Wash.	13,824	10,784	3,971	6,813
Yakima, Wash.	56,000	31,300	26,100	5,200

Note: All warehouses, other than minor storage locations, are considered to be full when vacant capacity is less than 5000 square feet.



SURVIVAL PLAN STUDIES

SUMMARY

During Fiscal Year 1957, FCDA made a definite change in emphasis and procedures for conducting survival plan studies. Previously, work had been initiated in a number of areas on Phase I of a 4-phase program under contracts between FCDA and the States. Phase I provided for the development of plans and designs for the complete area survival plan study with full statements of the problems to be solved, tentative damage assumptions, and inventories of existing statistical and test data. Phases II, III and IV contemplated the completion of detailed surveys with analysis of results, the actual formulation of operational survival plans, and the testing of such plans to evaluate their workability.

As some States and localities consumed several months in developing Phase I, it became apparent that the procedure originally developed would have to be telescoped somewhat in order to provide at least tentative operational plans in a shorter time. A practical civil defense view necessitated an operational plan in every vital area for use in a surprise emergency without the delay of many months or a year or two. Consequently, FCDA changed its approach by recommending that current efforts in this field be concentrated on the development of preliminary operational survival plans (POSPP).

The principal purpose of the Preliminary Operational Survival Plan was to develop as quickly as possible, from currently available data, statistics and information, a preliminary plan which could be put into effect in an emergency for a given area. It would provide definite procedures for such matters as:

- (a) receipt and analysis of attack warning information and the dissemination of civil defense instructions to the public;
- (b) the utilization of existing structures for protection from blast, burn and radiation;
- (c) maximum utilization of evacuation techniques and capabilities;
- (d) reception and care of evacuees;
- (e) command and control of the overall plans; and

- (f) strategic dispersal of the population in case sufficient warning time is available.

Such a preliminary operational survival plan would provide the basis for further procedure and identify those areas needing additional study and development. At the same time it would provide the best possible interim plan for use in the event of an emergency. FCDA recommended that the plans be developed directly by project staffs of the States and cities concerned, rather than by subcontracting the work out to private research organizations. Such a policy was designed to develop State and city capabilities and to develop continuing civil defense staffs having the benefit of knowledge and experience gained from the planning effort and the actual work done.

Accordingly, FCDA proceeded to work out amended contracts with the States and areas already working under Phase I contracts and negotiated preliminary operational survival plan phase contracts with States and cities coming in for first contracts. Some of the contracts provide for State-wide plans and others for city or target area plans.

Upon completion of a POSPP contract by a project staff, the next step is the negotiation of an Operational Survival Plan (OSP) contract. The OSP is designed to be a continuing emergency operations plan, improved through refinement and more intensive study of all aspects of the preliminary plan and through more nearly adequate provision for all essential emergency functions.

By June 30, 1957, forty POSPP contracts had been approved by FCDA. From these contracts, 15 POSPP reports had been received and 25 projects were still in process. Operational Survival Plan contracts had been negotiated and executed for 14 of the 15 projects which had submitted POSPP reports. A total of 14 other POSPP contracts were in various stages of negotiation and three States had not entered into negotiations.

The following table lists the areas which had or which were developing POSPP contracts and the areas which had OSP contracts as of June 30, 1957. The areas which worked under the Phase I arrangement are indicated also.

SURVIVAL PLAN STUDIES

SURVIVAL PLAN CONTRACTS

Area	Phase I Study		Preliminary Operational Survival Plan Phase				Operational Survival Plan		
	Contract Execution Date	Federal Funds Obligated	Contract Execution Date	Federal Funds Obligated	Report Received	Expiration Date	Contract Execution Date	Federal Funds Obligated	Expiration Date
<u>REGION 1</u>									
Connecticut	3-56	\$ 30,000	10-56	\$ 94,500	6-57		6-57	\$122,650	6-58
Maine	3-56	25,000	10-56	60,000	6-57		6-57	88,000	6-58
Massachusetts	4-56	25,000	11-56	155,000	5-57		5-57	213,000	5-58
New Hampshire			1-57	72,925		8-57			
New Jersey			1-57	85,250		9-57			
Trenton			1-57	200,000		9-57			
New York			12-56	275,000		9-57			
New York City	12-55	108,200	12-56	275,000					
Rhode Island	2-56	43,300	10-56	114,500	6-57		6-57	125,000	6-58
Vermont			2-57	58,475		9-57			
<u>REGION 2</u>									
Kentucky			10-56	81,300		7-57			
Maryland	2-56	42,500	11-56	100,500		7-57			
Ohio	3-56	209,900	10-56	284,480	6-57		6-57	430,000	6-58
Pennsylvania			*						
Philadelphia	3-56	50,000	12-56	175,800		10-57			
Virginia			2-57	103,750		10-57			
Wash. D.C. Area	10-55	12,000	1-57	109,830		8-57			
West Virginia			1-57	85,000		9-57			
<u>REGION 3</u>									
Alabama	4-56	23,750	12-56	85,000		8-57			
Florida	2-56	8,500	12-56	46,000	6-57		6-57	93,000	6-58
Georgia			5-57	85,000		12-57			
Mississippi			11-56	30,000	5-57		6-57	70,300	6-58
North Carolina	6-56	22,700	12-56	31,312	6-57		6-57	152,150	6-58
South Carolina			*						
Tennessee	4-56	44,175	10-56	85,000	5-57		6-57	100,000	5-58
Puerto Rico			4-57	63,000		10-57			
Virgin Islands			*						
<u>REGION 4</u>									
Illinois	1-56	51,000	10-56	130,000	5-57		6-57	412,473	6-58
Indiana			*						
Michigan	8-56	68,750	*						
Missouri	2-56	56,580	10-56	85,000	3-57		6-57	158,158	6-58
Kansas City	5-56	25,465	1-57	80,000		10-57			
Wisconsin			4-57	85,000		12-57			
<u>REGION 5</u>									
Arkansas	3-56	10,475	10-56	60,950		7-57			
Louisiana	2-56	15,000	10-56	60,000	5-57		5-57	200,000	5-58
New Orleans	10-55	25,500	8-56	181,000	4-57		**		
New Mexico			*						
Oklahoma	1-56	10,090	10-56	65,000		7-57			
Texas			*						
Houston	11-55		11-55	192,257		7-57			
<u>REGION 6</u>									
Colorado	2-56	29,400	10-56	85,000	5-57		6-57	122,000	6-58

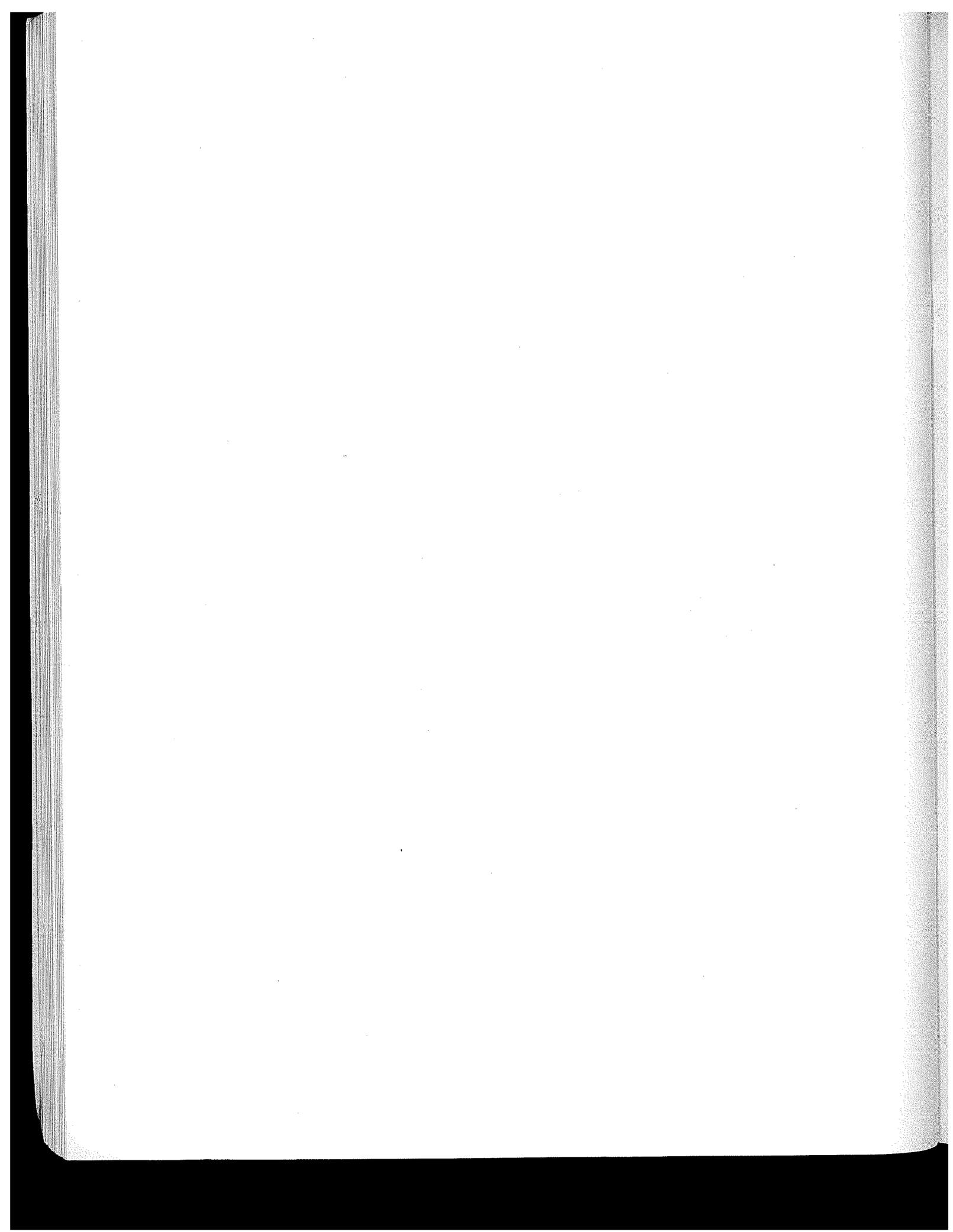
(Continued)

