

Greater
CLEVELAND
CIVIL DEFENSE

MANUAL



**WILLIAMS BROS.
 SERVICE STATION**
 Hi-Speed Gas
 Batteries Tires Lubrication
 12715 Shaw Avenue
 Cleveland, Ohio

Compiled in cooperation with national and local Civil Defense Authorities and Sponsored as a public Service by **W H K**
IN THE INTEREST OF CIVIL DEFENSE . RADIO CLEVELAND

**NO
 CITY
 IS
 SAFE
 FROM
 ATOM
 ATTACK**



AIR RAID instructions
 Published by the FEDERAL CIVIL DEFENSE ADMINISTRATION

AIR-RAID ALERT
 (immediate attack) 3 minute wailing siren
 or short blasts

ALL-CLEAR
 (attack over) 3 one minute blasts
 2 minutes silence between

SOURCES OF MATERIAL — Damage from Atomic Explosion and Design of Protective Structures (Dept. of Defense and AEC) • A Study of Civil Defense (National Military Establishment) • Civil Defense Against Atomic Attack (Joint Committee on Atomic Energy) • The Effects of Atomic Weapons (Atomic Energy Commission) • Medical Aspects of Atomic Weapons (Dept. of Defense and AEC) • Control of Radiation Hazards in the Atomic Energy Program (AEC) • Civil Defense Status (Civilian Defense Office) • Self-Help and Mutual Aid in Civil Defense (NSRB) • Municipal Action in Civil Defense (NSRB) • State and Municipal Responsibilities in Civil Defense Planning (NSRB) • The City of Washington and an Atomic Bomb Attack (NSRB) • Address of William A. Gill, Ass't Dir. of Civilian Mobilization Office • Radiological Monitoring in Civil Defense (NSRB) • National Defense Transportation Journal • Bulletin of the Atomic Scientists • Must We Hide?, Dr. R. E. Lapp • United States Civil Defense.

(Below) K.K. Hackathorn, Vice President and General Manager of WHK, co-ordinates the over-all operation of "Radio Cleveland." Alert to the civil and culture needs of Greater Cleveland and Northeastern Ohio, Mr. Hackathorn has guided the growth and progress of WHK to make the station one of the outstanding of Ohio radio. Under his expert guidance, WHK supplies a constant stream of information to the people of Cleveland and seventeen counties in Northeastern Ohio.



5000 Euclid Avenue Cleveland 3, Ohio

WHK and its staff are most happy to cooperate with the Civilian Defense authorities who have done a magnificent job of planning for the Metropolitan Cleveland area. Countless hours of work by a loyal group of citizens have been devoted to the task of trying to set up workable plans to meet disaster, panic, fire, and other effects in the event of bombing.

Civilian Defense is not a matter of concern for a few persons. It is a matter which affects every single person in the entire county. Each citizen must assume a certain amount of responsibility, the least of which is to know how and what to do under an emergency.

Radio is a vital and necessary part of Civilian Defense planning. In an emergency, radio will not only be the source of up to the minute news, but the only source from which all of the people will get instant instructions on what to do and how to act. Every home should have more than one radio. In each home, there should be at least one battery operated portable set.

WHK and its staff are pledged to give their fullest support in the interest of Civilian Defense. Are you prepared to do likewise?

K.K. Hackathorn
Vice President



J.B. Maurer, Sales Manager, K.K. Hackathorn, Vice president and General Manager, C.M. "Pinky" Hunter, Program Director of WHK, discuss and plan WHK's service to the community in the event of attack.



C.M. "Pinky" Hunter, as Program Director of WHK, plans and supervises the voice of "Radio Cleveland." News public service and entertainment are his tools. His experience in radio and its allied fields qualify "Pinky" to keep the public informed and guided in the event of attack.



(Below) WHK, "Radio Cleveland", covering 104,600 square feet, stands ready to serve Greater Cleveland in any emergency. In peace, "Radio Cleveland" keeps WHK listeners informed and entertained eighteen hours a day. In war or disaster, WHK's studios and facilities, as an emergency center, could house thousands for the Red Cross and disaster organizations.



- Citizens' Committee for Harry Bridges
- Citizens' Committee on Academic Freedom (The)
- Civil Rights Congress
- Civil Rights Council of Northern California
- Committee for Citizenship Rights
- Committee For the First Amendment
- Committee on One Thousand Congress of American Women
- Consumers Union
- Council on African Affairs
- Citizens' Committee for the Defense of Mexican American Youth
- Citizens' Committee for the Motion Picture Strikers
- Citizens Committee to Support Labor's Right Civil Rights Federation
- Committee for a Democratic Far Eastern Policy
- Committee for Civil Rights for Communists
- Committee for Peace through World Cooperation
- Committee for the Care of Young Children in Wartime
- Communist Information Bureau (Cominform)
- Conference for Democratic Action
- Conference on Constitutional Liberties in America
- Conference on Pan American Democracy
- Consumers' National Federation
- Contemporary Theatre
- Council of United States Veterans
- Daily Worker Press Club
- Daily Worker Publishing Co.
- Daughters of the American Revolution
- Descendants of the American Revolution
- Down Town Forum
- Dramatic Workshop
- Exiled Writers Committee
- Federated Press
- Film Audiences for Democracy
- Films for Democracy
- Four Continent Book Corporation
- Free Italy Society
- Film and Photo League
- Freedom from Fear Committee
- Friends of the Campus
- Friends of the Chinese People
- Frontier Films
- Group Theatre
- Galena Defense Committee
- Garrison Films Distributors, Inc.
- Harry Bridges Defense Committee
- Harry Bridges Victory Committee
- Hawaii Civil Liberties Committee
- Hollywood Democratic Committee
- Hollywood Motion Picture Democratic Committee
- Hollywood Peace Forum
- Hollywood Theatre Alliance
- Hollywood Writers Mobilization
- Holyoke Book Shop
- Hold the Price Line Committee
- Hollywood Community Radio Group, Inc.
- Icor
- Independent Citizens Committee of the Arts, Sciences, and Professions
- Independent Progressive Party
- Independent Socialist League
- Independent Voters Committee of the Arts and Sciences
- International Book Store, San Francisco
- International Committee on African affairs
- Industrial Workers of the World
- International Congress of Women

- International Democratic Women's Federation
- International Juridical Association
- International Labor Defense
- International Publishers
- International Union of Students
- International Workers Order
- Jewish Blackbook Committee of Los Angeles
- Jewish People's Committee
- Jefferson Chorus
- Jewish Peoples Fraternal Order
- Joint Committee for Trade Unions on Social Work
- Keynote Recordings, Inc.
- Korean Culture Society
- Korean Independent News Company
- Labor Research Association
- League of American Writers
- Labor Youth League
- League of Workers Theatres
- League of Young Southerners
- League of Struggle for Negro Rights
- Lincoln Book Store, Hollywood
- Maritime Book Shop, San Francisco
- Methodist Federation for Social Service
- Metropolitan Interfaith and Interracial Coordinating Council
- Modern Culture Club
- Motion Picture Artists Committee
- Mobilization for Democracy
- Model Youth Legislature of Northern California
- Modern Book Shop, Santa Barbara
- Motion Picture Democratic Committee
- Musicians' Democratic Committee
- National Committee for People's Rights
- National Committee for the Defense of Political Prisoners
- National Council of Negro Youth
- National Emergency Conference for Democratic Rights
- National Federation for Constitutional Liberties
- National Lawyers' Guild
- National Negro Congress
- National Negro Women's Council
- National Student League
- National Youth Assembly Against Universal Military Training
- National Civil Rights Federation
- National Committee Against Censorship of the Theatre Arts
- National Committee to Abolish the Poll Tax
- National Committee to Win the Peace
- National Conference on Civil Liberties
- National Congress for Unemployment and Social Insurance
- National Council of the Arts, Sciences and Professions
- National Institute of Arts and Letters
- National Joint Action Committee for Genuine Social Insurance
- National Labor Committee Against War
- Negro Cultural Committee
- Negro Labor Victory Committee
- New Union Press
- New Theatre League
- New Union Press
- New York Conference on Civil Rights
- New York Peace Association
- Non-Partisan Labor Defense
- Non-Sectarian Committee for Political Refugees
- Northern California Civil Rights Council

- Open Road
- Pacific Northwest Labor School
- Pacific Publishing Foundation, Inc.
- Pax Productions
- People's Artists, Inc.
- People's Educational Center
- People's Chorus
- People's Committee to Investigate Un-American Activities
- People's Institute of Applied Religion
- People's Orchestra
- People's Peace
- People's Radio Foundation, Inc.
- Progressive Citizens of America
- Progressive Book Shop, Los Angeles and Sacramento
- Progressive Women's Council
- Prompt Press
- Provisional Committee for Democracy in Radio
- Public Use of Arts Committee
- Seattle Labor School
- Second Annual California Model Legislature
- School for Democracy
- Scientific and Cultural Conference for World Peace
- Slavic Council of Los Angeles
- Southern Conference for Human Welfare
- Southern Negro Youth Congress
- State-Wide Legislative Congress (California)
- Student Conference Against War
- Stage for Action
- State-Wide Civil Rights Conference (California)
- Theatre Arts Committee (TAC)
- Theodore Dreiser Work Shop
- Trade Union Advisory Committee
- Trade Union Service
- Trade Union Theatre
- Twentieth Century Book Store
- Teen-Age Art Club
- Tom Mooney Labor School
- Trade-Union Unity League
- Twentieth Century Book Shop, Oakland, Calif.
- United American Artists
- United Committee of Action
- United Veterans for Equality
- Vanguard Press
- Veterans and Wives, Inc.
- Veterans National Liaison Committee
- Veterans of Equality
- Victory Book Store
- Western Council for Progressive Labor in Agriculture
- Western Writers Congress
- Wives and Sweethearts of Servicemen
- Workers Cultural Federation
- Workers Ex-Servicemen's League
- Workers Alliance
- Workers Library Publishers
- Workers' School of Los Angeles
- World Federation of Democratic Youth
- World Congress of Intellectuals
- World Peace Congress
- World Youth Council
- Young Communist League
- Young People's Records
- Young Pioneers of America
- Young Progressive Citizens' Committee
- Young Workers League



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HAROLD H. VELDE, M.C.
Ranking Minority Member,
Un-American Activities
Committee
(Formerly with FBI)



SUBVERSIVE ORGANIZATIONS IN THE U. S.

There are easy tests to establish the real character of such organizations:

1. Does the group espouse the cause of Americanism or the cause of Soviet Russia?
2. Does the organization feature as speakers at its meetings known Communists, sympathizers, or fellow travelers?
3. Does the organization shift when the party line shifts?
4. Does the organization sponsor causes, campaigns, literature, petitions, or other activities sponsored by the party or other front organizations?
5. Is the organization used as a sounding board by or is it endorsed by Communist-controlled labor unions?
6. Does its literature follow the Communist line or is it printed by the Communist press?
7. Does the organization receive consistent favorable mention in Communist publications?
8. Does the organization present itself to be nonpartisan yet engage in political activities and consistently advocate causes favored by the Communists?
9. Does the organization denounce American and British foreign policy while always lauding Soviet policy?
10. Does the organization utilize Communist "double talk" by referring to Soviet-dominated countries as democracies, complaining that the United States is imperialistic and constantly denouncing monopoly-capital?
11. Have outstanding leaders in public life openly renounced affiliation with the organization?
12. Does the organization, if espousing liberal progressive causes, attract well-known honest patriotic liberals or does it denounce well-known liberals?
13. Does the organization have a consistent record of supporting the American viewpoint over the years?
14. Does the organization consider matters not directly related to its avowed purposes and objectives?

This is a condensed list of organizations listed as subversive by the House Un-American Activities Committee and the U. S. Attorney General's Office.

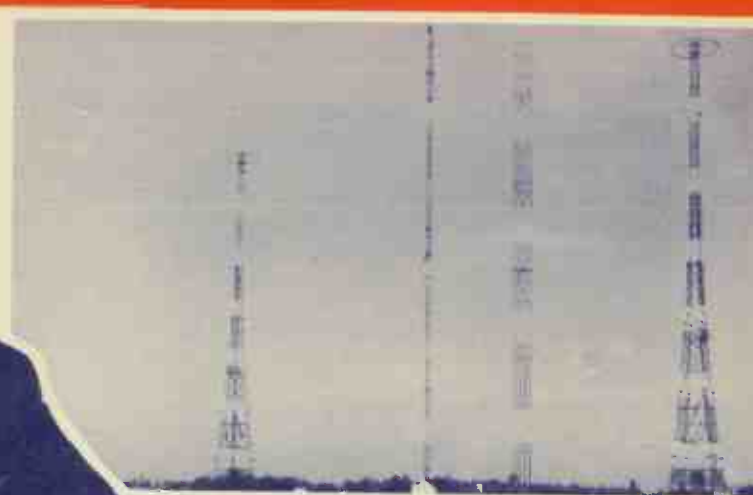
DEDICATED TO THE PUBLIC DEFENSE



Master Control, the heart of WHK, controls and keeps WHK on the air serving 1,000,000 radio families in Northeastern Ohio eighteen hours a day.



(Above) Ralph H. DeLany, Chief Engineer of WHK, calls upon twenty-five years of engineering skill to keep on the air. The technical advancement of WHK is a direct result of his untiring efforts to make WHK one of the largest and best equipped stations in the county.



WHK's transmitter radiates a 5,000-watt signal to seventeen counties in Northeastern Ohio serving more than 1,000,000 radio families. (Located at Pleasant Valley and State Roads.)



(Left) Bill Gordon, Cleveland's No. 1 disc jockey, on the air five hours a day, six days a week, reads a defense manual to be fully prepared to help his listeners and fans.



Joe Black, WHK staff announcer, and Lt. John Berichon of the Cleveland Fire Department, discuss Fire Safety in the home. "Fire Safety" has been on the air over WHK for more than fifteen years.



(Below) Studio One, with its seating capacity of 1,400, can be utilized for training programs, meetings and an emergency headquarters.



Eleanor Hanson, left, Director of Women's Activities, Tom Fletcher, standing, staff announcer of WHK, and Esko Townell, right, disc jockey-announcer of WHK, discuss civil defense plans for the station and WHK listeners.



Wayne Skakel, left, News Director of WHK, and Tom Fletcher, right, staff announcer, work together preparing a newscast from the wires of Associated Press. WHK's news room would be the focal point for all information covering the disaster area.



WHK's newscasters and Jack Pluntze, Assistant news Director of WHK, hold a briefing session for the civil defense area of Northeastern Ohio. Left to right, Esko Townell, Brian Hodgkinson, and Rob Evans. Standing Jack Pluntze.

- Abolish Peonage Committee
- Abraham Lincoln Brigade or Battalion
- Abraham Lincoln School
- Academic and Civil Rights Committee
- Academic and Civil Rights Council of California
- Action Committee to Free Spain
- Actors Laboratory
- Actors' Laboratory Theatre
- African Blood Brotherhood
- All-American Anti-Imperialist League
- All-California Conference for Defense of Civil Rights and Aid to Labor's Prisoners
- Allied Labor News Service
- Allied Voters Against Coudert
- Almanac Singers
- American Artists Congress
- American Association for Reconstruction in Yugoslavia
- American Association of Scientific Workers
- American Committee for a Korean People's Party
- American Committee for Anti-Nazi Literature
- American Committee for Democracy and Intellectual Freedom
- American Committee for European workers' Relief
- American Committee for Free Yugoslavia (The Soviet Union)
- American Committee for Friendship with the Soviet Union
- American Committee for a Free Indonesia - San Francisco
- American Committee for Protection of Foreign Born
- American Committee for Russian Famine Relief
- American Committee for Spanish Freedom
- American Committee for Struggle Against War
- American Committee for Yugoslav Relief

- American Committee of Jewish Writers, Artists, and Scientists
- American Committee of Liberals for the Freedom of Mooney and Billings
- American Committee to Aid Korean Federation of Trade-Unions
- American Committee to Aid Soviet Russia
- American Committee to Save Refugees
- American Congress for Peace and Democracy
- American Congress to Free Earl Browder
- American Council, Institute of Pacific Relations
- American Council on Soviet Relations
- American Federated Russian Famine Relief Committee
- American Federation for Political Unity
- American Friends of the Chinese People
- American Friends of the Mexican People
- American Friends of the Spanish People
- American Fund for Public Service (Garland Fund)
- American Labor Committee Against War
- American League Against War and Fascism
- American League for Peace and Democracy
- American Negro Labor Congress
- American Peace Crusade
- American Peace Mobilization
- American Round Table of India
- American Russian Institute of Southern California
- American Russian Institute for Cultural Relations with the Soviet Union
- American Russian Institute of San Francisco
- American Russian Music Corporation
- American Slav Congress
- American Society for Cultural Relations with Russia
- American Student Union

- American Writers Congress
- American Youth Congress
- American Youth for Democracy
- All Harlem Youth Conference
- American Friends of Spanish Democracy
- American Investors Union, Inc.
- American Jewish Labor Council
- American Labor Alliance
- American Labor Party
- American League of Ex-servicemen
- American People's Fund
- American People's Mobilization
- American Polish Labor Council
- American Pushkin Committee
- American Relief for Greek Democracy
- American-Russian Fraternal Society
- American Russian Institute (New York)
- American Russian Institute (Philadelphia)
- American-Soviet Science Society
- American Soviet Music Society
- American Youth for a Free World
- Appeal for Lawrence Simpson
- Artef
- Artists' Front to Win the War
- Associated Film Audiences
- Associated Magazine Contributors
- Book Find Club
- Book Union
- California Committee for Political Unity
- California Conference for Democratic Action
- California Labor School
- California Legislative Congress
- California Youth Legislature
- Carpatho-Russian Peoples Society
- Cervantes Fraternal Society
- China Aid Council
- Citizens' Committee for Better Education

THOMAS A. BURKE
MAYOR

City of Cleveland

The City of Cleveland has been listed as one of the prime targets in the nation for atomic bombing by the enemy, should World War III become a reality. Our factories and mills produce more than three billion dollars worth of essential goods each year. We can be proud of this fact. We must, however, be prepared to face the dangers that such a production record carries with it.

If the time does come when enemy bombers destroy our productive capacity, we can, with some difficulty, replace the machines and instruments of production. We cannot replace the lives that will be lost if our citizens are not prepared for atomic attack.

Therefore, I urge each and every citizen in the Greater Cleveland community to heed the warnings and instructions being issued by the Office of Civil Defense. If we are prepared, we can save many thousands of lives that would otherwise be lost. Civil Defense is a personal responsibility which must be recognized by each of us.

Sincerely yours,

Thomas A. Burke
Mayor

Mayor Thomas A. Burke, of Cleveland.



CITY OF CLEVELAND
OFFICE OF CIVIL DEFENSE

CITY HALL

CLEVELAND 14, OHIO

MAN 1-4600

December 5, 1951

Civil Defense has been made necessary because of the strained international situation and has been defined as a defense of the homefront by civilians and civil authority in time of war.

The responsibility for establishing an efficient, well-prepared Civil Defense Organization rests ultimately on each community. Since an attack by the enemy would be against cities and people, each community must be prepared to meet the problems that would result in case of atomic strikes.

We know that our potential enemy has the A-bomb and the means of delivering it to our cities. Because the bomb does not select certain groups of people Civil Defense becomes everybody's business. Cleveland being a highly industrialized community, is a logical target, but due to inaccuracy of a bomb, no community can afford a placid attitude. Civil Defense is a type of insurance. As individuals, we all need to know what to do in an emergency so as to help ourselves and our neighbors.

Your Civil Defense Organization also needs you as an active volunteer in any of the many phases of the program. You have a part to play in Civil Defense and cannot delegate this responsibility to your neighbor. Unless there is active participation by all, your Civil Defense Organization cannot operate efficiently and effectively.

John J. Pokorny
John J. Pokorny
Director of Civil Defense
City of Cleveland

John J. Pokorny, Civil Defense Director of Cleveland

IT CAN HAPPEN IN CLEVELAND

CLEVELAND CIVIL DEFENSE STAFF

(Tentative)

John J. Pokorny, Director of Civil Defense

Harry N. Hobart, Deputy Director

(S-1) PERSONNEL AND WELFARE

Edward L. Worthington, Director

Charles H. Williams, Central Records

John J. Shaffer, Welfare Activities

Donald E. Hagaman, Housing and Evacuation of Homeless

Henry L. Zucker, Welfare Processing, Registration and

Information Centers

(S-2) INFORMATION

Daniel J. Gorman, Director, Warden Services, Warning

System, Estimates for Damage Control and Casualties

Robert H. Marquardt, Public Relations and Information

Mrs. E. D. Alexander, Speakers Bureau

(S-3) OPERATIONS AND TRAINING

Alvin J. Sutton, Director

Col. Mack Garr, Plans, Operations and Training

Fred F. Leustig, Training Deputy

William W. Lytle, Operations Deputy

Nathaniel W. Baker, Communications

Thomas E. Story, Radio Communications

Ass't. Chief Frank J. Cooney, Fire and Auxiliary Operations

Bn. Chief Francis X. Andrews, C.F.D., Rescue Operations

Inspr. Patrick J. Lynch, Police and Auxiliaries

* 5 Sector Commanders (Police Officials) and one alternate for each

Captain Emil Ludwig, C.F.D., War Chemicals and Radiological Monitoring

* To be designated by the Director of Safety

(S-4) SUPPLY: (Includes engineering and utilities activities)

Emil J. Crown, Director

Edward P. Stapleton, Deputy Director

Leo Weil, Purchasing and Supply

George W. Hamlin, Metropolitan Water Supply System

E. C. Richardson, Sewer System

George E. Flower, Sewage Disposal Plants and Emergency Disposal

Vincent M. DeMolto, City Electric Power Supply

Kimball L. Wheeler, C.E.I. Co., Electric Power Supply

H. C. Southwick, East Ohio Gas Co., Natural Gas Supply

Fred T. Vitovec and

Harry Sizkind, Street Repair and Clearance of Obstacles and Rubble

John C. Wenrick, Engineering Activities, Demolitions, Repair of Bridges, etc.

Stanley J. Ryan, Transportation, all types

(S-5) HEALTH:

Dr. Harold J. Knapp, Director

Mrs. Kay Gasker, Associate Director and Liaison Agent with Academy of Medicine

Dr. John G. Smith, Medical Care

Dr. H. G. Lockwood, Public Health

George W. Hamlin, Sanitation and Food Inspection

Dr. George L. Sackett, Professional Training

Dr. Samuel R. Gerber, Mortuary Service and Evacuation of Dead

Sue Z. McCracken, Nursing Service

Mildred McIntyre, Nursing Service, Deputy

E. B. Buchanan, Sanitation and Food Inspection, Deputy

TS OF AN ATOMIC BLAST

RADIATION INJURIES

Because of the concentration of ionizing radiation nearly everyone not protected by earth, steel, or thick concrete within a radius of approximately 3000 ft. would probably die. The most serious cases would succumb within a few hours to 4 or 5 days after exposure. A second group would develop susceptibility to infection due to destruction of their white blood cells and would die from 4 days to 6 weeks after exposure. Another group would incur multiple hemorrhages and die within 2 to 3 weeks from this cause.

THEIR TREATMENT

Many people believe that very little can be done in treatment of radiation casualties. This is true of a lethal

GENERAL

There is little about the effects of either old or new weapons which is new to the health professions. The atomic bomb produces burns, lacerations, amputations, crushing injuries, and blast injuries which all surgeons are accustomed to treating. Radiation sickness is a new type of wartime injury, but it is not a new disease and its symptoms are recognized by physicians, particularly radiologists.

When the dose is 400 r or less, many lives can be saved with proper treatment. Immediate hospitalization, so as to insure complete rest, and avoidance of chills and fatigue, is the first step. Whole blood transfusions should be given as required, until the bone marrow has had time to regenerate blood cells. Adequate nourishment should be provided by intravenous feeding to supply necessary sugars, proteins, vitamins, etc. Infection may be controlled by the use of penicillin and other antibiotics.

Findings in Japan show that people exposed to heavy radiation suffer various injuries, sicknesses, and malfunctions which together are called the acute radiation syndrome. Physicians find that the severity of the symptoms is related importantly to two factors: The amount of radiation absorbed in a single dose, and the proportion of the body exposed.

No unusual ill effects directly attributable to ionizing radiation have occurred among Japanese survivors. Whether or not such after-effects will occur among these survivors will have to be answered in the future. After-effects from radiation exposure that cannot be fully assessed for many years are effects on heredity and effects on fertility. From investigations, it is found that the likelihood of parents having deformed children after suffering sublethal amounts of ionizing radiation is very slight.

With adequate warning which is heeded and adequate shelters which are occupied, the casualties can be greatly reduced. Furthermore, doctors with ample medical supplies, hospital facilities, and blood banks can save many of those injured by blast or burns.

GAMMA RAYS

Gamma rays are very similar to powerful X-rays and constitute the greatest radiological danger in an atomic blast. They penetrate deeply into the body and ionize the carbon, nitrogen, hydrogen, and oxygen atoms, disrupting the complex body combinations of these elements, changing the proteins, enzymes and other substances that make up our cells and bodies. As a result, the cells are injured or killed; if enough cells are damaged or killed, the person becomes seriously ill or dies.

dose; but many borderline cases can be saved by:

a. Good medical care.

b. Whole blood transfusions. It has been estimated that, for a catastrophe such as at Hiroshima, approximately 250,000 pints of blood would be needed, 80,000 per week for the first 3 weeks.

c. Control of infection by antibiotics such as penicillin and aureomycin.

d. Intravenous feeding to supply necessary sugars, proteins and vitamins.

e. Control of the bleeding tendency by use of drugs.

Whole blood would be required in great quantities, primarily to treat the casualties suffering from mechanical injuries and burns, secondarily to treat victims of ionizing radiation.

One may receive radiation producing far more serious tissue damage than a severe burn without any sensation and no damage will be apparent for several days.

In the case of such a high air blast as in Japan, some 15 to 20 per cent of the deaths probably will be caused solely by nuclear radiation. The remaining 80 to 85 per cent will be caused primarily by injuries suffered in the collapse of buildings and by burns, although many of these may also suffer severe radiation exposure.

A dose of 400 r (roentgens) of radiation received over the whole body in the course of a few minutes represents the median lethal dose which would be fatal to about 50 per cent of human beings. At the minimum distance of 2100 feet from the explosion, protection from a lethal dose would require something like 20 inches of concrete, 3 inches of lead, or 40 inches of packed earth.

CONTAMINATION

The chief external radiation hazard in a contaminated area will come from gamma rays thrown off by fission products or by materials made radioactive by neutrons or gamma rays during the explosion. Filter masks, clothing tight at the wrists, ankles, and neck, and tight-wristed gloves will afford protection against Alpha and Beta particle contamination. Material heavily contaminated with Beta-emitting material should not, however, be handled, even with gloved hands, since it can cause severe burns. Tongs or equivalent instruments should be used. Clothing should be discarded at the edge of the contaminated area to avoid spreading radioactive contamination. Thorough soap-and-water bathing would be a valuable precaution.

Gamma radiation from contamination will not approach the power of direct bomb radiation, but it still can be severe. The best protection against contamination that gives off gamma radiation is to use instruments to detect its presence and to avoid any areas of dangerous concentration.

At a bomb burst, contaminated particles of the size which will most readily pass from the small airpockets of the lung into the blood stream ascend rapidly into the atmosphere. The chances of inhaling a dangerous amount of these small particles is small unless explosion occurs during rain or heavy overcast. A combat-type gas mask will filter out 99.999 per cent of all such particles.

Any wound suffered in a contaminated area should be cared for in the same manner as any similar injury in an uncontaminated area. Clean such a wound with soap and water or potassium permanganate, cut out the damaged tissue, and cover the wound. Amputation is not indicated.

PERSONAL INJURY EFFECTS

INJURIES FROM ATOMIC EXPLOSION

- I. Those caused by the blast pressure or shock wave directly.
- II. Those caused when buildings are wrecked.
- III. Those caused from radiant heat.
- IV. Those caused by burns, either in the wreckage or otherwise.
- V. Those caused by nuclear radiation.
- VI. Those caused through residual contamination.

BLAST INJURIES

Direct blast injury may occur whenever the greatly increased air pressure comes into contact with body surfaces, causing multiple hemorrhages, particularly of the intestinal tract, the stomach, the lungs, the ears, and the sinuses about the nose. Direct blast is not a significant primary cause of death. Most blast injuries are the result of missiles, such as broken glass, falling bricks, etc.

The shock wave from the blast sweeps outward rapidly from ground zero and, in the case of Japan, took up to 10 seconds to travel 2 miles.

In the water, the dangerous level for pressure is about 500 pounds per square inch. In an underwater atomic explosion, any person immersed in the water probably would be killed or seriously injured up to 2,000 yards from the zero point.

Since practically all brick and light masonry buildings with weight-bearing walls in the blast area will be wrecked, wooden buildings flattened, and the doors and other partitions of blast-resistant steel-reinforced concrete buildings blown out, people in or near these buildings will be killed or injured by collapse of structures, and by missile effects of debris.

FLASH BURNS

The flash burns caused by an atomic explosion may be first degree, merely reddening the skin; second degree, causing blisters; or third degree, damaging all layers of the skin.

Severe burns are caused both by the radiant heat from the explosion of the atomic bomb (flash burns) and from the fires that break out in the wreckage (flame burns). The effects of visible light probably are not significant. Even those who look directly at the burst apparently suffer only temporary dazzling and loss of vision.

Atomic bomb flash burns are distinctly different from those caused by other types of explosions, since they are due to radiant heat rather than to hot gases, as in the case of shell bursts or gasoline explosions. Shadow effects are prominent. An ear, for example, might be badly burned, yet the skin behind the ear be unharmed.

As compared with flame burns, flash burns show a much smaller depth of penetration of the skin. This is due to the fact that the thermal radiation flash lasts only approximately 3 seconds. Within the depths to which the thermal radiations penetrate, the tissues appear to be completely destroyed; in a radius of 3600 feet from ground zero blackening

GENERAL

There are no particular problems involved in the treatment of individual injuries received as a result of an atomic attack. Standard treatment procedures can be used in treating mechanical injuries (cuts, lacerations, broken bones, concussions, etc.), burns, shock and radiation effects. Problems of a more serious nature are involved in the necessity of treating thousands of individual cases almost at once, in the immediate need for mountains of medical supplies and prompt evacuation of seriously injured to hospitals outside of the disaster area. There is nothing mysterious about radiation, as man is subject to a constant bombardment of cosmic rays. He accumulates minute amounts of radium in his body through life, and X-rays are used extensively in the treatment of certain illnesses. The only difference in atomic radiation is in the types of rays and the intensity.

FLAME BURNS

A conflagration may be expected to follow any atomic bomb blast. Fire damage light in underwater bursts.

Burns suffered from flames, in such cases, differ in no way from those encountered in any ordinary intense fires unless radiation injury has also been suffered. In Japan, there were many cases where excessive scar tissue (keloids) formed, and many of the survivors have contraction deformities not specifically related to exposure to the atomic bomb, but rather to slow healing, improper care, and infection. Burns suffered in non-atomic bomb raids resulted in comparable amounts of scar tissue, a tendency in Japanese as a race.

It would be unrealistic to prepare for fewer than 40,000 to 50,000 severely burned persons from a single atomic explosion. Fortunately, severe symptoms from radiation in those not killed outright do not ordinarily come on until several days after the acute exposure, so that those suffering from burns and mechanical injuries will actually constitute the chief immediate medical problem and make their heaviest demands on emergency facilities at a time when those suffering solely from acute radiation will require very little attention.

indicates that actual charring has occurred.

Direct injury from radiant heat occurs at the explosion of the bomb; Japanese people in the open suffered third-degree burns up to 1,500 yards and second-degree burns up to 2,500 yards. The effect was instantaneous.

Even loose clothing afforded some protection against atomic flame burns, and color also had a protective effect. White clothing tended to reflect the radiant heat, darker clothing to absorb heat. Burns sometimes were cross-hatched where light clothing was marked with dark lines. Tight clothing was less protection, and burns were inflicted at elbows and where straps crossed the shoulders, for example, while other places where clothing was loose were protected or less severely burned.

As far as burning caused by thermal radiation is concerned, the essential points are protection from direct exposure for human beings and the avoidance of easily combustible materials, especially near windows.



EDITOR'S NOTE: As this manual goes to press, a drastic change in the civil defense organization for Greater Cleveland is taking place. When material for the manual was gathered, the more than 60 separate communities within the confines of Cuyahoga County were engaged in building individual Civil Defense corps. There was no definite policy for coordinated action among the communities. Since then, however, the need for unified activity has moved the majority of incorporated cities and villages to band together in the Cuyahoga County Council of Civil Defense.

Under terms of the agreement between the County Commissioners and members of the council, the following action has been taken:

- (a) The county has appointed a Civil Defense Director for all unincorporated territory in the county. He is John J. Pokorny, Director of the Cleveland Office of Civil Defense. Mr. Pokorny also has been designated co-ordinator of the county civil defense organization.
- (b) A County Council of Civil Defense has been

established. It is composed of the Cuyahoga County Board of County Commissioners, the Mayor of the City of Cleveland, and the mayor or chief executive of each of the participating municipalities.

(c) A Civil Defense Advisory Committee has been formed to assist and advise the Civil Defense Coordinator. It consists of the Mayor of Cleveland, the Presidents of the County Board of Commissioners and seven members to be chosen by the County Council.

(d) The Advisory Committee has prepared a budget known as "Cuyahoga County Civil Defense Fund." Upon termination of the county organization, the remaining money in the fund will be distributed to participating communities in the same proportion as their contributions.

(e) Each community's share of the fund is figured at 50% on the basis of population, and 50% on the basis of tax duplicate.

(f) The agreement automatically binds the communities to a mutual aid pact.

AS WE GO TO PRESS

VOLUNTEERS FOR CIVIL DEFENSE

In March, 1951, a mass registration for Civil Defense volunteers was held in Cleveland. More than 11,000 volunteers signed up for the 16 job categories that will be needed if the city is bombed.

The Cuyahoga County Civil Defense Organization, now defunct, began the tremendous job of classifying registrants and constructing a schedule for training classes. Unfortunately, before the task could be completed the county organization was disbanded. When the Cleveland Office of Civil Defense was organized the following June, it took up where the county group had left off. The Cleveland organization is now in the process of assigning volunteers to classes and hopes, within the near future, to be ready with a trained corps of Civil Defense Workers.

Arrangements have been made for citizens who wish to volunteer for Civil Defense Work to do so at their local police and fire stations.



At the Cleveland Office of Civil Defense (L to R), Col. Garr, Deputy Director; John J. Pokorny, Director, and Bob Marquardt, Asst. Public Information Director, go over the latest literature from the Federal Civil Defense Administration.



The Public Information Staff of Cleveland Civil Defense at work on an important publicity release. Shown (L to R) are Mary Malloch, secretary; Mrs. Edw. J. Alexander, head of the Speaker's Bureau; Bob Marquardt, asst. public information director, and Dan Gorman, public information director.