SURVIVAL PLAN STUDIES

SURVIVAL PLAN CONTRACTS (Continued)

Area	Phase I Study		Preliminary Operational Survival Plan Phase				Operational Survival Plan		
	Contract Execution Date	Federal Funds Obligated	Contract Execution Date	Federal Funds Obligated	Report Received	Expiration Date	Contract Execution Date	Federal Funds Obligated	Expiration Date
<u>REGION 6 - (Con't.)</u>									
Iowa				*					
Kansas			3-57	\$ 85,000		12-57			
Minnesota	3-56	\$ 41,029	10-56	85,000		7-57			
Nebraska	2-56	22,270	10-56	71,000	5-57		6-57	\$100,000	6-58
North Dakota	1-57	6,278	4-57	35,000		1-58			
South Dakota			2-57	35,000		11-57			
Wyoming				*					
<u>REGION 7</u>									
Arizona			2-57	66,041		2-58			
California	3-56	198,000		*					
Idaho				*					
Montana			Inactive						
Nevada			Inactive						
Oregon	7-56	52,270	3-57	118,873		3-58			
Utah			Inactive						
Washington	6-56	67,672		*					
Hawaii				*					
Alaska				*					
<u>Total Obligations</u>		1,324,804		4,001,743				2,386,731	

* Negotiating
 ** Included in Louisiana Contract



OTHER FCDA PROGRAMS

SURPLUS PROPERTY (Continued)

Memoranda of Understanding
Surplus Property Program
(Continued)

Surplus property originally costing the Federal Government approximately \$7,000,000 has been donated to civil defense organizations since the program started in November 1956. The material consists of such representative civil defense items as crash trucks, fire-fighting and rescue equipment and tools, office furniture and supplies, generators, other electrical equipment and numerous other categories of property.

REGION 2

Delaware
Kentucky
Maryland
Pennsylvania
Virginia
West Virginia

REGION 5

Louisiana
New Mexico
Oklahoma

REGION 6

Colorado
Iowa
Kansas
Minnesota
Nebraska
North Dakota
South Dakota
Wyoming

REGION 3

Alabama
Florida
Georgia
North Carolina
South Carolina
Tennessee
Puerto Rico
Virgin Islands

REGION 7

Montana
Nevada
Washington
Alaska
Hawaii

REGION 4

Illinois
Indiana
Missouri
Wisconsin

As of June 30, 1957, copies of surplus property issue documents had been received from only thirty-six of the thirty-nine States now receiving property under the CD donation program. This is due, in large part, to the time lag between acquisition of property by the States and receipt of documents at the National Headquarters. This delay should be appreciably reduced as operational experience is gained. The documents received indicate that property costing \$3,958,410 had been received by thirty-five of the thirty-six States as shown below:

SURPLUS PROPERTY RECEIVED BY STATES
As of June 30, 1957

States	No. of Trans- actions	Purpose and Acquisition Cost of Donated Property			
		Total	Operational Readiness	Training	Reserve Stock
<u>TOTAL</u>	<u>2349</u>	<u>\$3,958,410</u>	<u>\$1,849,997</u>	<u>\$2,033,651</u>	<u>\$74,762</u>
<u>REGION 1</u>	<u>283</u>	<u>543,417</u>	<u>341,942</u>	<u>201,475</u>	-
Connecticut	70	43,407	43,407	-	-
Maine	6	29,382	29,382	-	-
Massachusetts	106	305,599	141,809	163,790	-
New Hampshire	85	85,609	58,042	27,567	-
New Jersey	1	8,698	-	8,698	-
New York	*	*	*	*	*
Rhode Island	1	1,420	-	1,420	-
Vermont	14	69,302	69,302	-	-
<u>REGION 2</u>	<u>746</u>	<u>487,587</u>	<u>156,604</u>	<u>330,230</u>	<u>753</u>
Delaware	27	13,133	2,780	10,253	100
Kentucky	13	48,847	-	48,847	-
Maryland	39	35,271	28,209	7,062	-
Pennsylvania	632	335,077	78,125	256,652	300
Virginia	32	45,321	37,552	7,416	353
West Virginia	3	9,938	9,938	-	-
<u>REGION 3</u>	<u>463</u>	<u>1,035,233</u>	<u>599,594</u>	<u>429,244</u>	<u>6,395</u>
Alabama	149	385,366	123,899	256,007	5,460
Florida	33	146,285	87,405	58,464	416

OTHER FCDA PROGRAMS

SURPLUS PROPERTY RECEIVED BY STATES As of June 30, 1957 (Continued)

States	No. of Transactions	Purpose and Acquisition Cost of Donated Property			
		Total	Operational Readiness	Training	Reserve Stock
<u>REGION 3 (Continued)</u>					
Georgia	59	\$ 120,437	\$ 89,659	\$ 30,340	\$ 438
North Carolina	205	304,379	222,429	81,869	81
South Carolina	5	5,223	2,659	2,564	-
Tennessee	12	73,543	73,543	-	-
<u>REGION 4</u>					
Illinois	422	814,353	232,282	532,052	50,019
Indiana	259	582,951	150,313	384,208	48,430
Michigan	49	73,320	11,224	61,599	497
Missouri	98	144,725	63,830	80,604	291
	16	13,357	6,915	5,641	801
<u>REGION 5</u>					
Arkansas	255	684,382	174,049	497,279	13,054
Louisiana	82	347,865	23,556	324,177	132
Oklahoma	48	176,317	43,182	133,135	-
Texas	6	5,017	4,984	25	8
	119	155,183	102,327	39,942	12,914
<u>REGION 6</u>					
Colorado	142	323,877	290,989	28,618	4,270
Iowa	39	98,159	97,964	195	-
Kansas	2	386	-	386	-
Minnesota	15	80,538	80,538	-	-
Nebraska	58	119,170	90,872	24,545	3,753
	28	25,624	21,615	3,492	517
<u>REGION 7</u>					
Arizona	38	69,561	54,537	14,753	271
Oregon	8	33,486	28,093	5,393	-
Washington	13	18,038	17,368	399	271
	17	18,037	9,076	8,961	-

* Data for New York not currently available.

OTHER FCDA PROGRAMS

RESEARCH PROJECTS

FCDA is authorized by the Federal Civil Defense Act of 1950 to conduct research and to study and develop civil defense measures designed to protect life and property, including research as to the best methods of treating effects of attacks, developing shelter designs and materials, as well as equipment and facilities to meet civil defense requirements. The research is carried out under contract with universities and other research organizations. These projects cover a variety of fields such as the testing of materials, testing of weapon effects, development of damage assessment techniques, development of

shelter designs, studies of natural disaster problems, and social science research. A list and brief description of the projects in process as of June 30, 1957, and the projects completed by that date appear below. During FY 1957, the funds obligated by FCDA for these research projects totalled \$2,797,456.00. It is important to note that the amount shown as obligated includes only those contracts which have been fully executed. Excluded are those projects, totalling approximately \$1,000,000.00 for which funds have been set aside and which are currently being negotiated.

RESEARCH PROJECTS COMPLETED

During FY 1957

Airborne Radiation Study - Atomic Energy Commission

This survey, to test certain aerial monitoring instruments and procedures, was carried out jointly with AEC and Geological Survey at the Nevada Test Site.

Attack Surveillance - Stanford Research Institute

The original objectives were: (1) to provide an attack surveillance system to communicate attack intelligence, such as; location of ground zero, size of bomb, height of burst, and weather information to computer centers; and, (2) to determine communication requirements for transmitting computer results. The contract was modified to include: (1) feasibility study of a surveillance system based on available knowledge, (2) type of circuits required between detection instruments and feed-in point, and (3) feasibility study of the use of Rocketsonde equipment for upper-air readings to meet damage assessment requirements.

Climatological Survey - United States Weather Bureau, Department of Commerce

A comprehensive climatological study of fallout probabilities. The survey was made to aid in planning evacuation studies, determining the location of stockpile sites, and to insure well-founded operational plans. Geographical probabilities of fallout by seasons and areas around bombworthy targets in the U. S., its territories, and southern Canada are indicated in the final report.

Medical Research - National Academy of Sciences

A contract authorized a project on the sterilization of blood plasma for the purpose of eliminating the transmission of jaundice. This was the first phase of a long-range program which is

continuing.

SHELTER AND OTHER ATOMIC TESTING

Design and Testing of a Dual Purpose Shelter - Ammann and Whitney

The design of a dual purpose shelter and parking garage capable of withstanding 30 pounds per square inch overpressure has been completed.