CIVIL DEFENSE REGISTRATION CUYAHOGA COUNTY		DO NOT WRITE HERE		CODE	
PLEASE PRINT: LAST NAME	FIRST NAME	INITIAL	HOME PHONE	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	CITIZEN OF U. S. <input type="checkbox"/> YES <input type="checkbox"/> NO
DATE FIRST PAPER					
PRESENT ADDRESS	PREVIOUS ADDRESS				
NO. STREET CITY	NO. STREET CITY				
NO. PREVIOUS ADDRESS	DATE OF BIRTH	<input type="checkbox"/> MARRIED <input type="checkbox"/> SINGLE	NO. CHILDREN	HAVE YOU REGISTERED BEFORE FOR PRESENT CIVIL DEFENSE ACTIVITY? <input type="checkbox"/> YES <input type="checkbox"/> NO	
NO. EMPLOYED BY	ADDRESS		SUBSCRIBER PHONE	WHERE?	
PRESENT OCCUPATION	PREVIOUS OCCUPATION	HOURS EMPLOYED FROM	AM TO	AM TO	DO YOU WORK VARIOUS SHIFTS? <input type="checkbox"/> YES <input type="checkbox"/> NO
EDUCATION NO. GRADES COMPLETED	DEGREE	MAJOR			SPECIAL SKILLS AND HOBBIES
SR. SCH'L	HI. SCH'L	COLLEGE			
HAVE YOU HAD PREVIOUS CIVIL DEFENSE EXPERIENCE?	WHERE?	KIND OF EXPERIENCE			I CAN SERVE—DAYS AND HOURS
					TOTAL HOURS PER WEEK
MILITARY SERVICE	BRANCH	GRADE AT DISCHARGE			PRINCIPAL DUTY ASSIGNMENT IN SERVICE
FROM	TO				
SERVICE CHOICE		PLEASE DO NOT WRITE IN THIS SPACE			
<input type="checkbox"/> AUXILIARY POLICEMAN	<input type="checkbox"/> MEDICAL CORPS	ASSIGNED		SECURITY CHECK DATE FOR ENGAGE	
<input type="checkbox"/> AUXILIARY FIREMAN	<input type="checkbox"/> NURSES AID	TRAINING RECORD		RECORD EXAMINED BY	
<input type="checkbox"/> AIR RAID WARDEN	<input type="checkbox"/> DECONTAMINATION SQUAD	A	B	C	D
<input type="checkbox"/> FIREWATCHER	<input type="checkbox"/> DEMOLITION & CLEARANCE CREW	E	F	G	H
<input type="checkbox"/> CLERICAL WORK	<input type="checkbox"/> RESCUE SQUAD	I	J	K	L
<input type="checkbox"/> MESSENGER	<input type="checkbox"/> ROAD REPAIR CREW	M	N	O	P
<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> EMERGENCY FOOD & HOUSING	Q	R	S	T
<input type="checkbox"/> DRIVERS CORPS	<input type="checkbox"/> WELFARE ACTIVITIES	U	V	W	X
<input type="checkbox"/> OTHER (WRITE IN)		Y	Z	AA	AB
SHOW YOUR PREFERENCE BY WRITING 1, 2 OR 3 IN BLOCK OPPOSITE THREE SERVICES YOU PREFER.		SIGNATURE		DATE	
		PLEASE READ OATH ON REVERSE SIDE. SIGNATURE BEFORE NOTARY WILL BE REQUIRED BEFORE TRAINING STARTS.			

Above is reproduced the application blank that every volunteer for civil defense work is required to fill out. In addition it is necessary to sign an oath of loyalty.

Wave-riding
Volunteer's Signature

OFFICE OF CIVIL DEFENSE
CLEVELAND, OHIO

THIS IS TO CERTIFY THAT

WARREN FRIEDLINGER

WHO HAS SIGNED THIS CARD HAS VOLUNTEERED FOR CIVIL DEFENSE FOR THE CITY OF CLEVELAND.

Each volunteer who is accepted for work in the Cleveland Civil Defense organization will be furnished an official membership card as shown at left. No person purporting to be connected with civil defense should be admitted to your home or place of business without this card.

PREPARING FOR A RED ALERT AIR RAID SHELTERS

AIR RAID WARNING SYSTEM

As this publication goes to press, Cleveland is moving toward a decision on a system of sirens and controls for alerting the population in the event of an attack by enemy aircraft.

Several manufacturers of warning equipment have made surveys of the city and have recommended various warning systems. Cost estimates based on these surveys show that a complete alarm system will cost about \$200,000. Half of this amount is for sirens, the other half for installation. It is expected that federal and state funds will pay the bulk of the cost.

Late in August, 1951, the Cleveland Office of Civil Defense undertook a test of existing noise making facilities in the Greater Cleveland area to learn whether or not they were adequate for use as a warning system. Every factory whistle, boat whistle, industrial siren, police and fire siren in the city was blown at a pre-arranged time. The greater majority of the people in the city either heard nothing or only a faint sound. The test clearly indicated that a new air raid system is needed if the people of Cleveland are to be given adequate warning of an impending attack.

Since that test, Civil Defense officials have been seeking the best possible warning system at the lowest possible cost. It is expected that final plans for such a system will be completed in the near future.



Cuyahoga County Commissioners, (L to R) J. Gorman, H.W. Speith, and J.F. Curry, make an inspection tour of one of the air raid shelters in the Cuyahoga County Court House.

There are no mass air raid shelters in view for Cleveland. Civil Defense officials feel that construction of huge underground shelters would be a useless expenditure of public funds. The short length of time between an air raid alert and the arrival of enemy bombers would not permit evacuation to public shelters.

Instead, an energetic campaign is being conducted to persuade every household in the city to prepare its own shelter. Residents are being asked to pick the safest spot in the house and stock it with emergency medical and food supplies. The emphasis is being directed toward individual preparation for an attack.

At the same time, public and commercial buildings are being inspected to determine their usefulness as air raid shelters. Once the safest place in each building is determined, building owners are asked to post signs indicating shelter areas and signs giving clear directions on how to reach these areas.

Commercial buildings and factories are being organized to provide occupants with a plan for protecting themselves in the event of an attack. Many business buildings and department stores as well as factories already have plans for action during an attack. In most cases responsible people have been appointed as wardens and others have been given first aid training. This, together with stockpiling of emergency supplies, give adequate protection to most of the workers in the city if they are at their jobs when an attack comes.

WHAT TO DO IF YOU HAVE ADVANCE WARNING



AIR RAID instructions

Published by the FEDERAL CIVIL DEFENSE ADMINISTRATION

AIR-RAID ALERT
(immediate attack)

3 minute wailing siren
or short blasts

ALL-CLEAR
(attack over)

3 one minute blasts
2 minutes silence between

1. Move at once to designated shelters or disperse as directed. In the event special shelters have not been prepared, go to the nearest subway or deep basement.

2. If no adequate shelter is nearby, you can still protect yourself against flying debris and some of the heat effect. Get away from frame buildings and trees. Lie down, preferably in a ditch, behind a wall, in a ravine. Protect your eyes from the flash by covering your eyes with your arm. If not, you may be temporarily blinded. Remain under shelter for a few minutes after the blast, to be sure all flying debris has landed.

3. If able, try and help any injured people near you. Administer first aid when possible. Put out any small fires in your vicinity. Each home should have a fire extinguisher available, as chances are that city water pressure will be gone.

4. When you have done what you can in your immediate vicinity, report to the place designated by civil de-

IN THE OFFICE



3A

fense authorities, as you will be needed to help in rescue work, evacuation of wounded, general fire fighting, and other emergency jobs. If no place to report has been designated, see if you can aid any of the emergency crews who will be in operation.

5. After the initial rescue work is done, check with a radiological defense man as to the safety of the area.

6. Take a shower and scrub thoroughly three or four times to remove any radioactive materials that may have gotten on you, using sodium bisulphite or potassium permanganate if badly contaminated, and if advised by competent authorities to do so.

7. Change your clothes, discarding the clothes you wore in the affected areas, especially shoes. **Bury them! Do not burn them!**

8. When feasible, check with a radiological defense adviser and a doctor to make sure you are well and safe.

9. Do not spread rumors. Enough confusion will exist without adding to it.

DON'T DO THIS!



3

CLEVELAND PUBLIC BUILDINGS WITH APPROVED AIR RAID SHELTER AREAS

The following buildings have been inspected and areas to be used for air raid shelters have been recommended. Some shelters are al-

ready designated with official signs and others will be so marked as rapidly as possible.

BONWIT TELLER, 1305 Euclid
B.F. KEITH BLDG., East 17 & Euclid
BOND CLOTHES, East Ninth & Euclid
B.L.E., Ontario & St. Clair Ave.
BUCKLEY BLDG., 1501 Euclid
CATHOLIC CHANCERY BLDG., Superior Ave. East
CLEVELAND STATE HOSPITAL, Turney Rd. & Worner Rd.
COUNTY NURSING HOME, 2905 Franklin Ave.
C A C BLDG., Euclid
CENTRAL NATIONAL BANK, 509 Euclid
CROWN BLDG., 310 Lakeside Ave.
CROWN BLDG. ANNEX, 1150 W. Third
CUYAHOGA BLDG., 216 E. Superior Ave.
CLEVELAND BOARD OF EDUCATION, 1380 East Sixth St.
CLEVELAND PUBLIC LIBRARY, 325 E. Superior Ave.
CLEVELAND CENTRAL POLICE STATION, 2001 Poynce Ave.
CRIMINAL COURTS BLDG., 1560 E. 21 St.
CUYAHOGA COUNTY JAIL, 1560 E. 21 St.
CUYAHOGA COUNTY COURT HOUSE, Ontario & Lakeside Ave.
COUNTY WELFARE DEPT., 919 Huron Rd.
COMMUNITY SERVICE BLDG., 1001 Huron Rd.
CLEVELAND STADIUM
CITY HALL, East Sixth & Lakeside
COLONIAL HOTEL, Prospect Ave.
COLONIAL ARCADE & BLDG., East Sixth & Euclid
CITIZENS BLDG., 850 Euclid
CENTRAL NATIONAL BANK, 610 Midland Bldg.
COWELL & HUBBARD, 1305 Euclid
DOAN BLDG., 1780 E. Ninth St.
ELLINGTON APT. BLDG., 1712 E. Ninth St.
EUCILD SQUARE BLDG., 1240 Huron Rd.
ENGEL FETZER, 1226 Huron Rd.
FEDERAL POST OFFICE BLDG., Public Square & Superior
FILM BLDG., 2108 Poynce Ave.
FAIRVIEW PARK HOSPITAL, 3305 Franklin Blvd.
GREAT LAKES BLDG., 610 Midland Bldg.
HANNA BLDG., Euclid & East 14
HANNA BLDG. ANNEX, Prospect & E. 14
HALLE BLDG., 1228 Euclid Ave.

HALLE BLDG. ANNEX, 1230 Huron Rd. & Prospect
HIGBEE CO. BLDG., Public Square
HURON 6th BLDG., 622 Huron Rd.
ILLUMINATING CO., 75 Public Square
LEADER BLDG., Superior Ave & E. 6th Street
LOWE BLDG., 1515 Euclid
LOWES STATE THEATER, 1515 Euclid
MARSHALL BLDG., Superior Ave. & Public Square
MORRIS BLDG., 819 Vincent Ave.
MARINE HOSPITAL, Fairhill Rd. & East 124
NATIONAL CITY BANK, 1965 E. 6th
NAVY BLDG., 1901 E. 13 Street
NOTTINGHAM BLDG., 423 Euclid
O.P.S. BLDG., 1101-1109 Euclid
OTIS ELEVATOR CO., 1375 E. 6th Street
PICKWICK RESTAURANT, 230 E. Superior Ave.
PEOPLES SAVING & LOAN CO., 4401 Clork Ave.
PUBLIC HALL, E. 6th & St. Clair Ave.
RICHMOND BROS. CLOTHES, 736 Euclid
ROCKEFELLER BLDG., 614 Superior Ave.
SOCIETY FOR SAVINGS BLDG., 145 Public Sq.
STERLING LINDNER DAVIS, Euclid & East 13
STOUFFER RESTAURANT, Euclid
SWETLAND BLDG., 1010 Euclid
THE HIPPODROME BLDG., 720 Euclid
TERMINAL TOWER BLDG., Public Sq.
TRUMAN BLDG., 1030 Euclid
THE MAY CO., 2 Bldg., Euclid Ave. & Ontario
THE BAILEY CO., Ontario & Prospect
UNION COMMERCE BLDG., E. 9th & Euclid
WM. TAYLOR & SON, 630 Euclid
WJW BLDG., 1375 Euclid
W.T. GRANT & CO., 240 Euclid
WILLIAMSON BLDG., Euclid
WELLMAN BRONZE, 2525 E. 93 St.
WOOLWORTH BLDG., 1317-1325 Euclid
1017 EUCLID BLDG.
1440 CHESTER BLDG.
1900 EUCLID BLDG.

WHAT TO DO IF BOMB FALLS WITHOUT WARNING

Your first indication of an atomic bomb burst will be an awesome glare in the sky hundreds of times brighter than the sun. **DON'T LOOK AT THIS GLARE.** YOU WILL EXPOSE YOUR FACE AND BODY TO FLASH BURNS AND DEADLY RADIATION.



IN THE OPEN

1. IF YOU ARE IN THE OPEN, DROP TO THE GROUND INSTANTLY, BACK TO THE LIGHT, AND TRY TO SHADE YOUR BARE FACE, NECK, ARMS AND HANDS. THIS WILL NOT PROTECT YOU FROM GAMMA RAYS BUT WILL PROTECT YOU FROM BURNS which can hurt you far beyond the limits of radiation effects. (See photo No. 1)

KEEP YOURSELF DOWN FOR AT LEAST 10 SECONDS. THE IMMEDIATE DANGER IS THEN OVER AND YOU CAN GET UP AND LOOK AROUND AND DECIDE WHAT TO DO NEXT — IF YOU ARE ABLE.

2. IF YOU ARE IN THE STREET, DUCK BEHIND A TREE OR INTO A CORNER OR A DOORWAY IF IT

IS ONE LEAP OR SO AWAY. BEND OVER, BACK TO THE LIGHT, SO AS NOT TO EXPOSE UNPROTECTED PARTS OF THE BODY — BUT IF SHELTER IS SEVERAL STEPS AWAY, DO NOT TRY TO MAKE IT. FALL TO THE GROUND AS IF YOU WERE IN THE OPEN AND THEN WAIT 10 SECONDS.

THEN PRESS YOURSELF TIGHTLY AGAINST A BUILDING IF YOU CAN, TO AVOID SHATTERED GLASS OR FALLING BRICKS. (See photo No. 2)

3. IF YOU'RE AT HOME OR IN THE OFFICE, DROP TO THE FLOOR, BACK TO A WINDOW, OR CRAWL BEHIND A DESK OR TABLE. THERE IS A LITTLE TIME LAG BETWEEN THE GLARE AND THE BLAST WAVE, SO FOR A FULL MINUTE STAY AWAY FROM THE WINDOWS AND THE DANGER OF FLYING GLASS. SAFEST PLACE INSIDE A BUILDING IS AGAINST AN INTERIOR PARTITION WHICH MAY BE STRONG ENOUGH TO RESIST COLLAPSE.

(See photos No. 3 and 3A)



AGAINST WALL

TRAFFIC CONTROL IN AN EMERGENCY

Recognizing the fact that should Cleveland be subjected to atomic attack outside help from other cities in Ohio would be of prime importance, Civil Defense planners have designated 10 principal routes over which help can enter the city and evacuation of casualties and homeless can be effected.

These routes were chosen partly because they would not be likely to be choked with debris from fallen buildings. In the event of an attack, they would be under complete control of Civil Defense authorities who would see to it they were cleared first and kept clear for essential traffic.

Plans for controlling other roads in and out of the city call for patrolling by auxiliary police. These volunteers receive training in traffic control as part of their regular instruction. It is felt that a well trained traffic control force will mean the difference between mass panic and an orderly evacuation of those parts of the city which are rendered uninhabitable.

Cleveland's "Web Defense" (see Map right) consists of main arterial highways radiating in all directions from the industrial center. The web has been divided into 5 sectors (outlined on map in red), with each sector in charge of a sector commander. Sector control headquarters for each sector is indicated on the map as a red triangle. Main control headquarters for the entire web is indicated as a red square. Civil Defense forces will be spread out in depth along the perimeters of the three circles radiating out from the disaster zone.

MODEL C. D. COMMUNITY

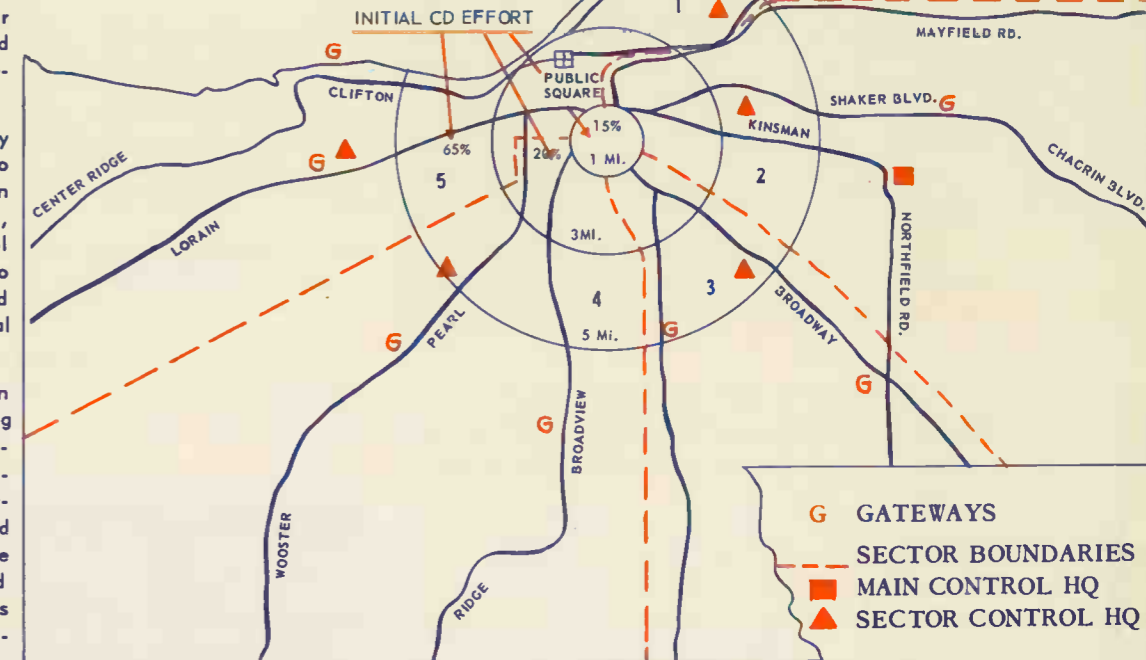
Lakeview Terrace, in the heart of the target area on West 25 Street north of the Main Avenue Bridge, is organizing for defense. At the request of residents, the Cleveland CD Office is setting the community up as a model village to show what can be done to prepare for attack. The emphasis is on individual survival, using the theory that if a person is alive ten minutes after the blast, even in the target area, his chances for survival are excellent IF he knows what to do. Classes in First Aid, Auxiliary Police and Fire Training are under way. Lessons learned at Lakeview Terrace will be applied to the rest of the city.

View showing a small section of Lakeview Terrace, which is being set up as a model CD community.



WEB DEFENSE

Cleveland's "Web Defense" plan, which will be activated immediately should disaster strike, is here outlined.



CLEVELAND C. D. OFFICE OF INFORMATION

The Office of Information occupies a unique position in Cleveland's Civil Defense organization. In addition to keeping the people of the city informed of developments in defense planning, this office is also charged with the responsibility for developing an air raid alarm system for the city and for organizing an effective warden service. It also collects and classifies civil defense information, including the mapping of the overall defense plan, and works with industry for the development of an adequate plant protection program.

A staff of four full-time workers carry out these duties. This staff, as part of its regular duties, operates a speakers bureau, conducts a weekly radio program and publishes an information bulletin each week.

Recently, to enlarge the scope of public relations activities, a group known as the Civil Defense Public Relations Committee was formed. Members of the committee are experts in every medium for the dissemination of information. Civil Defense officials in the city expect that the efforts of this committee will make it possible to get the Civil Defense message into every home in the community and create an active interest in Civil Defense among our citizens.

(L to R). CD Director John J. Pokorny; Sam Sague, WSRS President; Col. Frank Manak, Dir. of 5th Area Command for CD, and Dan Gorman, Dir. of Information for Cleveland CD, go over plans for a series of civil defense broadcasts.





DEFENSE OF THE HO

AUXILIARY POLICE

Auxiliary police for civil defense are being trained by the Cleveland Police Department. Regular classes are held each week for their instruction. The course covers a period of twelve weeks.

Auxiliary police trainees are given training in first aid, police science, traffic control, sabotage control and general police law. Particular emphasis is directed toward traffic control. If the city were to be subjected to atomic bombardment, an effective traffic control plan would mean the difference between panic and orderly flow of supplies and people. Only with complete control of the routes in and out of the city can help be brought in and evacuation of casualties be carried out effectively.

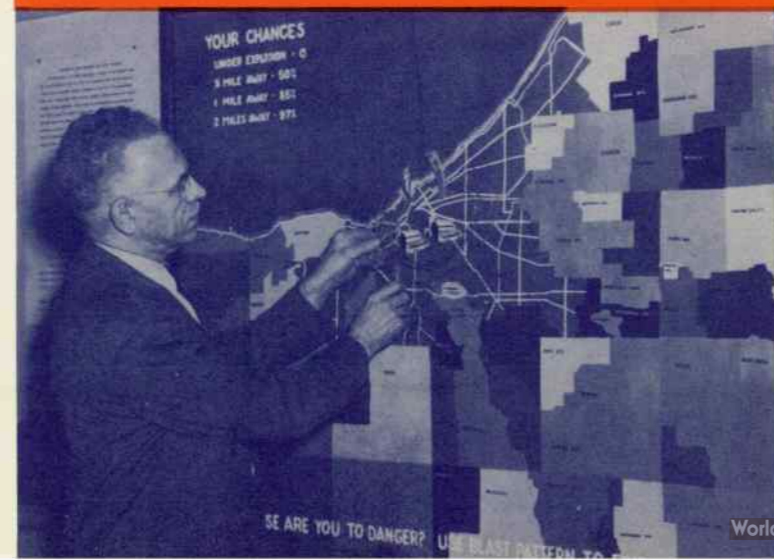
Upon completion of their training, Auxiliary Policemen are assigned to duties with the regular police force. Some are assigned to patrol cars, some to beat patrolmen and others to the traffic squad.

Volunteers may register for this duty at any Police or Fire Station in the city, or by calling the Civil Defense Office (TOwer 1-4600), at City Hall.

* * * * *



A series of graphic panel exhibits entitled "Seconds to Survival," originally planned by the Cleveland Museum of Natural History, have recently been on display at the Public Library. The exhibit above compares Hiroshima and Cleveland in the amount of havoc that could be wrought with a bomb blast. The map of Cuyahoga County below features a moveable plastic overlay that can be used to show the extent of blast damage at any point where it may be placed.



if bombs should fall...how to care for the injured

EXAMINE PATIENT CAREFULLY

- Control excessive bleeding if present. (See below)
- Provide artificial respiration if breathing is stopped.
- If you suspect extensive injury—even though not sure—treat patient as if injury is present.
- Use lipstick on forehead to mark tourniquet cases with a "T" and patients who have been bleeding heavily with an "H." (for hemorrhage).
- Splint all fracture cases before moving. A magazine or similar item fastened around the injured area will do.

CONTROL OF BLEEDING

- All bleeding must be stopped. Even slight loss of blood over an extended period of time may be fatal.
- Direct pressure applied over or on larger wounds with sterile gauze or reasonably clean cloth will control most bleeding. (Should always be tried first.)
- Along with direct pressure on the wound, pressing with the fingers on pressure points between the wound and the heart will often stop arterial bleeding.
- A tourniquet on the limbs should be used only in most extreme cases of bleeding. If used, tourniquet must be loosened every 15 minutes for a period of 7 or 8 seconds.

SHOCK

Shock is brought on by a sudden or severe physical injury or emotional disturbance. In shock, the balance between the nervous system and the blood vessels is upset. The result is faintness, nausea, and a pale and clammy skin. If not treated the patient may become unconscious, and eventually lapse into a coma.

Treatment

- Keep patient lying down.
- Don't give fluids unless delayed in getting to doctor, then give water. (Some medical authorities suggest giving patient salt and soda solution—1 tsp. salt, ½ tsp. soda to qt. of water.)
- Never give liquid to an unconscious person.
- Cover patient both under and around his body.
- Do not permit patient to become abnormally hot.
- Reassure patient, and avoid letting him see other patients, or his own injury.

BURNS

When skin isn't broken, apply petroleum jelly or burn ointment to area and bandage snugly with sterile gauze or gauze soaked in a solution of baking soda (3 tbs. to qt. of water). If burn is deep or covers much of the body, apply sterile gauze or clean cloth with baking soda solution, or dry dressing. (Never use grease or ointment) Call doctor and keep patient warm (not hot) and in prone position with head covered; avoid exposure to cold.

- If burn case must be transported a short distance, cover burns with clean cloth.
- Don't dress extensive facial burns. (Doing so may hinder early plastic surgery.)

WOUNDS **Minor Cuts:** apply pressure with sterile gauze until bleeding stops. Use antiseptic recommended by your doctor. Bandage with sterile gauze. **Minor Scrapes:** if dirty, wash with mild soap and water, blot dry and cover scraped area with recommended antiseptic. Allow to dry—no bandage necessary. If scrape is deep and dirty, see your doctor. **Puncture Wounds:** if puncture wound extends deeper than skin surface, try to induce bleeding. Cover with sterile gauze and consult doctor immediately. Serious infection can arise unless properly treated.

SPRAINS Elevate injured part and apply ice bag or cold cloth immediately after injury to reduce swelling. If swelling is pronounced, do not attempt to use injured part until seen by doctor. All serious "sprains" should be X-rayed for possible fractures.

FRACTURES

Pain, deformity or swelling of injured part usually means a fracture. If fracture is suspected, don't move person unless absolutely necessary, and then only if the suspected area is splinted. Give small amounts of lukewarm fluids and treat for shock.

EYE INJURIES

Foreign Bodies: remove by gently touching with moist point of clean handkerchief. Apply mineral oil or castor oil to corner of eye, and allow to flow over eye. **Chemicals:** if any chemical spatters into eye, wash with milk or running water . . . without pressure. Apply two or three drops of mineral or castor oil and consult doctor at once. **Wounds:** if eyeball is involved or dimness of vision is prolonged, get patient to doctor immediately. Cover both eyes with loose dressing.

UNCONSCIOUSNESS Never attempt to give anything by mouth. Lay patient flat, turn head slightly to one side, loosen any tight clothing about neck. Always summon a doctor unless you are sure it is a simple fainting spell. In simple faint, lower patient's head to restore circulation.

RADIOACTIVITY PRECAUTIONS

Although not as dangerous as other injuries, the effects of radiation should be guarded against, especially if you were within one mile of an atom bomb explosion, and were not adequately protected by shelter at the time of the blast. • As soon as possible, remove all outer clothing. • Scrub body vigorously with soap and water, paying special attention to skin folds, hair and finger nails. • Bury contaminated clothing. • If you suspect radiation injury (indicated by pallor, continued bleeding, undue fatigue, or infected wound), see doctor at once.

CIVIL DEFENSE HOUSEHOLD FIRST AID KIT

These emergency first aid items are for a family of four persons or less. Assemble them, then wrap in a moisture-proof covering and place in an easily carried box. Paste this sheet to the box cover and place the box in your shelter area.

FIRST AID ITEM	QUANTITY	USE
1. Antiseptic Solution Benzalkonium Chloride Solution, 1 to 1000 parts of water.	3 to 6 oz. bottle	For open wounds, scratches and cuts. Not for burns.
2. Aromatic Spirits of Ammonia	1 to 2 oz. bottle	For faintness, adult dose ½ teaspoonful in cup of water; children 5 to 10 drops in ½ glass of water. As smelling salts hold bottle under nose.
3. Table Salt	1 box	For shock—dissolve 1 teaspoonful salt and ½ teaspoonful baking soda in 1 qt. water. Have patient drink as much as he will. Don't give to unconscious person or semiconscious person. If using substitutes dissolve six 10-gr. sodium chloride tablets and six 5-gr. sodium bicarbonate (or sodium citrate) tablets in 1 qt. water.
4. Baking Soda	8 to 10 oz. box	For some slight protection against nerve gas—dissolve 4 teaspoonfuls of baking soda in 1 qt. water. Wash parts of body exposed to nerve gas with it or saturate cloth and place over face as gas mask.
5. Triangular Bandage compressed, 37 x 37 x 52 in., folded, with 2 safety pins.	4 bandages	For a sling; as a covering; for a dressing.
6. Large Bath Towels	2	For bandages or dressings: Old soft towels and sheets are best. Use as bandages or dressings. Cut in sizes necessary to cover wounds. Towels are burn dressings. Place over burns and fasten with triangular bandage or strips of sheet. Towels and sheets should be laundered, ironed, and packaged in heavy paper. Relaunder every 3 months.
7. Small Bath Towels	2	
8. Bed Sheet	1	
9. Medium First Aid Dressing 8 in. by 7½ in., folded, sterile with gauze enclosed cotton pads. Packaged with muslin bandage and 4 safety pins.	2	For open wounds or for dry dressings for burns. These are packaged sterile. Don't try to make your own.
10. Small First Aid Dressing 4 in. by 7 in., folded, sterile with gauze enclosed cotton pads and gauze bandage.	2	
11. Paper Drinking Cups	25 to 50	For administering stimulants and liquids.
12. Eye Drops, Castor Oil	½ to 1 oz. bottle with dropper	For eyes irritated by dust, smoke or fumes. Use 2 drops in each eye. Apply cold compresses every 20 minutes if possible.
13. Flashlight	1	Electric lights may go out. Wrap batteries in moisture proof covering. Don't keep in flashlight.
14. Safety Pins, 1½ in. long	15	For holding bandages in place.
15. Razor Blades, Single Edge	3	For cutting bandages and dressings, or for removing clothing from injured part.
16. Toilet Soap	1 bar	For cleansing skin.
17. Splints, Plastic, Wooden, ½ to ¾ in. thick, 3½ in. wide by 12 to 15 in. long.	12	For splinting broken arms or legs.
18. Tongue Blades, Wooden	12	For splinting broken fingers or other small bones and for stirring solutions.
19. Water Purification Tablets	Bottle of 100	For purifying water when it can't be boiled, but tap water officially declared radioactive must not be used for any purpose.
20. Measuring Spoons	1 set	For measuring or stirring solutions.

WARDEN SERVICE

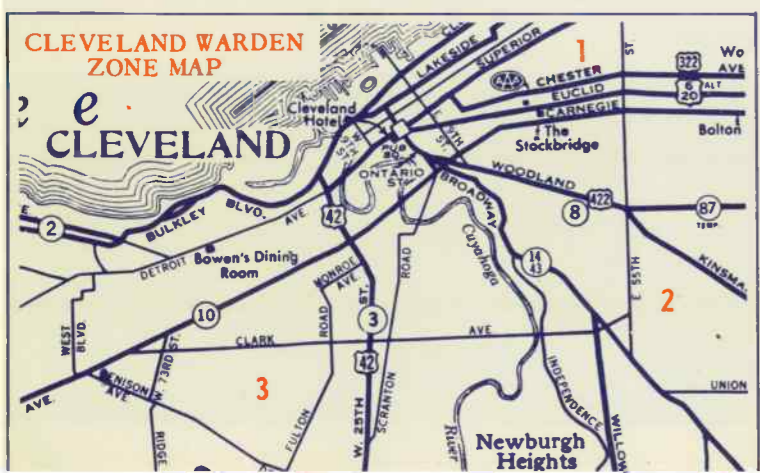
The block warden is one of the most important figures in the civil defense picture. He is the man who is in direct contact with the citizen for whose benefit civil defense is organized. It is the warden's job to see that every household on his beat is prepared for defense in the event of an attack.

When the Civil Defense Organization called for volunteers in March, 1951, 1400 people in the city indicated their willingness to serve as wardens. A total of 43,000 wardens are needed to adequately cover the city at the rate of one warden to every 25 families.

Steps are being taken to increase the pace of organization for the warden service. To date six of the city's 33 wards are completely organized, due to the effective work being done by the three zone offices in Cleveland. Warden Training is under way. The next job to be done is the recruiting of more wardens to fill in the gaps in the organization.

CLEVELAND ZONE WARDEN OFFICES

- Zone 1 – Norma Wulff, Dir.**
Cleveland Board of Education
1380 East 6 St. Cleveland 14.
Telephones: CH 1-3660,
IV 1-4447; IV 1-3933
- Officer in charge, Sec.,**
Observation School,
Sterns Road 2064,
Cleveland 6.
Telephone – TY 1-6767
- Zone 2 – Clark Kist, Dir.**
Provident Savings & Loan,
4119 East 131 St.,
Cleveland 5.
Telephone WY 1-0909
- Officer in charge,**
Thomas Stanton,
Secretary Margaret Lehmann,
11529 Buckley Road,
Cleveland 4,
Telephone – SW 1-3409
- Zone 3 – Patrolman Lewis Daniels, Acting Director**
15619 Lorain Ave.
Secretary Marie Hart,
First Police Precinct,
Lorain Ave. & Trisket.
Telephone WI 1-1344



YOUR BOMB SHELTER

The head of every household should seriously consider where his family would go in the event of an air raid warning. While circumstances vary widely certain general rules will be helpful in aiding you to select the safest shelter area in your home. In the case of apartment houses, or apartment hotels, the property owner or manager should survey his building to determine the best shelter area for its occupants.

(1) In the large apartment house, or apartment hotel, several stories in height, the best shelter area may be an inside corridor, hall, or stairwell on a lower floor and as far away from outside walls as possible. In a private dwelling the basement will probably be best.

(2) Shelter area should have a minimum of glass, and in no case should area have large glass windows, or large glass doors.

(3) Shelter area should have a minimum of 2 exits. In case of a basement one exit should be an outside one. In setting aside a basement shelter area in a private home some consideration should be given to reinforcing the ceiling of the area to prevent possible col-

lapse of structure above into your shelter.

(4) A means of ventilation should be available, or provided. Nearby sanitary facilities would be desirable.

(5) The area should contain no steam furnace, or boiler; no large gas mains, or steam pipes, unless these can be cut off where they enter the building.

(6) There should be no inflammable, or corrosive, liquids stored in the area.

(7) Some means of emergency lighting (battery operated) should be provided; also emergency communications.

(8) Area should be large enough so that each occupant will have at least 6 square feet of floor space.

Even an AUTOMOBILE, with closed windows, offers some protection for its occupants if car is more than 1½ miles from ground zero. Its steel body, and shatter proof glass are safety factors, while the car radio may offer a means of emergency communications or bulletins. If the car is in a garage some additional protection will be afforded.

EQUIPMENT AND SUPPLIES FOR YOUR BOMB SHELTER

Your bomb shelter should be equipped with certain necessary items that may be extremely valuable when it comes time to emerge into the bomb-blasted outer world.

FLASHLIGHT OR BATTERY-OPERATED LIGHTING FACILITIES — will be found valuable since all light circuits will be put out of commission at the time of the burst.



FIRST-AID KIT — will be found essential for rendering aid to injured or to members of your own family or group.



Individual items in FCDA officially recommended first-aid kit are listed on opposite page.

PORTABLE RADIO — to keep you in contact with emergency broadcasts concerning the disaster.



FOOD AND WATER — A few cans of staple food and water in a tightly sealed jar may be most useful. Properly covered or canned foods should undergo little or no contamination. Contaminated water, when distilled, is perfectly safe for drinking purposes. The radioactive material remains behind in the residual scale and brine. **MERE BOILING OF WATER CONTAMINATED WITH RADIOACTIVITY IS OF NO VALUE.**



FIRE EXTINGUISHER — A small hand fire extinguisher will permit you to put out any small fires in your immediate vicinity. This may prevent these fires from spreading into a general conflagration and will be a godsend to the firefighting groups which will have their hands full trying to cope with major fires.



GLOVES — Rubber gloves will serve to cover any small overlooked skin wounds that might permit entry of the radio-active particles into the blood stream. Heavy work (cotton or leather) gloves to slip over the rubber gloves might



BLANKETS — may be needed for warmth or shock protection.



TOOLS — of a simple nature, such as a shovel, saw, hammer, hand ax, crow bar, pliers, knife, etc., may be necessary to remove debris from exit of your own shelter or in doing rescue work.



COVERALLS — (preferably of a light color and loose fitting to tuck into your boots or overshoes) will provide an effective and practical working outfit that can later be discarded along with your other clothes when you have left the radioactive area.

BOOTS OR OVERSHOES — will prevent radioactive particles adhering to your shoes and at the same time will be most helpful in working in flooded areas. If overshoes or boots are not handy, you can wrap your shoes with cloth which can be discarded later along with any radioactive particles.