Shelter Design - American Machine and Foundry Company

Design of a 150 foot span, reinforced concrete dome-type shelter with the capacity to house about 3,000 persons for several days or longer.

Anti-Blast Valve Closures - A. D. Little, Inc.

The development, design, and fabrication of prototypes of anti-blast closures for ventilation openings in protective structures. The prototype devices have been shipped to the Atomic Energy Test Site for testing during the 1957 Continental Test Program.

SOCIAL SCIENCE RESEARCH

Effectiveness of Civil Defense Information Media - Group Attitudes, Inc.

Interviews with key civil defense personnel, and with selected influence groups to determine their evaluation of the effectiveness of Civil Defense public information media, news releases, radio, TV, etc.

Evaluation of Local CD Training Effectiveness - Applied Psychological Services

The study was designed to: (1) develop instruments and procedures for the evaluation of civil defense training; (2) report on the structure, function, and organization of Civil Defense training in the critical target and support

OTHER FCDA PROGRAMS

RESEARCH PROJECTS COMPLETED

(Continued)

areas of FCDA Regions I and II, and (3) develop an objective check list which can be used to evaluate the training in the three types of areas.

Local Civil Defense Organization Effectiveness - Michigan State University

A comprehensive study of types of civil defense organizations currently operative in States, cities, counties, and metropolitan target complexes. The following aspects were analyzed: formal organization of the specific agency, its external relations with other organizations, its internal relations, and its community relations.

New England Disaster Study - Bureau of Applied Social Research Columbia University

This study was concerned with the human relations aspects of a large scale evacuation in the New England area necessitated by a major flood.

Public Attitude Survey - Survey Research Center, University of Michigan

A nationwide survey of current public knowledge and attitudes concerning civil defense.

WARNING AND COMMUNICATION

Audio-Sound System - DuKane Corporation

A research program in the study of public communication systems in order to develop a practical system using simple and inexpensive amplifiers and other components that are portable and more rugged than currently available commercial models.

Hom-A-Lert - Allis Chalmers Company

The development, production, and testing of an internal warning system. Items for development and testing included signal generating equipment, wave-trap equipment, and signal receivers.

Home Warning Devices - Overall Investigation - Armour Research Foundation

An overall study of powerline warning systems making use of superimposed signals over a wide range of frequencies. General properties of warning systems and the transmission of warning

signals were studied. Comparative study was made of home warning devices presently developed or being considered. The preliminary design of a warning system based on the optimum superimposed signal was also completed.

Overall Warning and Communications Study - Melpar Corporation

The objective of this program was to make a realistic appraisal of FCDA's warning and communication facilities, methods and procedures, and to make recommendations for improvements in the facilities and procedures.

Powerline Harmonic System - Midwest Research Institute

The development of a harmonic voltage signal system to be used on electric power distribution systems.

Prototype CONELRAD Alert Receivers - Philco Corporation

The development of three prototype radio receivers which are similar except with respect to their alarm functionings. The alarms are actuated by varying sequences of carrier-break and carrier-on, based upon CONELRAD Alert Procedures.

Prototype 2000 C.P.S. System - International Business Machines Corporation

Development of an internal warning system for the purpose of generating and receiving a civil defense alert signal. Receivers and necessary transmitting equipment for installation were furnished FCDA as a part of the contract. Field tests were carried out by Armour Research Foundation under a separate contract.

Warning and Communication Studies - Gautney and Jones Company

The objective of this project was to make a study of the effectiveness of the existing communication facilities from the Air Division through the key points and down to the local level. The study was conducted in the States of Maryland and Pennsylvania.

OTHER FCDA PROGRAMS

PROJECTS IN PROCESS

June 30, 1957

Start- ing Date	Project and Contractor	Comple- tion Date	FCDA Funds Obligated FY 1957
Jul 1956	<p><u>MEDICAL RESEARCH - NATIONAL ACADEMY OF SCIENCES</u></p> <p>a. <u>BLOOD RESEARCH</u> Funds for this project have been transferred to the Department of Defense to support a continuing contract relating to blood research, plasma, volume expanders, and nasogastric feedings.</p>	Jul 1957	\$ 15,000
Jun 1956	<p>b. <u>PLASMA STERILIZATION AND LONG-TERM PRESERVATION OF BLOOD</u> An amended contract authorizes further research in the sterilization of blood plasma for the elimination of the transmission of jaundice and for research on the long-term preservation of blood.</p>	Nov 1957	20,000
Jun 1954	<p><u>BOMB DAMAGE ASSESSMENT AND REPORTING</u></p> <p>a. <u>BOMB DAMAGE ASSESSMENT AND REPORTING - STANFORD RESEARCH INSTITUTE</u> A program to develop immediate and specific information on attack damage to population, housing, and other facilities and resources. Emphasis is being placed on mechanization of fallout analysis, development of a computation system for evacuation analysis, and a compilation of various data required. Development of computations for bomb damage has been completed. When perfected the system will be important for national planning, post-attack operations, and war games.</p>	Oct 1957	310,000
Oct 1956	<p>b. <u>ESTIMATION OF FALLOUT CASUALTIES - DR. RUDOLPH LANGER</u> This study will provide a rapid alternative method of securing emergency estimates of casualties from fallout. It will develop and test a method which employs a specially designed photo analogue technique.</p>	Jul 1957	1,500
Jan 1956	<p><u>RADIOLOGICAL DEFENSE</u></p> <p>a. <u>IONIZING RADIATION STUDY - NATIONAL BUREAU OF STANDARDS</u> The objectives of this program are to furnish FCDA consulting and advisory services, make a study of shielding requirements in make-shift or prepared shelters, make instrumentation studies, and develop safety standards for people in fallout areas.</p>	Jul 1958	56,500
Oct 1956	<p>b. <u>NATIONAL RADIOLOGICAL DEFENSE LABORATORY</u> The objective of this program is to study:</p> <ol style="list-style-type: none"> 1. diagnosis and treatment of radiation injury, 2. biological effects of deeply penetrating radiation, 3. internal radiation hazards, and 4. surface effects of radiation from nuclear weapons. 	Oct 1957	75,000
Dec 1956	<p>c. <u>AERIAL SURVEY INSTRUMENTS - ATOMIC ENERGY COMMISSION</u> In order to provide aerial survey instruments to meet FCDA specifications, an agreement has been reached with the New York Operations Office of AEC to develop and test prototype instruments.</p>	Cont.	25,000
Mar 1956	<p>d. <u>RADIOLOGICAL DEFENSE SYSTEM - UNIVERSITY OF CALIFORNIA</u> A study aimed at the development of a national radiological defense system including intensive fact-finding, review, analysis, and recommendations for further research on such items as: fallout patterns and predictions; shelter-cover; radiological instrumentation; communications systems; mass radiation injury diagnosis and treatment; and ingestion hazards.</p>	Sep 1957	591,600

OTHER FCDA PROGRAMS

PROJECTS IN PROCESS
June 30, 1957
(Continued)

Start- ing Date	Project and Contractor	Comple- tion Date	FCDA Funds Obligated FY 1957
Sep 1956	<u>BIOLOGICAL AND CHEMICAL WARFARE DEFENSE</u> <u>CHEMICAL CORPS, DEPARTMENT OF THE ARMY.</u> The primary objective of this program is to develop inexpensive civilian masks for protection against inhalation of BW, CW, and RW agents. Tests of the masks developed are underway.	Cont.	\$ 14,700
Feb 1957	<u>WARNING AND COMMUNICATIONS SYSTEMS STUDIES</u> <u>TELEPHONE SIGNALLING SYSTEM - ARMOUR RESEARCH FOUNDATION.</u> The research includes an analysis of the switching techniques used in the Bell and independent telephone companies. Also being studied are techniques for communicating an alarm to telephone central office which is representative of those in a metropolitan area.	Apr 1958	48,198
May 1957	<u>SOCIAL SCIENCE RESEARCH</u> <u>EVALUATION OF FCDA TRAINING COURSES - APPLIED PSYCHOLOGICAL SERVICES.</u> A study designed to evaluate systematically FCDA training programs. The research is concerned with evaluation of FCDA training given to persons attending the Staff College, the Olney Training Center, and courses given by FCDA travelling teams.	May 1958	49,958
Dec 1956	<u>FIRE RESEARCH</u> <u>FIRE RESEARCH COMMITTEE - NATIONAL ACADEMY OF SCIENCES.</u> The functions of the Committee are to explore all means and methods for preventing, controlling, and extinguishing large-scale fires. Emphasis is on new and novel procedures and methods with the objective of recommending a basic research program in this field for implementation by FCDA.	Nov 1957	50,000
Apr 1957	<u>SCIENTIFIC ADVISORY COMMITTEE</u> <u>SCIENTIFIC ADVISORY COMMITTEE - NATIONAL ACADEMY OF SCIENCES.</u> The Scientific Advisory Committee was established by the National Academy of Sciences in 1954 at the request of FCDA. This Committee, which serves without pay, supplies advice to FCDA on technical and scientific problems.	Apr 1958	40,000
Feb 1957	<u>1957 CONTINENTAL TESTS</u> FCDA is participating in the 1957 Continental Tests at the Nevada Test Site of the Atomic Energy Commission. While the precise amount of FCDA contributions cannot be determined until the completion of the tests, the figure indicated is the approximate cost to FCDA. Funds have also been contributed by the French and German Governments and by various industries.	Nov 1957	1,500,000
	The test program includes research in the following areas:		
	a. <u>SHELTER DESIGN AND TESTING.</u> Various type of shelter designs have been completed, and these structures are being tested.		(1,045,000)
	b. <u>ENGINEERING EQUIPMENT TESTING.</u> Development and testing of instruments and equipment under various conditions produced by nuclear explosions.		(155,000)
	c. <u>RADIOLOGICAL DEFENSE.</u> Includes operations training and the development of radiological defense techniques and instruments.		(190,000)
	d. <u>BIO-MEDICAL.</u> Determination of the biological and medical effects of nuclear weapons.		(110,000)