THE FRONT IS VITAL

AUXILIARY FIREMEN

The goal of the auxiliary fireman training program is a strength of 5,000 men. Training of volunteers for this duty is now being carried forward by the Cleveland Fire Department.

Classes for Auxiliary Firemen run for about 12 weeks. During this period volunteers are given training in the fundamentals of firefighting and special training in controlling fires where radiation is a danger. When trainees finish their courses, they are assigned to fire stations near their homes where additional practical training is given them on a weekly basis.

Cleveland's fire fighting plan in the event of atomic attack is thoroughly worked out. The Fire Department has participated in several exercises in which they had an opportunity to test various phases of the plan. Basically, the plan calls for a dispersal of equipment and personnel to points outside the target area as soon as the warning alert comes over the wires. From these safety points, firefighting equipment would move in to surround the sweeping fires which follow any atomic explosion.

Volunteers for Auxiliary Fireman posts may register at any fire station in the city, or by calling the Civil Defense Information Office, (TOwer 1-4600), at City Hall.



Making a catchall for drafting water in emergencies using a salvage cover. Auxiliary Firemen Trainers at Engine House No. 42. Captain Elmer Ludwig in background at right.



A graphic demonstration showing how Cleveland CTS buses can be rapidly converted for the handling of casualties in the event of a disaster.



Actual supplies listed in the Federal Civil Defense Administration's officially recommended first-aid kit for home use were recently displayed at the Public Library in connection with its atomic exhibit called "Seconds to Survival."

CLEVELAND DISASTER MEDICAL PLAN

Plans for a Civil Defense emergency medical organization are being developed by the Academy of Medicine's Disaster and Relief Committee. For more than 18 months this committee has held a weekly meeting to map a program for putting all medical personnel and facilities to work in the event of an atomic disaster. The program is being laid out on a county-wide basis.

The Disaster and Relief Committee's plan calls for 2,300 physicians, all of whom have been registered and classified. About 450 pharmacists, 400 undertakers, 814 dentists and 200 laboratory technicians have been registered and classified. In addition, more than 6,000 registered nurses in the county have been listed for emergency duty.

To handle the enormous number of casualties which would result from an atomic explosion over the city, the committee has planned for 32 emergency hospitals, 96 supply depots, 48 mortuaries, 5 blood collecting centers, and 5 emergency control posts for directing the work of field teams. Hospitals and supply depots will be set up in schools, country clubs and churches. Mortuaries would occupy bowling alleys, skating rinks and dance halls. Sites for these installations are being arranged now.

Mass immunization for the people of Cleveland will be on a volunteer basis. A campaign is being conducted to urge all citizens in the county to have themselves immunized against typhoid, smallpox and tetanus.

ASSISTANCE OF COOPERATING ORGANIZATIONS ATOM BOMB EXPLOSION



Civil Air Patrol officers hold an informal briefing session during a recent civil defense exercise, "Operation Capar." (CAP Photo)

CIVIL AIR PATROL

The Civil Air Patrol has offered its services to the Cleveland Office of Civil Defense as the eyes and ears of the organization. In this area the Fourth Group Ohio Wing has demonstrated its usefulness in practice runs under simulated conditions.

On the 13th and 14th of October, 1951, the Group Mobile Support Unit of the Fourth Group, Ohio Wing, conducted an exercise in which smoke bombs were set off and pilots of the group were given the mission of spotting them from the air and relaying the information back to a headquarters. The bombs were located without delay by pilots of the group, flying their own light aircraft. This was a practical demonstration of how the Civil Air Patrol could serve in time of emergency as an information gathering service for Civil Defense. Rapid coordination of the rescue services could be effected by air observation in radio contact with ground forces.

The Civil Air Patrol is also investigating the possibility of equipping their planes with loud speakers which could be used for directing the flow of evacuees or for giving information to groups of people who have been isolated.

AMATEUR RADIO

The Amateur Radio Emergency Corps of Cuyahoga County is equipped and ready to offer free emergency radio communication service to Civil Defense should the need arise. All members of this group are licensed amateurs, using their own equipment.

A complete plan for active cooperation with Civil Defense authorities has been worked out by the corps. Upon receipt of a "yellow" alert, all members would be immediately notified and would go into action. They would automatically notify amateurs outside the area, providing a contact with danger free zones. Working on the theory that no commercial power would be available immediately following an attack, this group has made provisions for use of emergency power in mobile stations—usually the operator's own auto. It is planned to employ a fixed station for amateur use in Civil Defense headquarters for the direction of mobile and portable amateur stations.

The plans made by the Amateur Radio Emergency Corps would provide more than enough communication in this area if every other means of directing rescue and fire fighting efforts were to be knocked out. In addition to being available for civil defense operations this group is ready to serve any civic agency at any time, should the need arise.

COMMUNICATIONS IN CIVIL DEFENSE

Emergency communications in Cleveland are built around the existing police radio network. Communication on a county-wide basis by police radio has been a fact for several years. It is through this system that alarms would be broadcast. Police radio would be the first to receive notice of an impending attack from Air Force Air Command, immediately upon receiving the yellow alert, the police radio dispatcher would automatically notify all Cleveland police cars, police stations, and all suburban police and fire installations. The Cleveland Fire Department would also be alerted, as would commercial radio and television stations.

A complete plan of action has been worked out for emergency use of the police radio network for directing operations following an attack and for providing communications with neighboring cities.

Commercial radio and television in the city is also a part of the Civil Defense communications plan. The Cleveland stations would be alerted immediately should a fleet of enemy bombers be reported heading for the city. All stations would immediately go off the air to prevent their beams from being used as directional homing signals for enemy bombers. They would get back on the air only upon advice received from the Civil Defense organization.

Upon returning to the air, commercial radio would put all its facilities in service for Civil Defense use. A system of alternating stations for use to get messages to the people of the city has been worked out. The valuable service rendered by Cleveland radio during the paralyzing snow story of November, 1950, is only an indication of what can be done to prevent panic and mass hysteria by a well coordinated communication system.



Amateur "Ham" radio operators, utilizing the facilities of their amateur radio stations, such as this one, constitute a vital link in the emergency communications plan of Cleveland Civil Defense.



A regular meeting of the Communication Committee of Cleveland Civil Defense, in the WHK Building. Members include representatives from all types of communications in the area.

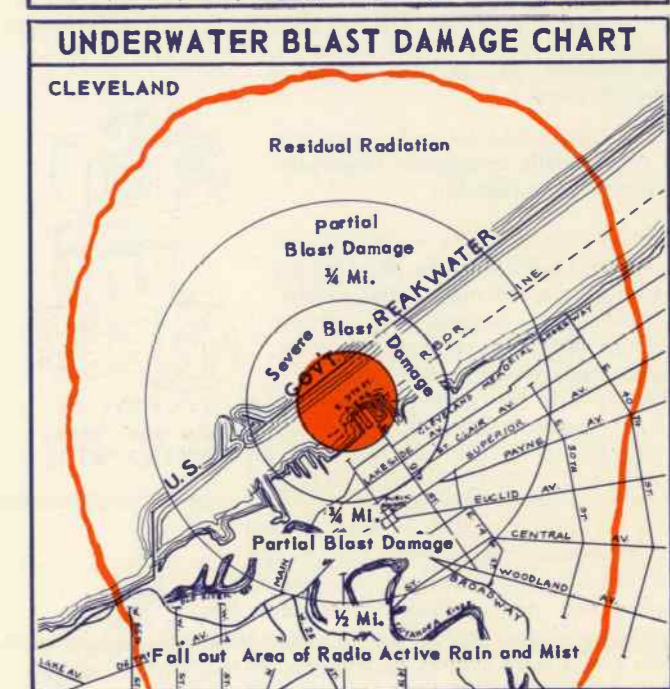
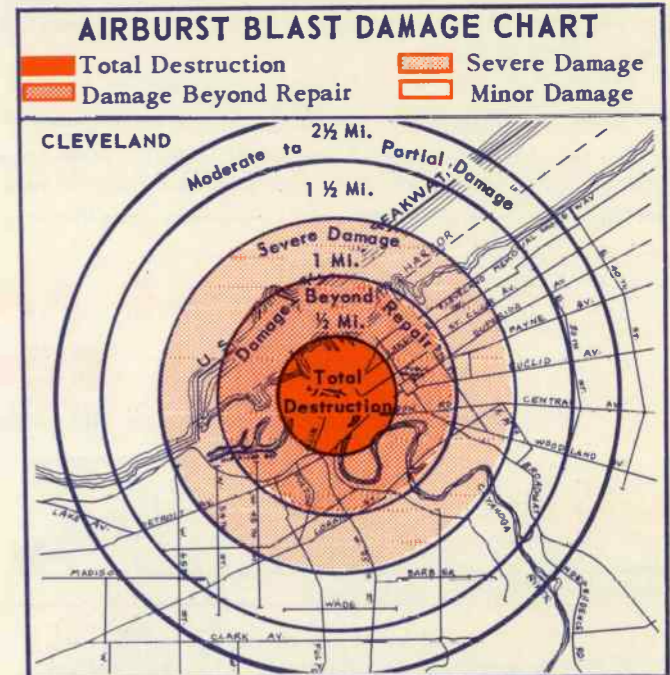
BLAST DAMAGE



GROUND ZERO COMPLETE DESTRUCTION 1/2 MILE SEVERE DAMAGE 1 MILE MODERATE DAMAGE 1 1/2 MILES PARTIAL DAMAGE 2 MILES LIGHT DAMAGE

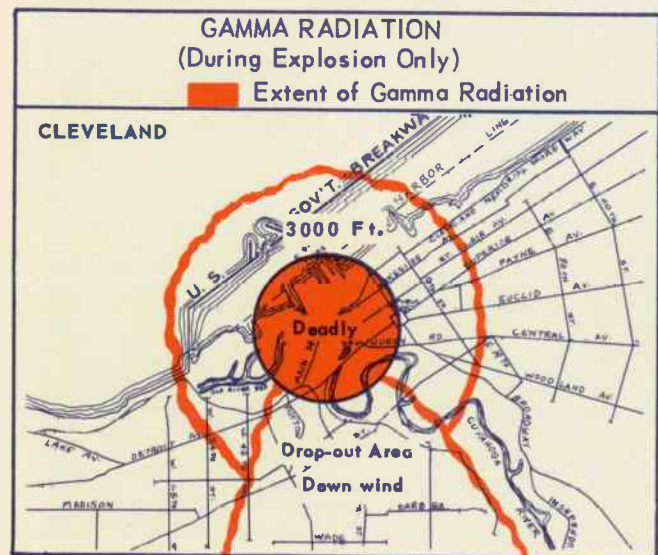
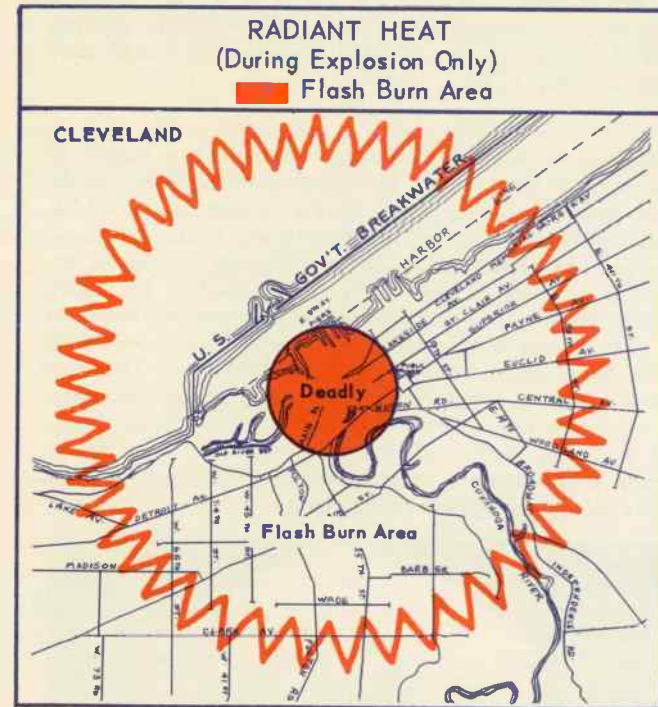
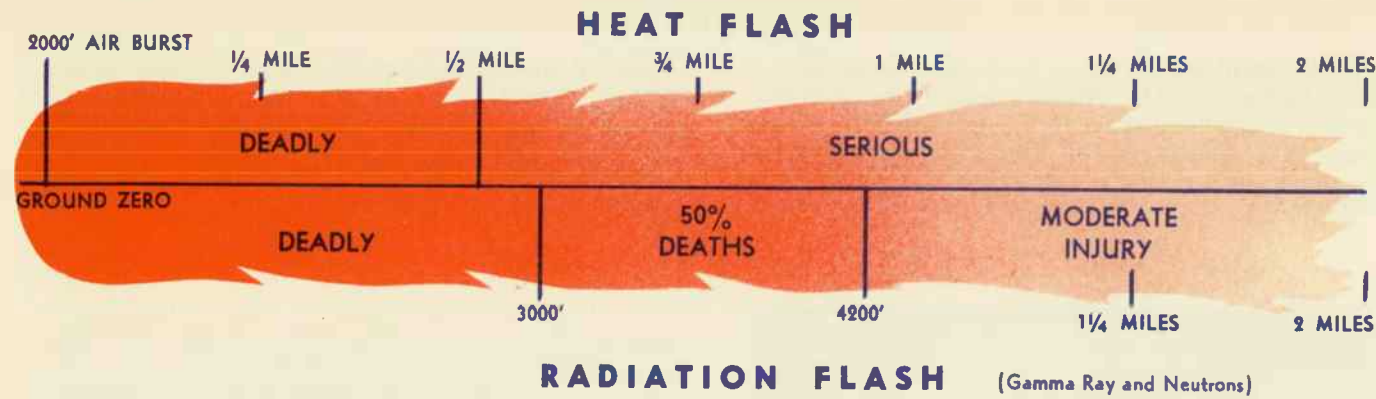
BLAST DAMAGE CHART (Air Burst) (AEC)

Feet	Damage (Statistics relate to Japanese explosions.)
0	Ground Zero — or directly beneath the air burst.
1,500	Mass distortion of heavy steel frame buildings.
2,000	Limit of severe structural damage to earthquake resistant reinforced concrete buildings.
2,500	To this point virtually complete destruction of all buildings, other than reinforced concrete.
3,500	18-inch brick walls completely destroyed.
4,000	Roof tiles melted by heat.
4,500	Light concrete buildings collapsed.
5,000	12-inch brick walls severely cracked.
5,500	Electrical installations and trolley cars destroyed.
6,000	Severe damage to entire area. Severe structural damage to steel frame buildings.
6,600	Structural damage to multistory brick buildings.
8,000	Severe damage to homes, heavy damage to window frames and doors, foliage scorched.
8,300	Moderate damage to area.
9,000	Heavy plaster damage.
10,000	Blast damage to majority of homes. Severe fire damage. Flash ignition of combustible materials.
10,300	Partial damage to structures in area.
11,000	Flash charring of telegraph poles.
12,000	Light damage to window frames and doors, moderate plaster damage.
8 MILES	— Limit of light damage.



While giant skyscrapers with reinforced concrete structures and long periods of vibration should withstand the shock very well the masonry would be stripped off, girders twisted and people literally blown out of the top floors of the buildings if within the primary blast area.

DAMAGE EFFECTS OF AN ATOMIC BOMB EXPLOSION IS ESSENTIAL IN CIVIL DEFENSE



THERMAL EFFECTS

At the time of the explosion a terrific heat flash is generated. It goes out in straight lines from the explosion and lasts but a fraction of a second, but during that time it can burn unprotected skin at distances of 2½ miles and has been felt up to 5 miles. It has scorched telegraph poles at 2 miles. FIRE, set directly by the flash of radiant heat, or started by the ignition of gas from disrupted mains, or short circuits, can destroy huge areas. In Nagasaki, it was estimated that almost immediately after the detonation, fires were started in dwellings within a radius of 3,000 feet from ground zero. Debris-choked streets usually hamper or make fire fighting difficult. **If survivors will personally fight the small fires in their immediate area, huge conflagrations may never develop.** The thermal effect of an A-Bomb air explosion in Cleveland is shown at left.

RADIATION EFFECTS

GAMMA RAYS, pulses of electro-magnetic radiation, traveling with the velocity of visible light, are very penetrating. They are usually lethal to anyone in the open up to 3,000 or 4,000 feet from the bomb burst. They do most of their killing in the first second, or not at all. The second gamma ray hazard comes from the radioactive fission products left from the blast, or deposited from the cloud. Fission products from an air burst bomb must be regarded as something of a nuisance but a negligible factor in causing death. In the case of an underwater burst, however, residual radioactivity is much more extreme and may remain a hazard for a considerable time.

AMERICAN RED CROSS

FIRST AID — In connection with the civil defense program the Government has asked the Red Cross to train millions in first-aid. The Greater Cleveland Chapter of American Red Cross offers the following courses in FIRST-AID:

Junior -- 15 hr. course, for those 12-14 yrs. of age being offered in many schools.

Standard -- 22 hr. course (including 4 hour atomic supplement), for those over 15. Many industries either require, or urge their employees to take this course.

Advanced -- 12 hr. course, open to those having completed Standard course.

Instructors -- 15 hour course, open to those over 20 yrs., who have completed Standard and Advanced courses.

Red Cross courses are also offered in:

Volunteer Nurse's Aide Instruction -- 36 hours class room, and 46 hours supervised practice in hospital. Course, open to H.S. grads., 18 to 55 years of age.

Home Nursing -- 12 hour course.

Information concerning enrollment in any of the above courses may be had by calling Red Cross, SUperior 1-1800.

THE BLOOD PROGRAM -- The Government has designated Red Cross as the official coordinating agency to meet the need for blood for the armed forces and to stockpile blood products for civil defense. There is no more vitally important necessity than the procurement of the 50,000 pints of blood which must be collected in Greater Cleveland by the end of this fiscal year.

The Regional Blood Center, at 1227 Prospect, is open Mon/Thurs 1:00-9:00p.m. and Tues/Wed/Fri. 10:00 a.m.-4:00 p.m. for your convenience in donating blood.

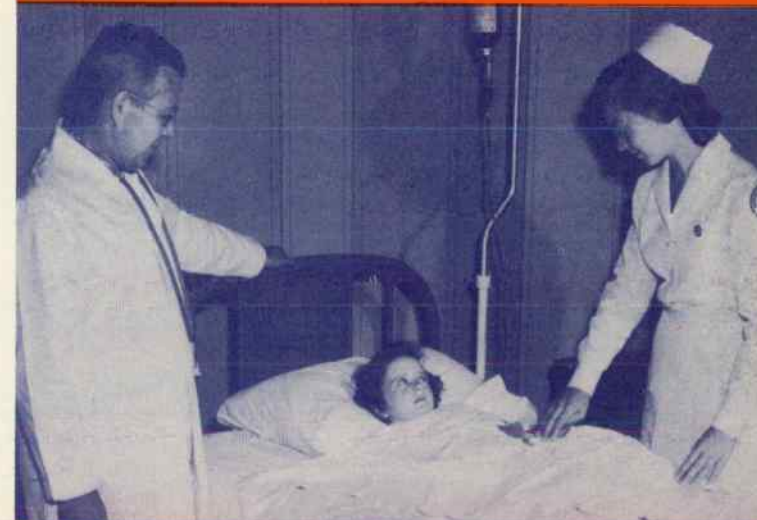
Call the Blood Center SU 1-1800 TODAY for an appointment. Every patriotic and unselfish individual will wish to help in this humanitarian service.

WELFARE SERVICES -- The responsibility for over-all planning, organizing and directing, and financing all phases of civil defense for war-caused disaster rests with the civil defense authorities. However, Red Cross Chapter disaster preparedness organizations and trained personnel will be made available to assist civil defense in the following functions: 1. Mass feeding; 2. Emergency clothing; 3. Emergency shelter; 4. Welfare inquiries.

Acting within these classifications the Greater Cleveland Chapter of American Red Cross has already established over 300 Welfare Centers (headquarters in disaster for all welfare services) in Cuyahoga County. A complete housing survey of this 6 county area has also been made which shows that 150,000 homeless people could be provided temporary shelter in the event of a disaster.



This map of Cuyahoga County which hangs in the Disaster Service Office of the Greater Cleveland American Red Cross Headquarters shows the more than 300 Welfare Centers which have been established for use in the event of enemy attack, or other disaster.



Civilian patients such as this little tot, as well as armed services personnel on the battlefields, benefit from the blood that YOU give at the Cleveland Regional Blood Center. (Red Cross Photo)



Here Cleveland firemen receive Red Cross first-aid training. (Red Cross Photo)



Here Ohio Bell Telephone employees practice first-aid techniques in a course sponsored in the interests of civil defense. The instructors were trained by the Greater Cleveland Chapter of Red Cross. (Ohio Bell Telephone Photo)

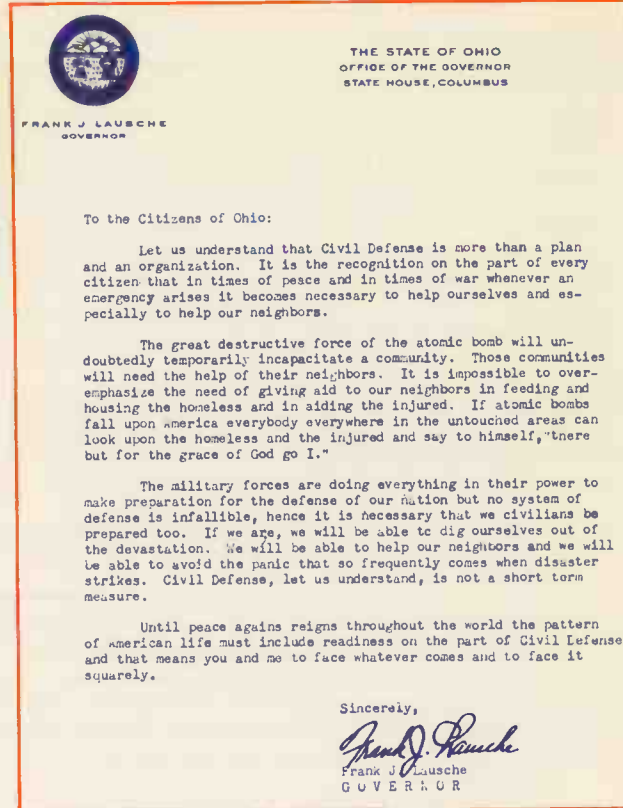
CIVIL DEFENSE PROGRESS IN OHIO

- 1. Organization.** Each of the 88 counties, and each of the 78 cities of 10,000 or more in Ohio, have responded to Gov. Lausche's call to organize for Civil Defense.
- 2. Observation Corps Program.** Ohio has 637 observation posts which will, in an emergency, be staffed by at least 16,000 volunteers. Personnel for most of the posts have been trained.
- 3. Filter Centers.** There are two in Ohio, one at Canton, and one at Columbus. Each has recruited and trained more than half of the 1500 volunteers required.
- 4. Warning System.** The State has provided a warning system that can, in a matter of seconds, notify each community of an impending raid.
- 5. Fire Defense.** A fire service bulletin and an auxiliary fireman's training manual have been produced and distributed to volunteers. An Industrial Fire Brigade bulletin is in second draft.
- 6. Police.** The police and security forces of the state have jointly compiled two fundamental bulletins, Police Services, and Auxiliary Police. In addition, the highway patrol has recruited and trained 5000 veterans to serve as Auxiliary Highway Patrol personnel in emergency.
- 7. Wardens.** This program includes a policy organization bulletin as well as a training manual which have been supplied to all parts of the state. The actual training of wardens is underway in many localities.
- 8. Health Services.** Three bulletins have been produced by the State Director of Health. These bulletins have been given careful consideration by a committee of all health resources in the state.
- 9. Radiological Defense.** 16 scientists trained in radiological defense work, are now in the process of training science teachers and others concerned in: (a) radiological defense education of the public, and (b) radiological monitoring. Monitoring instruments and lead-lined containers of radioactive isotopes have been purchased by the state.
- 10. Communications.** A basic bulletin embracing the emergency use of telephone, telegraph, TWX, radio, television, messenger and other communications mediums, including a supplement on the use of Radio Amateurs, has been distributed.
- 11. Transportation.** A survey has been completed of all certificated buses, school buses, city buses, common motor carriers, and contract carriers. A bulletin on the emergency use of all types of transportation is in preparation.
- 12. Civil Aviation.** A survey has been made of the entire private or Civil Aviation lift in Ohio. Plans have been developed for the emergency use of 4500 private aircraft.
- 13. Industrial Security.** A complete study concerning the security of Ohio industry has been carried out by a representative on loan from the Industrial Commission with the assistance of a representative group of 28 Industrial Security specialists.
- 14. Rescue.** This program on a standby basis involves 650 trained, equipped, and mobile rescue workers in the eastern and southern parts of the state organized by the Bureau of Mines. Assistance would be rendered by all fire fighting resources and the State Highway Department, and Ohio Contractor's Assoc.
- 15. Identification.** A bulletin concerning identification of Civil Defense volunteers has been developed.
- 16. Forests.** In cooperation with Federal, State and local agencies, the various forest resources of Ohio are to be brought into the Civil Defense program.
- 17. Wide Use of Women in Civil Defense.** This program has been developed by the Exec. Sec. of the Ohio Development and Publicity Commission, with assistance of leaders of women's organizations. More than half of the Civil Defense work will be done by the women of Ohio.
- 18. Children and Youth.** The program has been developed by the Exec. Sec. of the Ohio Commission of Children and Youth. A comprehensive bulletin concerning their protection and participation will be distributed.



Governor Frank J. Lausche, of Ohio.

OHIO STATE



COMMUNICATIONS

By Ohio Bell Telephone Company

Communications has been termed the nerve center of Civil Defense, and telephone service is the most widely used medium for effective functioning of all CD activities in emergency.

The Ohio Bell Telephone Co., the Ohio independent telephone companies, Western Union and the broadcasting stations have demonstrated their ability to furnish adequate service both from a quality and reliability standpoint at all times.

Civil Defense communications include plans for expediting the handling of essential calls for performing vital CD functions during emergency. These include supplementing normal communication facilities with alternate means when necessary. All existing land lines and radio communications and services are to be used to their fullest extent, but other types of existing emergency facilities must be considered for use during the period of any temporary inadequacy of existing means which might result from damaged buildings and equipment.

In critical target areas, alternate facilities such as radio (mobile, amateur and broadcast) telegraph and messenger, both foot and vehicular, would also be used in the event the primary means of communication should become disrupted.

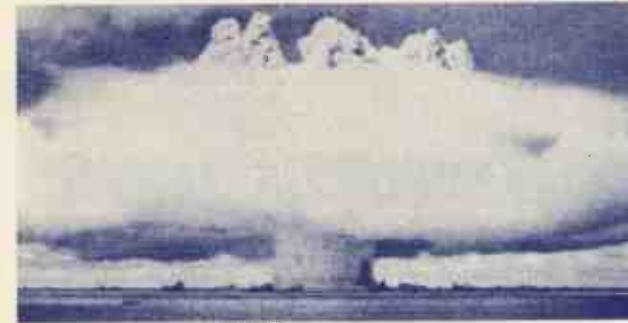
Many measures are being taken by Ohio Bell to safeguard telephone facilities so that in the event of sabotage or hostile attack, service will still be available to emergency forces, including those of Civil Defense. These include locking man-holes and cable vaults; alternate routing of local trunk and long distance circuits; auxiliary engines to furnish power in case the commercial power supply is interrupted; placing primary trunk and central office cables underground; locking all telephone buildings; providing employees with identification cards; employee citizenship and loyalty checks; providing space in each building for shelter areas and for the warden's organization; duplication and dispersion of important records; and providing standby mobile radio transmitters and receivers at remote locations.

ATOM BOMB!

THE ATOMIC BOMB differs from other bombs in several important ways: (1) **ENERGY** released by an atomic bomb is roughly equivalent to that produced by the explosion of 20,000 tons of TNT bombs; (2) the explosion of the bomb produces highly penetrating, invisible **RADIATION** in the form of lethal gamma rays. In addition there

is also; (3) intense **HEAT** (1,000,000° C. in center of fireball) and **LIGHT** (at 5.7 miles, the brilliance is 100 times that of the sun viewed at the earth's surface); and (4) **RADIOACTIVE RESIDUES** which remain after the explosion emitting harmful radiations.

TYPES OF EXPLOSIONS



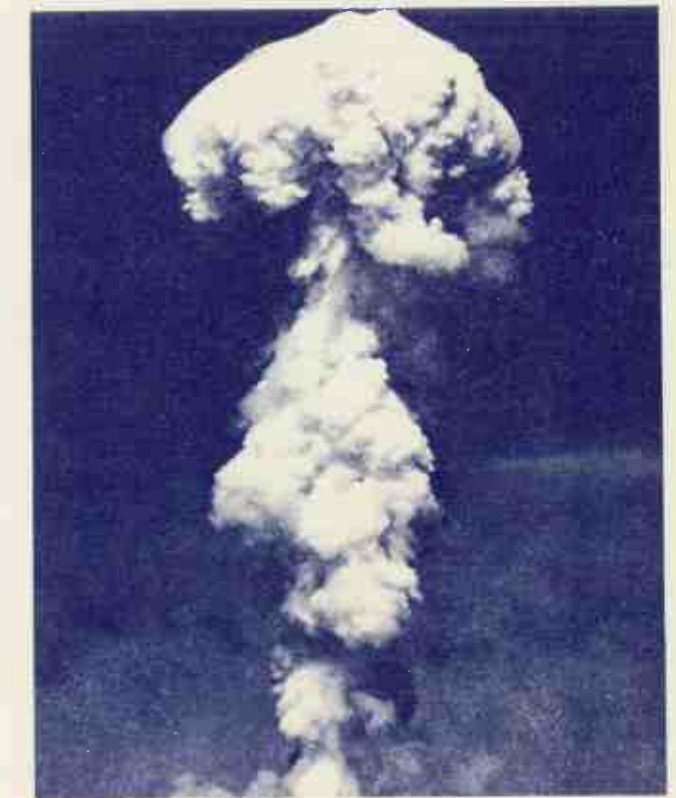
shielding. On account of falling debris, streets would likely be clogged and fire fighting would be rendered very difficult. . . . **SUB-GROUND LEVEL BLAST** — According to the AEC an atomic bomb could be made to burrow 50 feet or more into soft earth before exploding causing a "Grade D" earthquake. It would upset chimneys, collapse weak buildings, etc., to a radial distance of approximately 1350 to 3300 feet.

AIR BURST — An air burst of bomb at a height of about 2,000 feet, setting up thousand-mile-an-hour winds, very powerful suction and deadly, instantaneous radiation, appears to be the most destructive use of atomic energy. The heat wave in this case would not be as important as fires of secondary origin started by falling debris, shorting of electrical circuits, etc. The instant burst of gamma rays that would flash from the bomb would be lethal to anyone in the open up to 3,000 feet. The blast wave would be terrific, destroying almost everything within a half-mile radius of the explosion, and all but the strongest buildings would collapse to about one mile. Radioactive contamination of ground, building structures, etc., is practically negligible in an airburst.

UNDERWATER BLAST — In test "Baker" off Bikini, a tremendous column of water was produced, which completely absorbed the initial flash of neutrons and gamma rays. When it began to fall back to the lagoon surface a critical base surge — a 200 to 300 foot wave of radioactive fission products — rolled over the ships in the harbor drenching them with highly contaminated radioactive products. Fall-out droplets were a further serious radioactive hazard many miles "downwind." In order to produce a critical base surge the water must be fairly deep. Fortunately little water of such depth exists in harbors or water adjacent to any of our larger cities. However the blast effect of an underwater explosion in even shallow water would cause considerable damage to any nearby docks or shore installations. . . . **AIR BURST OVER WATER** — In an air burst over water exposed structures, such as masts, spars, radar antennae, etc., within a radius of 3,000 to 3,500 feet may be expected to suffer very severe damage.



GROUND LEVEL BLAST — On account of the blocking and shielding effects of the huge skyscrapers a ground level or "basement" blast in say New York, or Chicago, would have a relatively small area of critical destruction. Very close buildings would probably collapse and those nearby would suffer loss of masonry and be materially weakened. Primary radiation would be materially checked by the shielding of the buildings but there would be a small area of intense residual radioactivity near explosion center. It would probably be 6 hours before it would be safe to walk across the area but to stay for any length of time would be out of the question without proper



THE MIGHTY

CIVIL DEFENSE

FILTER CENTER, AND GROUND OBSERVER CORPS

Speaking to the American Society of Newspaper Editors recently, Federal Civil Defense Administrator Caldwell cited 4 reasons why these are the the gravest days in our history.

1. The Russians have atomic bombs and planes in sufficient numbers and excellent to assault ALL of our major cities in one attack.

2. There is little or nothing we can do to stop them. The best to be expected is that some 10 percent of the attacking force may be downed or deflected.

3. That attack can come with little or no warning. The best we can hope for is a few minutes notice.

4. The Russians are capable and ready to deliver this destruction whenever they feel like it -- whenever it is most profitable to do so.



Millard F. Caldwell, former Governor of Florida, Administrator of Federal Civil Defense.

A POTENTIAL MILITARY WEAPON

We are currently engaged in a conflict in which use of the atomic bomb is quite probable. It is highly important that you understand the effects of this weapon and how you can best protect yourself. We shall present in the following pages a simple digest of such facts from governmental and other authentic sources we feel to be of greatest value.

The atomic bomb is an extremely potent military weapon but not "absolute" in the sense that its possession alone guarantees victory. Thus far the United States has exploded several atom bombs and we have learned of the devastation that can be caused. In Hiroshima, 71,000 people were killed and 68,000 injured in a city of 245,000. About 75 A-bombs, according to Dr. R. E. Lapp, would probably have done as much damage to target areas in Germany as was done by all the strategic bombing during World War II. With all its tremendous heat and blast effects, accompanied by its unique radiation effects, it is still not unlimited in the amount of damage it can do. You need not worry, for example, about rumors to the effect that atomic explosions might contaminate the earth. It would take something like a million A-bombs to do the trick.

The atomic bomb is certainly to be feared and respected but there is no reason that it should cause panic. Now that the damage that it can cause, and the probable extent of such damage, is known, it has been possible to formulate certain simple rules that will go a long way towards insuring your safety and eliminate to a great degree the element of fear.

In any discussion of the atomic weapon it should be

remembered that constant improvements in design and type, or usage, can be expected. A top military spokesman recently forecast the use of A-bombs as the next probable step in battlefield warfare and said that they can be used with deadly accuracy against troops, tanks and other military targets.

RADIOLOGICAL WARFARE — The use of radioactive gases, dusts or mists as a weapon, is a possibility and we should be prepared for it according to Prof. Ridenour of the University of Illinois, but because it is a mystery weapon its most important effect might be psychological since it probably couldn't be used to kill people. It probably would force them to abandon homes, towns and military installations, however.

H-BOMB (Hydrogen Bomb) . . . It is no secret that research and experimentation on the development of the H-bomb is going on. It is not possible to predict when, or if, such a weapon will be produced. It is interesting to note however that according to the AEC a hydrogen bomb 1,000 times more powerful than the original A-bombs would be only 10 times as destructive.

ATOMIC GUIDED MISSILES — President Truman recently announced that we have developed fantastic new weapons.

In testimony before the senate appropriations committee Gordon Dean, Chairman of the Atomic Energy Commission, disclosed the U. S. will have atomic guided missiles "and things of that type" in 1952. In a speech in Los Angeles Dean said, "We have today a tactical (atomic bomb) capability which is very impressive. . . . It can be used against men in the field and against military targets."

STATE OF OHIO
ADJUTANT GENERAL'S DEPARTMENT
COLUMBUS 16

STATEMENT BY MAJOR GENERAL LEO M. KREBER, THE ADJUTANT GENERAL OF OHIO AND DIRECTOR OF OHIO CIVIL DEFENSE.