OTHER FCDA PROGRAMS

PROJECTS IN PROCESS
June 30, 1957
(Continued)

Start- ing Date	Project and Contractor	Comple- tion Date	FCDA Funds Obligated FY 1957
Jun 1957	<u>DISASTER RESEARCH PROGRAM -</u> <u>NATIONAL ACADEMY OF SCIENCES.</u> Sponsorship of research into the effects of disaster on the individuals and organizations concerned. Initial research centers on the effects of Hurricane Audrey in Louisiana. The Committee on Disaster Studies of the National Academy of Sciences and its Technical Staff will also advise and cooperate with FCDA on other relevant social science research problems which confront the Agency.	Jun 1958	\$ 42,000

OTHER FCDA PROGRAMS

TRAINING SCHOOLS

During fiscal year 1957, FCDA operated a Staff College in Battle Creek, Michigan, a Rescue School at Olney, Maryland, and a Radiological Defense School which presented Radiological Defense courses in Battle Creek and at various locations, as needed, through the States. In these schools civil defense training was carried on under the mandate of the Act of Congress creating the agency -- to "conduct or arrange, by contract or otherwise, for training programs for the instruction of civil defense officials and other persons in the organization, operation, and techniques of civil defense; conduct or operate schools or classes...., and provide instructors and training aids as deemed necessary."

The Staff College in Battle Creek normally has specialized in training civil defense administrative officials in its one-week Administration Course. Its other basic courses of at least one week were (a) an Operations Course covering problems a local CD organization would face in an enemy attack, and (b) an Evacuation Course dealing with the techniques and problems of evacuating a target area. In addition it has conducted numerous special courses and conferences for the orientation of government employees and for instruction of specialized and technical groups such as communications specialists, police officers, fire fighters, engineers, public health officials, the clergy, industry representatives, and others.

The Rescue School at Olney conducted three types of courses: (1) a one-week instructor course in heavy duty rescue, (2) a one-week instructor

course in light duty rescue, and (3) a one-week advanced rescue course. These courses prepare key personnel to carry on rescue training activities at State and local levels.

The Radiological Defense School began operation in early 1956. Through June of that year five courses were given by officials of the U. S. Public Health Service, under contract with FCDA. Thereafter the courses were presented by an FCDA staff. A total of 101 persons had completed training through these one-week courses prior to fiscal year 1957.

A summary of training activities by these three schools during fiscal year 1957 indicates that 1,451 persons received training at the Staff College (391 completed one of the basic courses and 1,060 attended special courses and conferences), 562 were trained at the Rescue School and 299 at the Radiological Defense School -- a total of 2,312 for the year.

The 2,312 persons who received training in fiscal year 1957, together with 12,075 trained previously, made a grand total of 14,387 persons who had received training at these schools. Of this total 6,108 completed training in one of the basic civil defense courses and 8,279 in special courses and conferences. These totals include revised figures for the years prior to FY 1957. The figures were revised to reflect only the number of persons actually completing the various courses and receiving certificates of completion. Previous figures included persons who attended but did not complete the various courses.

TRAINING SCHOOLS

Type of Course	Number of Persons Trained		
	Prior to FY 1957*	FY 1957	Total
Administration	2,736	177	2,913
Evacuation	246	88	334
Operations	378	126	504
Light Duty Rescue Instructor	216	323	539
Heavy Duty Rescue Instructor	1,091	220	1,311
Advanced Rescue	88	19	107
Radiological Monitor Instructor	81	299	380
Radiological Aspects of CD	20	-	20
<u>Subtotals</u>	<u>4,856</u>	<u>1,252</u>	<u>6,108</u>
Special Courses & Conferences	7,219	1,060	8,279
<u>Totals</u>	<u>12,075</u>	<u>2,312</u>	<u>14,387</u>

* Revised

OTHER FCDA PROGRAMS

The number of courses or conferences conducted during FY 1957 and the number of people trained in each category are indicated in the following table:

TRAINING AT FCDA SCHOOLS July 1, 1956 to June 30, 1957

Type of Training	Number of		Type of Training	Number of	
	Courses or Con- ferences	People Trained		Courses or Con- ferences	People Trained
<u>Staff College Basic Courses:</u>			<u>Special Courses & Conferences:</u>		
Administration	3	177	(Continued)		
Evacuation	2	88	Welfare	2	153
Operations	2	126	<u>Total Special Courses & Conferences</u>	20	1,060
<u>Total Basic Courses</u>	7	391			
<u>Special Courses & Conferences:</u>			<u>Rescue School:</u>		
American Legion Auxiliary	1	54	Light Rescue Instructor	14	323
Business Industry Education	1	50	Heavy Rescue Instructor	11	220
Health Service	2	92	Advanced Rescue	1	19
Industry Defense	4	179	<u>Total Rescue School</u>	26	562
Natural Disasters	2	145			
Nurses	1	61	<u>Radiological Defense School:</u>		
Parent-Teacher Association	1	42	Instructor's Course for		
Religious Affairs	3	165	Radiological Monitors	12	299
Rural CD Planning	1	49			
State and Local School Administrators	1	34	<u>Total Radiological Defense School</u>	12	299
Training & Education					
In-Service Training	1	36	<u>Grand Total, All Courses and Conferences</u>	65	2,312

People taking basic civil defense courses have come from every State in the Union. Federal Government agencies, particularly the Department of Defense, have sent substantial numbers of their employees to secure this training. Some of the Territories and Possessions have also sent people for training, and nearly 200 persons

from foreign countries have received training.

The following table shows a distribution, by States, of the number of people completing the various FCDA basic courses. The number from Federal agencies and foreign countries are indicated also.

OTHER FCDA PROGRAMS

PERSONS COMPLETING BASIC CD COURSES By Region, State and Course Fiscal Years 1951 - 1957

Region and State	Number of Persons Completing Specified Course								
	Total	Adminis- tration	Evacu- ation	Opera- tions	Rescue Instructor		Advanced Rescue	Radio- logical Monitor Instructor	Radio- logical Aspects of CD
					Heavy Duty	Light Duty			
TOTAL	6,108	2,913	334	504	1,311	539	107	380	20
REGION 1	619	303	15	44	166	49	16	22	4
Connecticut	100	53	1	4	28	9	3	2	-
Maine	29	14	2	3	9	-	-	1	-
Massachusetts	117	51	1	5	43	8	4	5	-
New Hampshire	31	20	-	4	2	1	-	4	-
New Jersey	117	32	1	4	56	14	7	3	-
New York	181	103	9	23	18	16	1	7	4
Rhode Island	36	23	1	1	10	-	1	-	-
Vermont	8	7	-	-	-	1	-	-	-
REGION 2	1,356	561	71	88	418	143	36	36	3
Delaware	107	38	8	15	30	13	2	-	1
Dist. of Columbia	121	50	-	3	65	2	1	-	-
Kentucky	40	24	3	4	2	4	1	2	-
Maryland	350	152	10	20	99	44	12	13	-
Ohio	262	109	30	29	60	23	6	4	1
Pennsylvania	121	48	8	8	32	14	4	7	-
Virginia	305	114	12	7	114	41	6	10	1
West Virginia	50	26	-	2	16	2	4	-	-
REGION 3	398	203	19	18	76	39	11	32	-
Alabama	42	22	-	-	9	5	3	3	-
Florida	92	63	8	10	5	3	-	3	-
Georgia	88	37	-	4	15	12	4	16	-
Mississippi	18	8	-	-	3	4	-	3	-
North Carolina	48	17	4	1	14	7	1	4	-
South Carolina	16	8	1	-	3	2	-	2	-
Tennessee	94	48	6	3	27	6	3	1	-
REGION 4	535	282	51	75	58	42	6	17	4
Illinois	105	51	9	10	11	15	1	6	2
Indiana	124	61	12	20	15	12	2	1	1
Michigan	196	113	15	25	24	8	2	9	-
Missouri	34	24	1	2	3	3	-	-	1
Wisconsin	76	33	14	18	5	4	1	1	-
REGION 5	295	184	6	28	35	10	11	21	-
Arkansas	4	4	-	-	-	-	-	-	-
Louisiana	168	126	1	8	16	7	7	3	-
New Mexico	6	5	-	1	-	-	-	-	-
Oklahoma	28	20	-	7	-	-	-	1	-
Texas	89	29	5	12	19	3	4	17	-
REGION 6	228	108	5	21	34	19	2	39	-
Colorado	47	17	2	3	1	2	-	22	-
Iowa	6	2	-	-	-	-	-	4	-
Kansas	34	24	2	4	1	1	-	2	-
Minnesota	87	37	1	12	19	11	2	5	-
Nebraska	27	12	-	1	10	2	-	2	-
North Dakota	5	4	-	-	-	1	-	-	-
South Dakota	12	6	-	-	1	2	-	3	-
Wyoming	10	6	-	1	2	-	-	1	-
REGION 7	154	76	11	17	12	12	1	25	-
Arizona	13	5	3	5	-	-	-	-	-
California	62	38	5	4	7	7	1	-	-
Idaho	21	1	-	2	1	-	-	17	-
Montana	6	1	1	-	1	1	-	2	-
Nevada	3	3	-	-	-	-	-	-	-
Oregon	24	9	-	5	2	3	-	5	-
Utah	9	6	2	-	1	-	-	-	-
Washington	16	13	-	1	-	1	-	1	-
Terr. & Possessions	66	44	5	8	8	1	-	-	-
Alaska	12	8	-	2	2	-	-	-	-
Canal Zone	10	2	1	3	3	1	-	-	-
Guam	1	1	-	-	-	-	-	-	-
Hawaii	26	20	3	1	2	-	-	-	-
Puerto Rico	12	9	-	2	1	-	-	-	-
Virgin Islands	5	4	1	-	-	-	-	-	-
FCDA	749	525	60	88	13	9	1	49	4
Dept. of Defense	1,018	412	36	66	300	169	11	23	1
Other Fed. Agencies	499	122	27	24	170	38	3	113	2
Foreign Nations	191	93	28	27	21	8	9	3	2