"THE SUCCESS OF CIVIL DEFENSE WILL DEPEND ON TRAINED PEOPLE"

The effectiveness of this whole Civil Defense program must, in the end, be measured in terms of people. Trained people, who understand the facts, who understand the organization of Civil Defense, who can take their proper places in that organization and train others to do the same. Unless the people of our country — whoever they are, and wherever they live — take their heads out of the sand and face the facts, no Civil Defense program can be successful. The painful truth is that our NATIONAL WILL to survive and to fight back can be no stronger than the personal preparedness of each and every citizen.

So, you ask yourselves the question — 'What can we do about all of this?' Well, I can tell you truthfully — That Your State Civil Defense Organization has been actively setting up the frame-work for an operating agency that will utilize all the services, all the equipment, and all the personnel of every volunteer group in the State of Ohio. The success of this will depend on the training of all the people.

Civil Defense is both the shield and the sword of the home front! Its aim is to protect the people, production and property of the entire nation. It is a job so staggering that it will take all the resources of every city of this country — should a mass attack come. If an attack comes, it will be a grand slam assault on many cities in many states. Its purpose would be to create the greatest possible panic and terror, and the maximum number of casualties within the span of a few hours. The purpose of such an attack would be to break the back of our will to survive as a nation. There is little doubt that the enemy could accomplish these aims, unless we were prepared through Civil Defense to reduce the impact of the assault.

In the interests of education and training your Ohio Civil Defense organization has prepared and distributed a series of publications in the form of Information Bulletins. Some thirty of them have been released to date, and they touch on the administration and operation of every phase of Civil Defense Education, in addition to providing excellent training manuals.

"Be Prepared, Not Scared", is the slogan for Ohio Women in support of Civil Defense. This slogan might well apply to all of us. Preparedness is the key to survival in these times. Women must face the challenges of today by intelligently, energetically and persistently doing their very best in Civil Defense work.

The Local and County organizations of Civil Defense throughout Ohio need the help and understanding of all citizens. We must make certain that everyone is alert to the dangers that face us and alert to our individual responsibilities. We must enlist every able-bodied person in Civil Defense, and weld them into a cohesive and flexible organization which will meet any emergency in a sane and productive manner.

We hope that no such emergency as an Atomic disaster will ever come to our State and Nation, but we must be ready in the event it does happen.

We as Americans have always thought of freedom as something that meant prosperity and the pursuit of happiness and peace. We now know that — so long as nations of men oppose liberty — freedom means a readiness to pay whatever price the strength of the opposition entails.

We are determined to complete our plans for Ohio Civil Defense, to protect the lives, property and industries of our citizens. We must prepare against every contingency so as to make attack by an aggressor unprofitable. In Ohio we need the help of every man, woman and child. With the combined efforts of all, we will make Ohio strong, capable of taking its place in the National security.



Maj. Gen. Leo M. Kreber, Adjutant General of Ohio, and Director of Ohio Civil Defense.

The Ground Observer Corps (filter center and observation post personnel) when completely staffed will be composed of approximately 16,000 civilian volunteer defense workers of Ohio. There are 2 filter centers in Ohio, one at Columbus, the other at Canton. Each will require approx. 1500 civilian volunteers to completely man the filter center on a 24 hour basis. There are approx. 640 observation posts, which will require 20 persons per post to operate on a 24 hour basis.

The mission of the Ground Observer Corps Filter Center is to receive, plot and evaluate information concerning the movement of aircraft within that filter center's area, as reported to them by the observation posts; to relay this evaluating data to selected control points of the aircraft control warning system and to adjacent filter centers.

The training of the filter center personnel consists of two-hour classes during the daylight and evening hours. When the volunteer has received 16 hours of instructions, he is considered to be a fully trained plotter. After an additional 8 hours of training, this plotter is then fully acquainted with filtering and evaluating the information as shown on the filter center plotting board, and is considered fully trained for any position he is called on to handle.

The Observation Posts throughout the State are located approx. 8 miles apart and form a grid. The organization of each post consists of a Supervisor, Chief Observer and 18 Observers. It is the duty of the Observation Post personnel to report the movement of any aircraft within their specified zone of responsibility. This information is forwarded by priority telephone messages to the Filter Center for the area.

The Radar Net extending around the perimeter of our country has certain deficiencies and it is only by supplementing this type of surveillance by a human factor, namely the Ground Observer Corps, that our country is assured of a complete coverage against aircraft attack. Ohio possesses a considerable number of cities over 100,000 in population, together with a large farming section and an extremely critical industrial area. As a consequence of these highly diversified factors, the people of Ohio are definitely aware of the need for a Ground Observer Corps and are responding wholeheartedly when informed of the need for their services. At the present time, both the Filter Centers at Columbus and Canton, together with the Observation Posts throughout the State are undermanned and to correct this deficiency, an intensified orientation and organization program is being undertaken by the State Civil Defense Office in conjunction with the Air Force personnel.



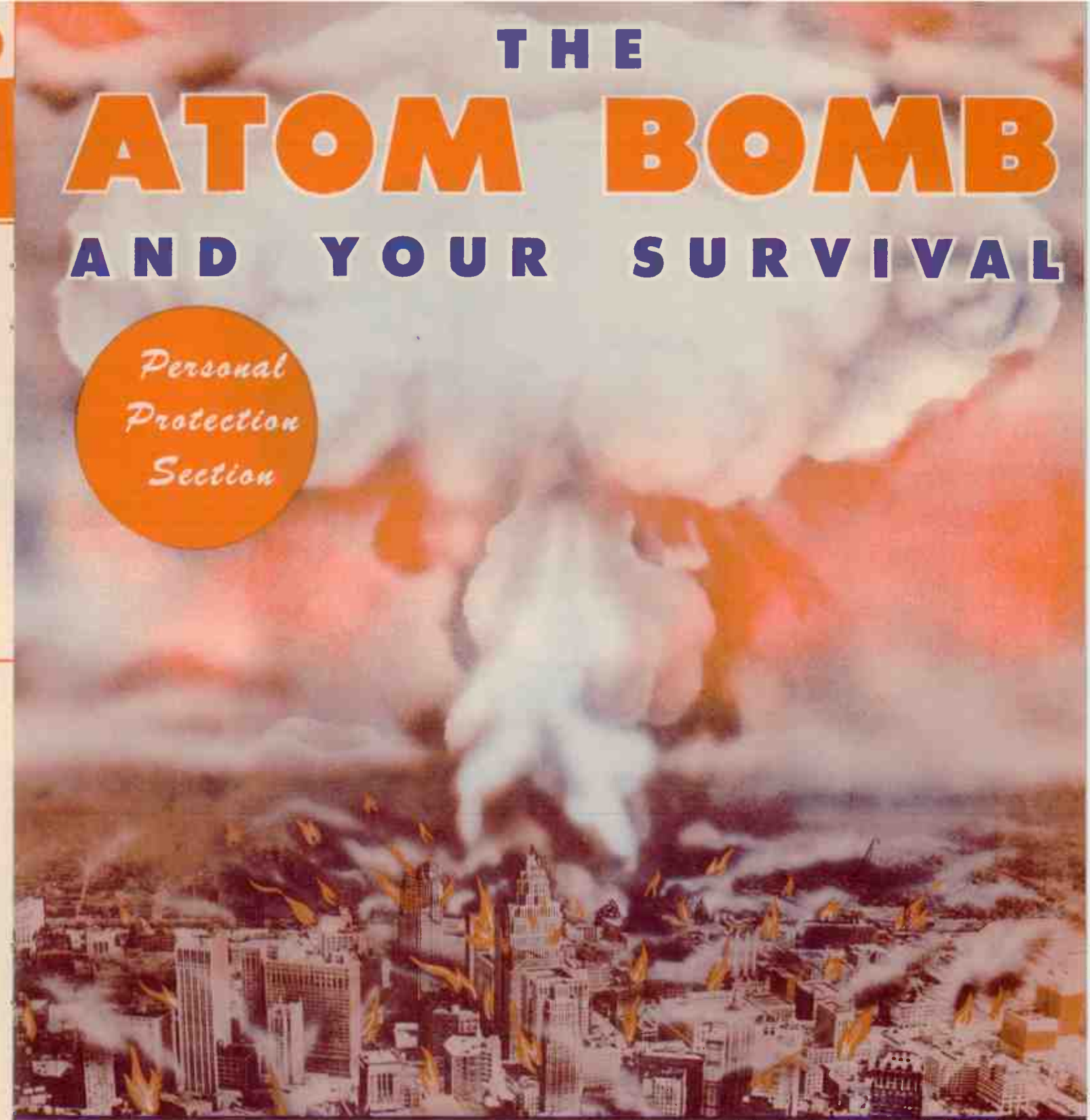
The Filter Center at Columbus in action during a recent Air Raid Alert Test. On the right are shown Brig. Gen. Kenneth Cooper; Maj. Gen. Leo M. Kreber, Civil Defense Dir. of Ohio, and Gov. Frank J. Lausche, talking with Filter Center officials.

CIVIL DEFENSE IN CUYAHO

THE

ATOM BOMB

AND YOUR SURVIVAL



Part of Parma's Auxiliary Fireman Group

PARMA

As we go to press a unified plan is being drawn up that will permit Cleveland and the 60 communities that make up Cuyahoga County to work in harmony as far as overall civil defense planning is concerned. Mutual aid agreements between communities is a vital factor in the plan. Mayor Thomas A. Burke of Cleveland will

5TH CIVIL



(L to R) Kimball L. Wheeler, Exec. Dir. and Col. Frank C. Manak, Commander of Ohio's Fifth Civil Defense Area, examine a map of Cuyahoga County, during a problem in web defense. In event of a major disaster Col. Manak would take over direction of relief and rescue in 6 counties--Cuyahoga, Erie, Geauga, Huron, Lake and Lorain.

EAST CLEVELAND

Under the Leadership of City Manager Charles A. Carran and Civil Defense Director G.T. Aphorp, East Cleveland Civil Defense is being organized as a segment of the Cuyahoga County Web Defense plan. The City has been divided into six districts, each composed of six posts, with each post having a population of approximately 1000. District and post wardens are being assigned and trained and training is proceeding in first aid and in auxiliary police and fire duties.

Plans for the immediate future call for execution with the other municipalities of a county-wide civil defense planning and operating agreement; a call for additional volunteers; the acceleration and agumenting by other courses of the training program; installation of public warning system and control center; establishment of first aid stations and emergency hospitals including medical supplies.

When complete, we expect to have about 2500 citizens trained and assigned as wardens, auxiliary policemen and firemen, rescue teams and other specialized branches of C.D. service. We will operate as part of the Cuyahoga County organization.



Charles A. Carran
City Manager

"MODERN MI

"Modern Minute Men," a splendid twenty-five minute movie, produced as a public service by The Ohio Bell Telephone Company, featuring in graphic form how YOU and your family may be saved in the event of an atomic bombing in your city, has been playing in the theaters of Cleveland, and in other

Civil Defense in Parma is progressing slowly but surely. Our full quota of Auxiliary Police have been trained by Sgt. Leonard Benedict of the Parma Police Dept. in accordance with the training manual set up by Inspector Story of the Cleveland Police Dept. and accepted as a standard by the CD Zone Directors of Cuyahoga County. We have also trained Auxiliary Police for the smaller communities of Parma Heights, North Royalton, Broadview Heights and Seven Hills.

Classes of Auxiliary Firemen have completed their training and are ready to go into action when needed.

Numerous classes have completed the Red Cross Standard First-aid course and others are nearing completion of the course at this time.

Air Raid Warden training is about to get underway. Our short-wave radio communication system, under the capable direction of Dr. F.N. Natherson is ready to go into action at any time with both mobile and stationery equipment.

Transportation, Medical, Radiological, Housing, Demolition and other branches are being organized.

Harry P. Barth, CD
Dir. of Parma.



LAKWOOD

The aim of Lakewood's Civil Defense like any other Civil Defense program, is to teach the people methods of self-protection which will minimize the effects on the population of any enemy bombing, or sabotage. Since the Governor has placed on all Mayors the responsibility for Civil Defense it has also been necessary to organize and train a volunteer organization to assist the existing City Safety Services and to cooperate with the Cleveland organization in caring for all injured and homeless that might be sent to Lakewood.

To do this Lakewood has trained part of a Warden Organization which will have one or more members in every block and part of a staff for 2 Auxiliary Hospitals at Harding and Emerson Jr. High Schools; also 3 200-man First Aid Teams whose supplies will be kept at Lakewood Elks Hall, and at the Harrison and Horace Mann Schools. Training has also been given to Auxiliary Policemen, and Auxiliary Firemen and is planned for Road Clearance, Rescue Emergency Food and Housing teams.

Every school, church and hall has been contacted and have volunteered to serve as Emergency Housing Centers.

Bids for Air Raid Warning Equipment have been opened and installation awaits the decision of the Cuyahoga County Mayors Association as to what uniform system all communities will adopt.

* * * * *

Fred E. Bernard, Co-ordinator of Lakewood Civil Defense.



The next ten pages of this Civil Defense Manual consist of vital information about the atom bomb; descriptions of the effects of an atomic explosion, and concise instructions as to what you can do to insure the greatest degree of safety for yourself, and your family, in the event of an attack.

All material is presented in a condensed, easily understood, graphic style and has been carefully compiled from official government sources, and with the close cooperation of many civil defense officials.

GA COUNTY AND THE AREA

HELP PROTECT OUR COUNTRY

The President of the United States in restating the responsibilities of the Federal Bureau of Investigation has called upon all law enforcement officers, patriotic organizations and individuals to report information pertaining to es-

pionage, sabotage and subversive activities to the FBI.

The following suggestions listed on this page are offered to assist patriotic organizations and individuals in complying with the President's request.

WHAT YOU CAN DO

1. THE NEAREST FBI OFFICE IS LISTED ON PAGE 1 OF YOUR TELEPHONE DIRECTORY. YOU CAN COMMUNICATE WITH THE FBI BY TELEPHONE, LETTER OR CALL AT OUR NEAREST OFFICE.

2. Furnish all facts in your possession. Many times a small bit of information might furnish the data we are seeking. If you have any information on sabotage, espionage, or subversive activities, contact the FBI.

3. The FBI is interested in receiving facts; we are not interested in what a person thinks but in what he does which undermines our internal security. Avoid reporting malicious gossip or idle rumors.

4. Do not circulate rumors about subversive activities, or draw conclusions from information you furnish the FBI. The data you possess might be incomplete or only partially accurate. By drawing conclusions based on insufficient evidence grave injustices might result to innocent persons.

5. Once you have reported information to the FBI do not endeavor to make private investigations. This can best be done by trained investigators who have access to data acquired over the years on individuals engaged in subversive activities. Hysteria, witch hunts and vigilantes weaken internal security. Investigations involving internal security require care and painstaking effort. We all can contribute to our internal security by protecting the innocent as well as by identifying the enemies within our midst. In cases involving espionage it is more important to identify spies, their contacts, sources of information, and methods of communications than to make immediate arrests.

6. Be alert. The greatest defenders against sabotage are the loyal American workmen who are producing the materials and weapons for our defense. They can be the "watch dogs" of defense in every walk of life.

7. The forces which are most anxious to weaken our internal security are not always easy to identify. Communists have been trained in deceit and secretly work toward the day when they hope to replace our American way of life with a Communist dictatorship. They utilize cleverly camouflaged movements, such as some peace groups and civil rights organizations, to achieve their sinister purposes. While they as individuals are difficult to identify, the Communist Party line is clear. Its first concern is the advancement of Soviet Russia and the godless Communist cause. It is important to learn to know the enemies of the American way of life.

John Edgar Hoover, Director
Federal Bureau of Investigation

RED CORE POISED TO STRIKE US

J. Edgar Hoover testifying before a senate appropriations subcommittee said that the fifth column menace from 43,217 known Communists is "far greater than in the last war with the Nazis and subversive elements.

Continuing he stated the Communists "for strategic purposes are emphasizing the need to infiltrate heavy industries such as coal, steel rubber, machinery, transportation, mines and factories engaged in vital defense efforts.

He said their concentration is strongest in such industrial centers as New York, California, Illinois, Michigan, Ohio and Pennsylvania,

"The interruption of the flow of military supplies to our armed services and the undermining of the Civilian will to resist a campaign of sabotage could be as successful as military action against our fighting forces."

REPORT THESE MATTERS DIRECT TO FBI

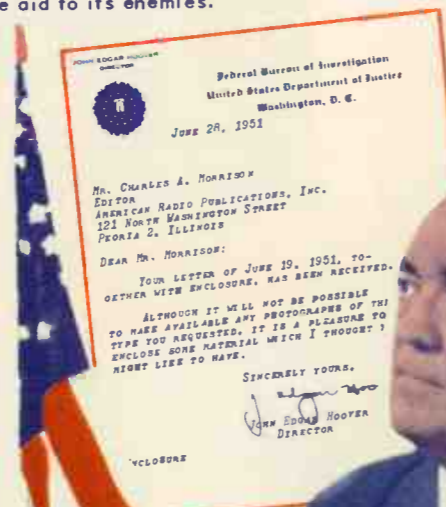
The public should be alert to report all information directly to the FBI which relates to the following specific matters:

1. Allegations of espionage, sabotage, or subversive activities.
2. Foreign submarine landings.
3. Suspicious parachute landings.
4. Possession and distribution of foreign-inspired propaganda.
5. Theft or unauthorized possession or purchase of large quantities of firearms, ammunition or explosives, or short-wave transmitters and receivers.
6. Poisoning of public water supplies.
7. Chartering of airplanes for flights over restricted areas.
8. Fires and explosions of an unusual nature affecting any phase of the defense program.
9. Suspicious individuals loitering near restricted areas.
10. Possession of radio-active materials.

Espionage may be generally defined as the obtaining of confidential information regarding the national defense and furnishing it to unauthorized persons to the detriment of the United States or the advantage of a foreign power.

Sabotage is any act designed to destroy or damage national defense materials - to impede production, injure plant premises, to destroy public utilities, or to produce defective national defense goods.

Under the "term" "subversive activities" would be activities on the part of any individual or organization which are intended to forcibly overthrow the American government or to give aid to its enemies.



J. EDGAR HOOVER

DEFENSE AREA



More than 85 Civil Defense representatives from the 6 counties making up Ohio's Fifth Civil Defense Area, attended a two-day civil defense staff school recently held in Cleveland's Public Auditorium. In the photo a problem in the "web defense" of Cleveland is being worked out.