OTHER FCDA PROGRAMS

FCDA TRAINING SCHOOL EXTENSION PROGRAM

In addition to the training activities at the FCDA Staff College, Rescue School and Radiological Defense School, a program of training has gone forward in the States to assist them in developing their own training programs.

Under this plan an agreement is executed with the State Civil Defense Office which calls for the presentation of an initial Civil Defense Administration Course in the State by a traveling team of FCDA instructors. Some institution of higher learning within the State serves as a cooperating agency, and its facilities are utilized. Among those taking this course are university faculty members, as well as key State and local civil defense personnel, who will serve as instructors in subsequent State courses. The State agrees to present the same type of course

at least twice a year for 3 years under terms of a contract. Some financial assistance is furnished the State by FCDA for the initial course.

Through FY 1956 this program had been carried to 10 States and 477 people had been trained by FCDA traveling teams. The States had presented 15 courses and thereby trained 591 people. In FY 1957 FCDA traveling teams took the course to three additional States and trained an additional 121 people. The States presented the course 17 times during the year, thereby training an additional 588 people. As of June 30, 1957, FCDA traveling teams had taken the course to a total of 13 States and trained 598 people. Twelve of these States had presented a total of 32 courses and trained an additional 1,179 people.

ADMINISTRATION COURSES GIVEN
BY FCDA TRAVELING TEAMS

State	Date of FCDA Course	People Trained by FCDA Staff
Ohio	Aug 9-13, 1954	54
Connecticut	Oct 4- 8, 1954	50
Florida	Nov 15-19, 1954	73
Georgia	May 23-27, 1955	30
Wisconsin	Jun 19-24, 1955	28
Tennessee	Sep 5-10, 1955	58
Maine	Sep 18-23, 1955	49
Maryland	Oct 24-28, 1955	46
Louisiana	Mar 5- 9, 1956	58
Kansas	Apr 2- 6, 1956	30
Nebraska	Jul 30- Aug 3, 1956	25
Alabama	Aug 20-24, 1956	51
Kentucky	Nov 12-16, 1956	46
TOTAL	13 Courses	598

ADMINISTRATION COURSES
GIVEN BY STATES

State	No. of Courses	People Trained
Alabama	1	73
Connecticut	4	166
Florida	4	198
Georgia	2	112
Kansas	1	15
Louisiana	1	32
Maine	4	161
Maryland	2	63
Nebraska	1	6
Ohio	6	195
Tennessee	2	76
Wisconsin	4	82
TOTAL	32 Courses	1,179

OTHER FCDA PROGRAMS

POLICE INSTITUTES

FCDA has provided top level instruction and discussion of police functions and problems in civil defense to groups in a number of cities. Institutes for this purpose are conducted by experts in the field at FCDA expense in cooperation with State CD and police officials and under guidance of FCDA staff members. Two such institutes were conducted during FY 1957 at

Jefferson City, Missouri in which 295 people received training. In previous years 14 institutes had been conducted with participation by 1,874 people -- mostly police officers, sheriffs and auxiliary police, together with a few regional civil defense officials and military personnel. As of June 30, 1957, this made a total of 16 institutes held, with 2,169 participants.

INSTITUTES HELD FY 1952 - 1957

Location	Date	Attendance	Location	Date	Attendance
Portland, Oreg.	May 19-20, 1952	174	College Park, Md.	Nov 9, 1954	150
Louisville, Ky.	Apr 8- 9, 1953	130	Camp Perry, Ohio	May 15-16, 1955	73
Providence, R. I.	Oct 20-21, 1953	88	Indianapolis, Ind.	Apr 19-20, 1956	48
Hartford, Conn.	Feb 9-10, 1954	589	Springfield, Ill.	May 14-15, 1956	83
Atlanta, Ga.	Mar 30-31, 1954	108	Olney, Md.	Jun 19-20, 1956	55
Montgomery, Ala.	Apr 7- 8, 1954	124	Jefferson City, Mo.	Oct 3- 4, 1956	75
Chapel Hill, N. C.	Jun 23-24, 1954	102	Jefferson City, Mo. (Auxiliary Police)	May 3- 4, 1957	220
Phoenix, Ariz.	Oct 28-29, 1954	50			
Dover, Del.	Nov 8-12, 1954	100	<u>Total</u>		<u>2,169</u>

EMERGENCY TRAFFIC CONTROL

Utilization of highways and effective control of traffic are among the important problems that would be faced in the event of enemy attack and attempted prior evacuation. As one step toward preparation in this field FCDA, in conjunction with the staff of Northwestern University Traffic Institute, developed a course of instruction on emergency supervision and regulation of street and highway traffic for civil defense purposes. During FY 1957 this course was presented at Olney, Maryland and Topsfield, Massachusetts with 125 people receiving the instruc-

tion. Altogether this course has been given at FCDA expense in 17 locations for the benefit of State and local traffic control officers and other CD officials. A total of 614 people have received this training, 228 representing the States, 288 representing civil subdivisions, 39 from the U. S. Department of Defense and 59 other CD officials -- mostly employees of FCDA at the national and regional offices. Most of the people receiving this training were police officers, traffic engineers and highway transportation officials.

COURSES PRESENTED

Location	Date	Attendance	Location	Date	Attendance
Evanston, Ill.	Feb 18-19, 1952	21	Lansing, Mich.	Dec 7-11, 1953	37
Olney, Md.	May 26-Jun 6, 1952	23	Monroe, La.	Jun 8-10, 1954	26
Boston, Mass.	Jul 14-25, 1952	27	Columbus, Ga.	Nov 15-19, 1954	12
Evanston, Ill.	Sep 8-19, 1952	38	Louisville, Ky.	Jan 10-14, 1955	18
Seattle, Wash.	Sep 29-Oct.10, 1952	28	Battle Creek, Mich.	Mar 21-25, 1955	36
St. Mary's College, Cal.	Nov 10-21, 1952	41	Detroit, Mich.	Dec 5- 9, 1955	40
Naval Air Station, Dallas, Tex.	Feb 16-26, 1953	71	Olney, Md.	Oct 29-Nov 2, 1956	82
Georgia Institute of Technology	Apr 27-May 8, 1953	32	Topsfield, Mass.	Apr 29-May 3, 1957	43
Lowry AF Base, Denver, Colo.	Sep 14-25, 1953	39	<u>Total</u>		614

ENROLLMENT REPRESENTATION

Students Representing	Through Jun 30, 1956	Jul 1, 1956 to Jun 30, 1957	Total Jun 30, 1957
<u>Total</u>	489	125	614
States	188	40	228
Subdivisions	230	58	288
Dept. of Defense	21	18	39
Other	50	9	59

OTHER FCDA PROGRAMS

MOTION PICTURES

FCDA has recognized the importance of motion pictures as a training aid for use both in formal instruction courses and for general public education. Almost from the beginning of the agency, work has gone forward in the production of useful civil defense films. Some of them have been produced at FCDA cost. Others have been sponsored by commercial enterprises and produced at no cost to FCDA. A variety of fields and situations have been covered in order to emphasize the various aspects of civil defense--survival, shelter, evacuation and expected damage in the event of attack. Most of

the films have been cleared for television use and are available also for use in schools, churches and civic organizations in the civil defense education of their members.

Some of the earlier films released have been withdrawn because changing concepts and new weapons have made them obsolete.

The following lists show the films which are now completed and available, and those declared obsolete.

FILMS COMPLETED AND AVAILABLE June 30, 1957

Name	Black & White or Color	Running Time (Minutes)	Date Released
Alert Today - Alive Tomorrow **	B & W	20	Sep 1956
Big Men in Small Boats *	Both	13½	Jan 1956
Bombproof *	Both	13½	Jan 1956
Crisis *	B & W	13½	Dec 1956
Facts About Fallout	Both	12	Sep 1957
Frontlines of Freedom (Revised)	B & W	13	Jan 1955
House in the Middle, The	B & W	6½	Oct 1953
House in the Middle, The *	Both	12	1954
Nerve Gas Casualties and Their Treatment * **	Color	25	Jun 1957
New Family in Town (Revised) *	B & W	13½	Aug 1956
Operation Cue (EG&G Short and Long Versions)	B & W	9 & 19	1956
Operation Doorstep (Revised) *	B & W	10	Jun 1953
Operation Ivy	Both	28	Mar 1954
Operation Kids	Color	13½	Mar 1957
Operation Scat	B & W	11½	1954
Operation Scramble	Color	27½	Aug 1957
Operation Welcome	Color	10	Aug 1955
Rehearsal for Disaster *	B & W	13½	Jan 1956
Rescue Street *	Both	14	Jan 1954
Rural Community Defense	B & W	13½	***
Sound for Survival *	B & W	13½	Jun 1957
Time of Disaster *	B & W	13½	Dec 1954
To Live Tomorrow *	B & W	13½	Jul 1955
Trapped	B & W	20	Feb 1954

* Sponsored and/or financed by a commercial organization with cooperation of FCDA.

** Not cleared for television presentation.

*** For release on or before December 31, 1957.

FILMS DECLARED OBSOLETE

A New Look at the H-Bomb	Firefighting for Householders	Survival Under Atomic Attack
Atomic Attack	First Aid TV Spots (Series of 6)	Target You
Cities Must Fight	Improvised Hospital	This is Civil Defense
Conelrad	Let's Face It	U. S. Civil Defense in Action
Disaster on Main Street	Operation Alert - 1956	Warning Red
Duck & Cover	Operation Cue	What you Should Know About Biological Warfare
Emergency Action to Save Lives	School for Survival	
Escape Route		

OTHER FCDA PROGRAMS

FILMSTRIPS

Filmstrips constitute one of the most effective training aids in civil defense. A number of filmstrips, dealing with a wide variety of civil defense subjects, have been produced by FCDA and in most cases have been interwoven with lesson units and training courses available to civil defense and other organizations at the local level. States and local subdivisions can pur-

chase these materials under the Federal-State Matching Funds Program by submitting applications to the FCDA Regional Offices.

The following lists show the titles of filmstrips completed and available; those soon to be distributed, and those currently in process:

COMPLETED AND AVAILABLE, JUNE 30, 1957

Title	Date Released	Title	Date Released
<u>Public Information</u>		<u>Skills Training Series (Cont'd)</u>	
Civil Defense Against Biological Warfare	Jun 1956	Fire Fighting - Part I	Sep 1953
Civil Defense of Animals Against Biological Warfare	Jun 1956	Fire Fighting - Part II	Sep 1953
Civil Defense of Man Against Biological Warfare	Jun 1956	Handling and Care of Ladders	Sep 1953
Civil Defense of Plants and Crops Against Biological Warfare	Jun 1956	Lowering and Raising Casualties on a Stretcher	Sep 1953
Improvised Hospitals	May 1954	Pick-ups, Carries and Drags	Sep 1953
Improvised Hospitals *	May 1954	Ropes and Knot Tying - Part I	Sep 1953
Operation Cue	Oct 1955	Ropes and Knot Tying - Part II	Sep 1953
Role of the Warden in Fire, The	May 1953	Using a Ladder as a Stretcher	Sep 1953
Role of the Warden in Rescue, The	Dec 1952	Using Improvised and Regular Stretchers	Sep 1953
Role of the Warden in the H-Bomb Era, The *	Mar 1957	Using Ladders in Rescue	Sep 1953
Warden's Responsibility for Emergency Sanitation, The	Dec 1953	Emergency Mass Feeding	Jan 1957
<u>Training Filmstrips</u>		<u>Rescue Series</u>	
What You Should Know About Radioactive Fallout	Jan 1956	Damage Survey for Rescue Workers	Sep 1956
<u>Skills Training Series</u>		Reconnaissance and Rescue by Stages	Sep 1956
Emergency First Aid	Sep 1953	Rescue from Basements	Sep 1956
		Rescue Squad Operations	Sep 1956
		Rescue Tools and Techniques	Sep 1956

COMPLETED BUT NOT YET DISTRIBUTED

Title	Date Completed	Title	Date Completed
<u>Public Information</u>		<u>Industry ** (Continued)</u>	
<u>Warden</u>		Establishing Protective Shelters in Industry	May 1956
Preparing Your Neighborhood for Evacuation	Dec 1956	Evacuation of Industrial Plants	May 1956
Shelters from Fallout	Dec 1956	Moving Industrial Workers into Shelters	May 1956
<u>Training Filmstrips</u>		Organizing for Civil Defense Protection in Industry	
<u>Warden</u>		Planning Civil Defense Protection in Industry	May 1956
Facilities and Block Warden Organization	Dec 1956		
<u>Industry **</u>			
Eliminating Hazards to Civil Defense in Industry	May 1956		

* Filmograph

** Industry Filmstrips held pending development of training material

OTHER FCDA PROGRAMS

FILMSTRIPS
(Continued)

IN PROCESS

Title	Title
<u>Public Information</u> Conducting a Neighborhood Civil Defense Meeting Evacuation of Neighborhood Handicapped Persons Mobilizing the Neighborhood for Evacuation Your Family Evacuation Plan	<u>Warden (Continued)</u> Role of the Warden in Receiving and Billeting Evacuees, The
<u>Training Filmstrips</u> <u>Warden</u> Block Census, The Map Making for Wardens	<u>Welfare</u> Registration and Information Welfare Task in Civil Defense, The
	<u>Miscellaneous</u> Public Hygiene and Sanitation Safety Measures Under Tornadic Conditions

OTHER FCDA PROGRAMS

RADIO AND TELEVISION

Radio and television offer one of the most effective means of getting a message to the thinking people in the shortest possible time. FCDA uses them in four principal ways: (1) by providing specially prepared spots, films and programs to stations throughout the country in order to keep reminders on some phase of civil defense constantly before the public, (2) by integrating civil defense information into regular network broadcasts either by personal appearances of CD people, or by integrating the material into the usual format of programming, (3) by preparing special civil defense programs

for actual use on radio networks, such as the current programs, "By the People" on the Mutual Broadcasting System and "Entertainment U.S.A." on the Columbia Broadcasting System, and (4) by preparing special transcribed programs such as the current "Stars for Defense", and offering them to stations on a request basis. Radio materials are usually recorded on transcription platters and distributed to every station in the U. S. and the territories. TV materials are put on film and likewise sent to all stations. A detailed list of the available materials appears below:

MATERIALS AVAILABLE

Title	Running Time	Explanation
<u>RADIO TRANSCRIPTIONS</u>		
Conelrad Spots	21 to 53 seconds	Well known commentators
Conelrad Spots	19 to 50 seconds	Announcers
Conelrad Spots (Series II)	1 minute	Novelty - humorous
Dramatized Spots	1 minute; 20 seconds; 10 seconds	Civil Defense basic spots in dramatic form
Firefighting for Householders	1 minute	Spot Announcement
Firefighting for Householders	18 seconds	Spot Announcement
Firefighting for Householders	14½ minutes	Radio program
"No Second Chance"	14½ minutes	Dramatic Conelrad Program
Religious Spots	30 seconds	CD announcements by top religious leaders
Stars for Defense	14½ minutes each	Musical program with top singing stars
This is Civil Defense	15 minutes each	Series of 13 dramatic programs
Tomorrow	59 minutes	Dramatization of Philip Wylie novel, with Orson Wells, Mona Freeman, and All-Star Cast
<u>TELEVISION MATERIAL</u>		
Conelrad	20 seconds	Film Spot
Star TV Film Spots	1 minute	Famous Stars Give CD Messages
TV Station I.D. Slide		Station Break Call Letters Slide
TV Package #1	1 minute; 20 seconds	Six CD subjects, each covered in a one minute film, a 20-second film, and a 2 x 2 slide with accom- panying live copy.

OTHER FCDA PROGRAMS

PUBLICATIONS

FCDA has published and distributed a large number of publications dealing with various aspects of civil defense in accordance with provisions of the basic law creating the Agency which authorized the Administrator to "publicly disseminate appropriate civil defense information by all appropriate means."

As of June 30, 1957, more than 203,000,000 copies of publications had been distributed and sold. Many of these were in the form of administrative

and technical manuals, bulletins, guides, and handbooks for use of civil defense officials at all levels and for training and educational purposes. Many others were issued for the information and guidance of the general public. These included numerous small booklets, leaflets, and cards on specific aspects of civil defense important to the individual, the family, and the local community. The following table shows the number of copies distributed and sold in each of 18 categories.

MATERIAL DISTRIBUTED AND SOLD
by Fiscal Years

Type of Publication	Total	FY 1957	FY 1956*	FY 1955*	FY 1954	FY 1953*	FY 1952
TOTAL	203,199,938	58,013,191	49,828,764	22,601,789	8,529,874	10,810,119*	53,416,201
Administrative Guides	1,536,976	118,375	104,853	117,186	67,780	97,498	1,031,284
Flyers	478,639	444,669	33,970	-	-	-	-
Handbooks	3,630,311	2,243,385	733,767	424,266	168,383	15,949	44,561
Instructor Guides	271,340	74,504	143,586	53,250	-	-	-
Leaflets	9,391,889	9,391,889	-	-	-	-	-
Manuals	59,672	18,237	8,454	1,947	7,804	23,230*	-
Pocket Manuals	31,628	31,628	-	-	-	-	-
Posters	3,295,431	2,368,599	543,154	23,049	42,378	318,251	-
Program Guides	193,422	87,887	53,669	51,866	-	-	-
Public Booklets	29,382,545	5,018,125	6,024,330	1,424,607	2,921,088	1,137,456	12,856,939
Technical Bulletins	2,448,479	908,746	954,006	287,609	188,755	76,561	32,802
Technical Manuals	1,511,741	210,943	313,190	104,982	405,271	289,365	187,990
Technical Reports	163,220	43,471	85,774	33,975	-	-	-
Training Bulletins (Officer Series)	294,589	1,081	29,012	24,106	77,376	137,708	25,306
Training Bulletins (School Series)	88,525	460	-	6,511	23,969	27,433	30,152
Training & Education Bulletins	141,804	-	10,054	1,568	1,269	1,284	127,629
Volunteer Manpower	396,319	-	12,707	93,783	30,815	254,632	4,382
Miscellaneous	149,883,408	37,051,192	40,778,238	19,953,084	4,594,986	8,430,752	39,075,156

* Total and figures for some categories revised.

Many publications issued in early stages of the program became obsolete in the light of more recent developments and weapons and consequently have either been revised and brought up-to-date or have been replaced by new publications with later technical information. The following list

shows the publications currently available. All of these are available from FCDA in Battle Creek, Michigan, and most of them may be obtained also from the Superintendent of Documents in Washington, D.C.

OTHER FCDA PROGRAMS

PUBLICATIONS
Currently Available as of June 30, 1957

Identification	Title	Publication Date	Identification	Title	Publication Date
	<u>Administrative Guides</u>			<u>Leaflets (Continued)</u>	
AG 6-1	Supply Service, The	Jun 1952	L-2-13	Visitors Brochure	Jan 1956
AG 7-1	Marden Service, The	Aug 1951	L-2-14	What You Can Do Now	Oct 1952
AG 8-1	Principles of CD Operations	Jul 1951			Feb 1956*
AG 9-1	Fire Services	Oct 1951	L-11-1	Needed...Nursing Assistants for Civil Defense Preparedness	1957
AG 10-1	Police Services	May 1951			1957
		Jun 1952*	L-11-2	Civil Defense and the Nurse	1957
AG 11-1	Health Services and Special Weapons Defense	Dec 1950	L-25-1	Special Course for Clergymen	Feb 1956
		Jun 1952*	L-25-2	Tornado Tips...For Your Protection	1957
AG 12-1	Emergency Welfare Service	Feb 1952			
		Jul 1952*	<u>Manuals</u>		
AG 13-1	Engineering Services	Feb 1952	M 25-1	Federal Contributions	Oct 1954
		Jul 1952*			Jan 1957*
AG 14-1	Rescue Service, The	May 1951	M 27-1	Survival Plan (Advance)	Sep 1955
AG 25-1	Church and Civil Defense, The	Oct 1951	M 27-2	Survival Plan Workbook (Advance)	Dec 1955
		1956*			
				<u>Pocket Manuals</u>	
	<u>Flyers</u>		PM-12-1	Basic Course in Emergency Mass Feeding, ARC-488-A	Jan 1957
PA- F-1	Mr. CD Reporting for Duty	1956			
PA- F-2	Shake Off That Spring Fever	1956	PM-14-1	Emergency Rescue Training	Oct 1956
PA- F-4	Exhibits	1956			
PA- F-5	Drinking Water	1956		<u>Posters</u>	
PA- F-6	Basic Course in Emergency Mass Feeding	1957		"Alert America"	Apr 1952
				Civil Defense - Part of Our Tradition	May 1954
	<u>Handbooks</u>			Disaster Strikes Suddenly (Car Cards)	Sep 1953
H-3-1	Annotated CD Bibliography for Teachers	Dec 1951		Fiddling's Fun	May 1954
		Apr 1956*		Go Join Civil Defense	Jun 1954
H-11-1	Before Disaster Strikes - What to Do Now About Emergency Sanitation at Home	Aug 1953		In Case of Air Raid (Billboard)	Jul 1955
		Mar 1954*		Natural Disaster	1956
		Oct 1955*		Mr. Civil Defense	1956
H-11-2	Before Disaster Strikes - What the Farmer Should Know About Biological Warfare	Aug 1954		Official CD Identification	Jul 1954
		Feb 1956*		Radioactive Fallout Poster	Sep 1955
		Feb 1956		Recruiting	Jan 1953
H-25-2	Civil Defense Glossary	Jun 1956*	PG-12-1	Rescue Training Poster	Jul 1955
				<u>Program Guides</u>	
	<u>Instructor's Guides</u>			Program Guide for Basic Course in Emergency Mass Feeding	Jan 1957
IG 3-1	Skills Training Films	Aug 1954			
		1956*		<u>Public Booklets</u>	
IG 3-2	Basic Course for Civil Defense	Feb 1955	PAB-2	What You Should Know About Biological Warfare	1951
IG 3-3	Civil Defense Instructor's Course	Feb 1956			May 1951
IG 11-1	Venipuncture and Intravenous Procedures	Aug 1954	PAB-3	This is Civil Defense	Jun 1956*
IG 12-1	Basic Course in Emergency Mass Feeding	Jan 1957			Oct 1951
IG 14-1	Basic Rescue Course	Jan 1956	PAB-4	Fire Fighting for Householders	Mar 1956*
IG 14-2	Light Duty Rescue Course	Jul 1956			Jul 1951
IG 14-3	Heavy Duty Rescue Course	Sep 1956	PAB-5	Emergency Action to Save Lives	Apr 1954*
IG 19-1	Introduction to Radioactive Fallout Interim Instructor's Guide to Radiological Defense for Monitors Course	Sep 1955			
		1957	PAB-7	What You Should Know About Radioactive Fallout	Jun 1955
					Jun 1956*
				<u>Technical Bulletins</u>	
	<u>Leaflets</u>		TB 4-1	Advantages of FM over AM for CD Communications in the Frequency Bands 50 Megacycles per Second and Up	Oct 1953
L-2-1	Between You and Disaster	1956			Dec 1953*
L-2-2	You and the Welfare Program	1956			
L-2-3	So You Are Chairman of Civil Defense	1957	TB 4-2	Radio Frequency Allocation Plans for Disaster Communications Service and Radio Amateur Civil Emergency Service	Oct 1953
L-2-4	Six Steps to Survival	Mar 1955			Sep 1955
		1957*	TB 4-3	National Communications Priorities	
L-2-5	Rural Family Defense	1956			Apr 1957
		1957*	TB 4-4	Status of CONELRAD Plans and Rules for all Classes of Radio Stations	
L-2-6	CONELRAD	Sep 1953			
		1957*	TB 4-5	Priority Procedures for the Resumption of Intercity Private Line Communication Services	May 1957
L-2-7	Atomic Blast Creates Fire	Sep 1951			Sep 1955
L-2-8	Four Wheels to Survival	Oct 1955	TB 5-2	Shelter from Radioactive Fallout	Jan 1956*
		Feb 1956*			
L-2-10	Facts About the H-Bomb	Feb 1955	TB 7-1	The Role of the Warden in Panic Prevention	Nov 1954
L-2-11	Facts About Fallout	Mar 1955			Jan 1957*
L-2-12	Civil Defense Household First Aid Leaflet	Jun 1951			
		1957*			

OTHER FCDA PROGRAMS

PUBLICATIONS
(Continued)
Currently Available as of June 30, 1957

Identifi- cation	Title	Publication Date	Identifi- cation	Title	Publication Date
	<u>Technical Bulletins (Continued)</u>			<u>Technical Bulletins (Continued)</u>	
TB 7-2	The Role of the Warden in the H-Bomb Era, revision of TB-27-3	Dec 1956	TB 13-5	Utilization of FCDA Stockpiled Light-weight Steel Pipe and Centrifugal Pumps	Dec 1953
TB 8-1	Blast Damage from Nuclear Weapons of Larger Sizes	Feb 1955	TB 13-5 Supp.	New Check Valve and Priming Instructions for FCDA Centrifugal Pumps	Dec 1954
TB 11-1	Emergency Exposures to Nuclear Radiation	Mar 1952 Aug 1956*	TB 13-6	Utilization of FCDA Stockpiled Portable Water Purifiers and Storage Tanks	Apr 1954
TB 11-2	Personal Dosimeters for Radiological Defense	Apr 1952	TB 13-7	Utilization of FCDA Stockpiled Flexible Vinyl Film	Apr 1954
TB 11-3	The Most Promising Personal Dosimeters for Civil Defense Use	Apr 1952	TB 13-8	Utilization of FCDA Stockpiled Mobile Chlorinators	Apr 1954
TB 11-4	Development Status of Personal Dosimeters	Apr 1952	TB 13-9	Restoration of Gas Facilities in CD Emergencies	May 1954
TB 11-5	Emergency Blood Transfusion	Nov 1952	TB 13-10	Sewage Works Facilities in Civil Defense Emergencies	Jun 1954
TB 11-6	Emergency Blood Grouping Laboratory Techniques	Nov 1952	TB 13-11	Plastic Patching for Emergency Repairs	Apr 1955
TB 11-8	Permissible Emergency Levels of Radioactivity in Water and Food	Dec 1952	TB 14-1	Construction and Adaptation of Structures for Rescue Training	Dec 1952
TB 11-9	Emergency Measurement of Radioactivity in Food and Water	Dec 1952	TB 16-1	Casualty Services in Facilities	Aug 1953
TB 11-10	Responsibilities for Production and Distribution of Potable Water During Disaster	May 1953 Apr 1956*	TB 16-2	Protection of Vital Records and Documents	May 1955
TB 11-11	Use of Tourniquet in Controlling Hemorrhage	Jun 1953 Aug 1955*	TB 16-3	Industry Defense-Sources of Reference and Guidance	Dec 1955 Jun 1956*
TB 11-12	Civil Defense Household First Aid Kit (Revision)	Feb 1954*	TB 16-4	Industry Defense Checklist	Apr 1956
TB 11-13	The FCDA Clinical Laboratory Assembly	Jul 1954 1957*	TB 16-5	Planning for Continuity of Management Following Disaster	Nov 1956
TB 11-14	Revised Instructions for Shipping Blood	Jul 1954 May 1956*	TB 19-1	The Radioactive Fallout Problem	Jun 1955
TB 11-15	Phosphate Glass Dosimetry	Jul 1954	TB 19-2	The Problem of Panic	Jun 1955
TB 11-16	Minimum Potable Water Supply Requirements in CD Emergencies	Aug 1954 Apr 1956*	TB 27-1	Evacuation of Civil Populations in Civil Defense Emergencies	Feb 1955 Oct 1955*
TB 11-18	Biological Warfare Against Public Water Supplies	Apr 1955	TB 27-2	Evacuation Checklist	May 1955
TB 11-19	Protection Against Fallout Radiation	Sep 1955		<u>Technical Manuals</u>	
TB 11-20	Radiological Instruments for Civil Defense	Sep 1955 Oct 1955	TM 4-1	Outdoor Warning Device Systems	Oct 1951 Jul 1952*
TB 11-21	Fallout and the Winds	Feb 1956*	TM 8-1	Civil Defense Urban Analysis	Jul 1953
TB 11-22	Radiation Physics and Bomb Phenomenology	Dec 1955 Jun 1956*	TM 8-2	Operational Planning	Jan 1957
TB 11-23	Promotion of an Emergency Hospital Exhibit	Apr 1956	TM 9-1	Water Supplies for Wartime Fire Fighting	Jul 1951 1950
TB 11-24	Medical Aspects of Nuclear Radiation	Jul 1955	TM 9-2	Fire Effects of Bombing Attack	Sep 1955*
TB 11-25	Introduction to Chemical Warfare	Jul 1956	TM 11-1	Organization and Operation of CD Casualty Services, Part I - The First-Aid System	Jan 1953
TB 11-26	General Concepts of Chemical Warfare	Jul 1956	TM 11-3	Organization and Operation of CD Casualty Services, Part III - Medical Records for Casualties	Mar 1952 Oct 1952*
TB 11-27	Developing a Hospital Exhibit	Jul 1956	TM 11-5	Blood and Blood Derivatives Program	Apr 1952 Jan 1953*
TB 11-28	Chemical Warfare Agents of Special Significance to Civil Defense	Jan 1957	TM 11-6	Radiological Decontamination in Civil Defense	Mar 1952 Sep 1952*
TB 11-29	Chemical Agent Detector Kit, CD V-810	Apr 1957	TM 11-7	The Nurse in Civil Defense	Jun 1952 Apr 1954*
TB 11-31	Probability of Fallout Debris Deposition (Advance Copy)	1957	TM 11-8	Emergency Medical Treatment	Apr 1953
TB 13-1	Engineering Equipment Stockpiled for Emergency Water Supply Use	Jun 1952	TM 11-9	The Dentist in Civil Defense	Feb 1953 Apr 1954*
TB 13-2	Utilization of FCDA Stockpiled Portable Generator Sets	Sep 1953	TM 11-10	CD Against Biological Warfare	Nov 1953
TB 13-3	Preliminary Report of Tests of Thermal Type Atomic Bomb Air Zero Locators	Oct 1953	TM 11-11	The Veterinarian in CD	Jan 1955
TB 13-4	Report of Tests of Identification Tags Exposed to Blast and Thermal Radiation of an Atomic Bomb	Oct 1953	TM 11-12	Mortuary Services in CD	Apr 1956
			TM 12-1	Registration and Information Service	May 1954
			TM 12-2	The Social Worker in Civil Defense	Oct 1956
			TM 13-1	Utilization and Control of Streets and Highways in CD Emergencies	Jan 1953

OTHER FCDA PROGRAMS

PUBLICATIONS
(Continued)
Currently Available as of June 30, 1957

Identifi- cation	Title	Publication Date	Identifi- cation	Title	Publication Date
TM 13-2	<u>Technical Manuals (Continued)</u> Operation and Repair of Water Facilities in CD Emergencies	Sep 1953		<u>Unnumbered Miscellaneous (Continued)</u> Annual Report - 1956	1957
TM 13-3	Clearance and Restoration of Streets and Highways in CD Emergencies	Apr 1954		Annual Statistical Report - FY 1955	Jun 1955
TM 14-1	Rescue Techniques and Operations	Sep 1953		Interim Statistical Report, December 31, 1955	1956
TM 27-1	Procedure for Evacuation Traffic Movement Studies	Nov 1955		Interim Statistical Report, March 31, 1956	1956
TM 27-2	Planning and Organizing for Civil Defense Traffic Operations	Nov 1955 Jan 1956*		Annual Statistical Report, FY 1956	1956
	<u>Technical Reports</u>			Interim Statistical Report, September 30, 1956	1956
TR 4-1	The Effectiveness of Sonic Outdoor Warning Devices	Jul 1954		Interim Statistical Report, December 31, 1956	1957
TR 9-1	Operation Firestop	Jan 1955		Interim Statistical Report, March 31, 1957	1957
TR 11-1	Effects of Nuclear Explosions Upon Drugs	Mar 1955		Battleground USA	Feb 1957
TR 27-1	Operation Kids	Sep 1955		Civil Defense Air Raid Instructions (Alert Signal)	1956
TR 27-2	Scientific Study of the Preattack Evacuation of New York Cit	Oct 1955		Civil Defense Air Raid Instructions (Evacuation Signal)	1956
TR 27-3	Spontaneous Leadership in a CD Evacuation Exercise	Oct 1955		Civil Defense and National Organizations	May 1951
TR 27-4	Operation Exit	Jun 1956		Civil Defense and Vocational Education	1957
TR 27-5	Operation Green Light	Jun 1956		Civil Defense Rescue Training Brochure	Apr 1955
TR 27-6	Operation Scram	Jul 1956			Dec 1955*
	<u>Training Bulletins (Officer Series)</u>			Civil Defense Through Elementary and Secondary Schools	1956
No. 9	Map Making for Wardens	Oct 1952		"Conelrad" Sticker (80 per card) Card	Apr 1956
No. 10	The Block Census	Nov 1952		Control of Communicable Diseases in Man	1955
No. 11	The Role of the Warden in Rescue	Dec 1952			
No. 17	The Role of the Warden in Receiving and Billeting Evacuees	Apr 1953		Damage from Atomic Explosion and Design of Protective Structure	Aug 1951
No. 18	The Warden Post Message Center	Apr 1953		Disaster Fatigue	Apr 1956
No. 22	Rescue Tools and their Application to Rescue Techniques	Jul 1953		Education for National Survival	1956
No. 23	Organizing a Neighborhood for Survival Unnumbered Rescue Squad Operations	May 1953 Jan 1954		Emergency Mass Feeding Instructor's Course	Aug 1953
	<u>Miscellaneous</u>			Employees Handbook	Jun 1952
MP 2-1	Home Protection Exercises (A Family Action Program)	Aug 1953 Mar 1956*		Home Protection Exercises (Exercise No. 1)	1955
MP 2-2	Federal Assistance in Natural Disasters	Feb 1957		Index to FCDA Specifications	Apr 1955
MP 2-3	Cue for Survival	May 1955 1956*		National Plan for Civil Defense Against Enemy Attack	1956
MP 11-1	Nerve Gas Casualties and their Treatment	1957		National Warning System (NAWAS)	1957
MP 25-1	Ten Steps to Industrial Survival	1956		Natural Disaster Manual	May 1956
	<u>Kits</u>			Operation Doorstep 2-2/3 Seconds	Jun 1953
	CONELRAD - A Simple Message	1955		Policy for Survival AFL-CIO	1957
	Emergency Mass Feeding	1957		Progress Report on the Damage Analysis System	1956
	Evacuation Advertising	1956		Seal - CD Week "Alert Today"	Jun 1956
	Facts About Civil Defense	1955		Shelter Designs	Jul 1955
	Radio CD Week	1956		Signs of Our Times	Oct 1952
	Rescue Instructors Training	1956		Survival in Public Shelter	1957
	Weekly Newspaper CD Week	1956		Underground Personnel Shelters	Sep 1955
	<u>Kit Covers</u>			Washington Conference of Mayors and Other Local Government Executives on National Security	Feb 1956
K-2-1	Home Preparedness Workshop Guide for Group Leaders	1957			
K-2-2	Operation You	1955			
	<u>Unnumbered Miscellaneous</u>				
	AEC - A Report by the USAEC on the Effects of High Yield Nuclear Explosions	Feb 1955			
	Annual Report - 1951	Apr 1952			
	Annual Report - 1952	Jan 1953			
	Annual Report - 1954	1955			
	Annual Report - 1955	1956			

* Latest revision