SHAKER HEIGHTS

The Civil Defense organization of Shaker Heights was completed at the department-head level during the winter of 1950-1951. This organization embraces all functions of Civil Defense, including Air Raid Wardens, Police, Fire, Medical, Highway, School, Shelter and Transportation facilities.

Shaker Heights has additionally been organized into 16 neighborhood divisions, each with a Division Chief responsible for a complete Air Raid Warden organization.

The Civil Defense plans of Shaker Heights are based on the very simple formula that there are two essentials for a civil defense program.

- 1) An adequate air raid warning system
- 2) Thorough instruction of the people in self-defense.

We must depend upon the county to develop an adequate warning system as this must obviously be uniform throughout the metropolitan Area, but our Air Raid Organization is now distributing to all Shaker Heights homes the following instructive matter.

- 1) Survival Under Atomic Attack.
- 2) Fire Fighting for Householders.
- 3) Emergency Food Supplies.
- 4) Emergency Action to Save Lives.
- 5) First Aid Kit.

Civil Defense in Shaker Heights, beyond the program outlined above, will be adjusted from time to time to meet the exigencies of the situation.



Robert B. Dennison
Dir. Civil Defense,
Shaker Heights.

"NOTE MEN"

theaters throughout the State of Ohio. This film which carries a message by, and the endorsement of Governor Frank J. Lausche, is now being made available to civil defense organizations throughout the nation who may wish to borrow it.



An Auxiliary Police Unit in Cleveland Heights. Civil Defense uniforms shown were purchased by the men.

CLEVELAND HEIGHTS

The Cleveland Heights Civil Defense Organization began to function early in Jan., 1951. At that time Auxiliary Police and Auxiliary Fire Units were activated, and began training courses under the direction of the regular City Fire and Police Departments. The city has appropriated funds for the purchase of training rifles and helmets for the Auxiliary Police, and the men have purchased their own uniforms. The fire department has regular fire uniforms on order. Both Fire and Police auxiliary groups are continuing their training and it is anticipated that small moveable pumping units will be available for the Auxiliary Firemen in the near future.

Plans have been drawn up for the establishment of a uniform alarm system employing 25 small siren units distributed around the city, all of which would be set off simultaneously from city hall in the event of an air raid warning.

The city has been divided into 3 zones for the purposes of an air raid warden network. Each zone in turn is divided into units which in turn are divided into sectors, the latter numbering approximately 185 for the city as a whole. Unit and sector wardens have been established in 2 of the 3 zones and it is contemplated that the third zone will be set up shortly after the first of the year. A course in medical self help adopted from that given in New York State has already been given to Unit Chiefs in Zone 1 and they are engaged in instructing their sector chiefs in the course. Sound motion picture films have been purchased to aid in this training and a projector has been contributed.

Amateur radio units have been coordinated into the training program and at present a transmitter is being installed in the City Hall and one in the Drs. Hospital to provide auxiliary communications. It is anticipated that two more transmitters will be built in 1952 in large schools in two of the suburbs to complete the auxiliary communications network. Health and welfare centers will be tied into the overall program.



John B. Calfee,
Defense Director of
Cleveland Heights

LORAIN

Lorain Civil Defense was organized in September, 1950, at the request of Mayor P.J. Flaherty and upon authority of a special Civil Defense Ordinance approved by City Council. Willard B. Zimmerman, local business man, was appointed as Director and he set up a board of business, industrial and professional leaders to head the city organization. In this group are: Carl Olson, Asst. City Director; Earle Seidner, Director Training & Operations; Ralph Thibaut, Director Personnel; M.J. Powers, Director Supply; Dr. M.C. Kolczun, Director Health; Earl White, Director Industry; Gene Hopkins, Director Information; Mrs. Gerald Krupp, Director Women's Division and Ralph Neumeyer, Director Public Relations. In the past year much progress has been made and almost 1000 persons have received basic training sufficient to make them of immediate value in event of an emergency. Especially active have been the Civil Police Unit - more than 200 men completely trained and equipped, and the Women's Division, which is making a block-by-block survey of the City. Air Raid Warden and other classes are underway. City council has provided funds for administration of the program, with a part-time secretary and with headquarters in the Chamber of Commerce Office. Lorain, near Cleveland, is preparing to cooperate in the "mobile defense" program for inter community assistance in this area.

W.B. Zimmerman, City
Director, Lorain Civil
Defense.



TARGET CLEVELAND



This is Cleveland, leading industrial and manufacturing center. Seventh city in size in the U.S., Cleveland has a population of 914,808. The metropolitan area including Cuyahoga, and part of Lake County, has a population of 1,456,511.

Cleveland's Public Auditorium and Exhibition Hall, one of the largest in the U.S., cost \$12,000,000. Its main auditorium seats 13,156; the Music Hall 3,000. The total exhibit area is 259,000 square feet, including a huge underground hall.

There are approximately 3,163 industries in Greater Cleveland with a total annual value of products in excess of 3 billion dollars. Shown is the Tapco Plant of Thompson Products Photo

The Multi-million dollar Lewis Flight Propulsion Laboratory of the National Advisory Committee for Aeronautics, largest of its kind in the world, does basic research and development of aircraft propulsion devices, accessories, instruments, fuels and lubricants.

Nela Park, East Cleveland, houses the executive and laboratory activities of the Lamp Department of the General Electric Co.; is the home of the famous G.E. Lighting Institute.

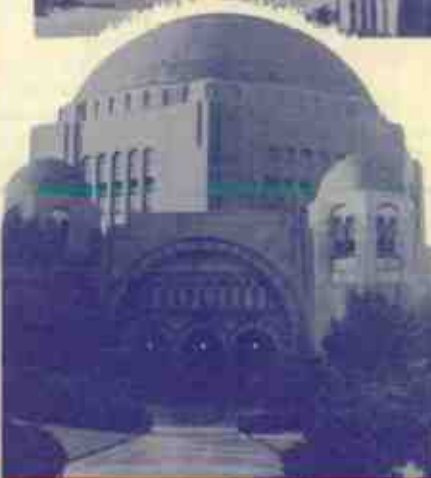
Magnificent Cleveland Museum of Art, overlooking the Fine Arts Garden, is a gem of classic architecture in white Georgian marble.

Cleveland Airport, the largest municipal airport in the world. A major aviation center served by 9 major airlines. Cleveland also has a downtown lakefront airport.

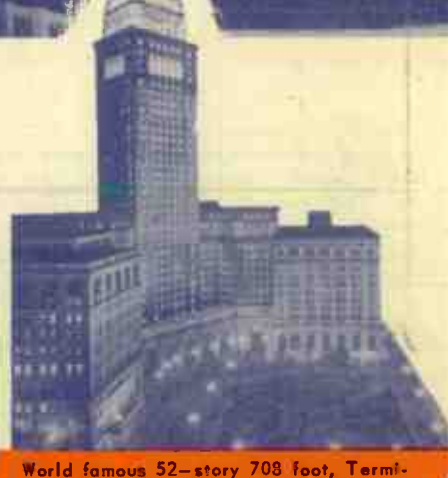
Entrance to Cleveland's fine harbor, showing the United States Coast Guard Station in the foreground. In the background looms the 52-story Terminal Tower.

The U.S. Naval training submarine Gar at its berth in Lake Erie off the Cleveland lakefront (Air Force Photo)

Com. Bricker M. Ganyard, USN Inspector-Instructor, Naval Reserves, & Officer-in-Charge, Naval Reserve Training Facilities, Cleveland Ohio.



Symbolic of Cleveland's many fine houses of worship is the Temple (Jewish Reformed)



World famous 52-story 708 foot, Terminal Tower, dominant unit of the Terminal Group. To the right is the Cleveland Hotel; to the left Higbee's Department Store. In the foreground is Public Square, downtown Cleveland.



The Ohio Bell Telephone Building in downtown Cleveland is a carefully guarded communications center. (Ohio Bell Telephone Co. Photo)



Historic, and picturesque, Old Stone Church, on Public Square, in downtown Cleveland.



One of the nation's outstanding libraries, the Cleveland Public Library has 2,634,000 volumes in its collection; has 31 branch libraries. (Cleveland Public Library Photo)



Beautiful St. John Cathedral, consecrated by Hoban in 1948. (Catholic Universe Bulletin Photo)



One of the tallest industrial structures in Ohio, is the new Cat Cracker at the No. 1 Refinery of the Standard Oil Co. in Cleveland (John Trauger - Standard Oil Co. Ohio)



In ore receipts Cleveland leads all lower lake ports with 15 million gross tons in a busy year. Here the Erie Railroad's gigantic Hulett unloader are removing 17 tons of ore from a ship's hold on each trip. (Erie Railroad Photo)



Cleveland's industry is based upon the production of iron and steel. This plant of Republic Steel Company in Cleveland has the world's largest steel strip mill. (Great Lakes Photo by Carl McDow)



As a leading transportation and shipping center Cleveland has extensive rail facilities. Here, one of the many streamliners passing through the city daily emerges from the underground Union Terminal (Erie Railroad Photograph)

WHK'S STAFF AND FACILITIES ARE

(Below) K.K. Hackathorn, Vice President and General Manager of WHK, co-ordinates the over-all operation of "Radio Cleveland." Alert to the civil and culture needs of Greater Cleveland and Northeastern Ohio, Mr. Hackathorn has guided the growth and progress of WHK to make the station one of the outstanding of Ohio radio. Under his expert guidance, WHK supplies a constant stream of information to the people of Cleveland and seventeen counties in Northeastern Ohio.



5000 Euclid Avenue Cleveland 3, Ohio

WHK and its staff are most happy to cooperate with the Civilian Defense authorities who have done a magnificent job of planning for the Metropolitan Cleveland area. Countless hours of work by a loyal group of citizens have been devoted to the task of trying to set up workable plans to meet disaster, panic, fire, and other effects in the event of bombing.

Civilian Defense is not a matter of concern for a few persons. It is a matter which affects every single person in the entire county. Each citizen must assume a certain amount of responsibility, the least of which is to know how and what to do under an emergency.

Radio is a vital and necessary part of Civilian Defense planning. In an emergency, radio will not only be the source of up to the minute news, but the only source from which all of the people will get instant instructions on what to do and how to act. Every home should have more than one radio. In each home, there should be at least one battery operated portable set.

WHK and its staff are pledged to give their fullest support in the interest of Civilian Defense. Are you prepared to do likewise?

K.K. Hackathorn
Vice President



J.B. Maurer, Sales Manager, K.K. Hackathorn, Vice president and General Manager, C.M. "Pinky" Hunter, Program Director of WHK, discuss and plan WHK's service to the community in the event of attack.



C.M. "Pinky" Hunter, as Program Director of WHK, plans and supervises the voice of "Radio Cleveland." News public service and entertainment are his tools. His experience in radio and its allied fields qualify "Pinky" to keep the public informed and guided in the event of attack.



(Below) WHK, "Radio Cleveland", covering 104,600 square feet, stands ready to serve Greater Cleveland in any emergency. In peace, "Radio Cleveland" keeps WHK listeners informed and entertained eighteen hours a day. In war or disaster, WHK's studios and facilities, as an emergency center, could house thousands for the Red Cross and disaster organizations.



ENEMIES FROM WITHIN

- Citizens' Committee for Harry Bridges
- Citizens' Committee on Academic Freedom (The)
- Civil Rights Congress
- Civil Rights Council of Northern California
- Committee for Citizenship Rights
- Committee For the First Amendment
- Committee on One Thousand
- Congress of American Women
- Consumers Union
- Council on African Affairs
- Citizens' Committee for the Defense of Mexican American Youth
- Citizens' Committee for the Motion Picture Strikers
- Citizens Committee to Support Labor's Right
- Civil Rights Federation
- Committee for a Democratic Far Eastern Policy
- Committee for Civil Rights for Communists
- Committee for Peace through World Cooperation
- Committee for the Care of Young Children in Wartime
- Communist Information Bureau (Cominform)
- Conference for Democratic Action
- Conference on Constitutional Liberties in America
- Conference on Pan American Democracy
- Consumers' National Federation
- Contemporary Theatre
- Council of United States Veterans
- Daily Worker Press Club
- Daily Worker Publishing Co.
- Daughters of the American Revolution
- Descendants of the American Revolution
- Down Town Forum
- Dramatic Workshop
- Exiled Writers Committee
- Federated Press
- Film Audiences for Democracy
- Films for Democracy
- Four Continent Book Corporation
- Free Italy Society
- Film and Photo League
- Freedom from Fear Committee
- Friends of the Campus
- Friends of the Chinese People
- Frontier Films
- Group Theatre
- Galena Defense Committee
- Garrison Films Distributors, Inc.
- Harry Bridges Defense Committee
- Harry Bridges Victory Committee
- Hawaii Civil Liberties Committee
- Hollywood Democratic Committee
- Hollywood Motion Picture Democratic Committee
- Hollywood Peace Forum
- Hollywood Theatre Alliance
- Hollywood Writers Mobilization
- Holyoke Book Shop
- Hold the Price Line Committee
- Hollywood Community Radio Group, Inc.
- Icor
- Independent Citizens Committee of the Arts, Sciences, and Professions
- Independent Progressive Party
- Independent Socialist League
- Independent Voters Committee of the Arts and Sciences
- International Book Store, San Francisco
- International Committee on African affairs
- Industrial Workers of the World
- International Congress of Women
- International Democratic Women's Federation
- International Juridical Association
- International Labor Defense
- International Publishers
- International Union of Students
- International Workers Order
- Jewish Blackbook Committee of Los Angeles
- Jewish People's Committee
- Jefferson Chorus
- Jewish Peoples Fraternal Order
- Joint Committee for Trade Unions on Social Work
- Keynote Recordings, Inc.
- Korean Culture Society
- Korean Independent News Company
- Labor Research Association
- League of American Writers
- Labor Youth League
- League of Workers Theatres
- League of Young Southerners
- League of Struggle for Negro Rights
- Lincoln Book Store, Hollywood
- Maritime Book Shop, San Francisco
- Methodist Federation for Social Service
- Metropolitan Interfaith and Interracial Coordinating Council
- Modern Culture Club
- Motion Picture Artists Committee
- Mobilization for Democracy
- Model Youth Legislature of Northern California
- Modern Book Shop, Santa Barbara
- Motion Picture Democratic Committee
- Musicians' Democratic Committee
- National Committee for People's Rights
- National Committee for the Defense of Political Prisoners
- National Council of Negro Youth
- National Emergency Conference for Democratic Rights
- National Federation for Constitutional Liberties
- National Lawyers' Guild
- National Negro Congress
- National Negro Women's Council
- National Student League
- National Youth Assembly Against Universal Military Training
- National Civil Rights Federation
- National Committee Against Censorship of the Theatre Arts
- National Committee to Abolish the Poll Tax
- National Committee to Win the Peace
- National Conference on Civil Liberties
- National Congress for Unemployment and Social Insurance
- National Council of the Arts, Sciences and Professions
- National Institute of Arts and Letters
- National Joint Action Committee for Genuine Social Insurance
- National Labor Committee Against War
- Negro Cultural Committee
- Negro Labor Victory Committee
- New Union Press
- New Theatre League
- New Union Press
- New York Conference on Civil Rights
- New York Peace Association
- Non-Partisan Labor Defense
- Non-Sectarian Committee for Political Refugees
- Northern California Civil Rights Council
- Open Road
- Pacific Northwest Labor School
- Pacific Publishing Foundation, Inc.
- Pax Productions
- People's Artists, Inc.
- People's Educational Center
- People's Chorus
- People's Committee to Investigate Un-American Activities
- People's Institute of Applied Religion
- People's Orchestra
- People's Peace
- People's Radio Foundation, Inc.
- Progressive Citizens of America
- Progressive Book Shop, Los Angeles and Sacramento
- Progressive Women's Council
- Prompt Press
- Provisional Committee for Democracy in Radio
- Public Use of Arts Committee
- Seattle Labor School
- Second Annual California Model Legislature
- School for Democracy
- Scientific and Cultural Conference for World Peace
- Slavic Council of Los Angeles
- Southern Conference for Human Welfare
- Southern Negro Youth Congress
- State-Wide Legislative Congress (California)
- Student Conference Against War
- Stage for Action
- State-Wide Civil Rights Conference (California)
- Theatre Arts Committee (TAC)
- Theodore Dreiser Work Shop
- Trade Union Advisory Committee
- Trade Union Service
- Trade Union Theatre
- Twentieth Century Book Store
- Teen-Age Art Club
- Tom Mooney Labor School
- Trade-Union Unity League
- Twentieth Century Book Shop, Oakland, Calif.
- United American Artists
- United Committee of Action
- United Veterans for Equality
- Vanguard Press
- Veterans and Wives, Inc.
- Veterans National Liaison Committee
- Veterans of Equality
- Victory Book Store
- Western Council for Progressive Labor in Agriculture
- Western Writers Congress
- Wives and Sweethearts of Servicemen
- Workers Cultural Federation
- Workers Ex-Servicemen's League
- Workers Alliance
- Workers Library Publishers
- Workers' School of Los Angeles
- World Federation of Democratic Youth
- World Congress of Intellectuals
- World Peace Congress
- World Youth Council
- Young Communist League
- Young People's Records
- Young Pioneers of America
- Young Progressive Citizens Committee
- Young Workers League



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HAROLD H. VELDE, M.C.
Ranking Minority Member,
Un-American Activities
Committee
(Formerly with FBI)



SUBVERSIVE ORGANIZATIONS IN THE U. S.

- There are easy tests to establish the real character of such organizations:
1. Does the group espouse the cause of Americanism or the cause of Soviet Russia?
 2. Does the organization feature as speakers at its meetings known Communists, sympathizers, or fellow travelers?
 3. Does the organization shift when the party line shifts?
 4. Does the organization sponsor causes, campaigns, literature, petitions, or other activities sponsored by the party or other front organizations?
 5. Is the organization used as a sounding board by or is it endorsed by Communist-controlled labor unions?
 6. Does its literature follow the Communist line or is it printed by the Communist press?
 7. Does the organization receive consistent favorable mention in Communist publications?
 8. Does the organization present itself to be nonpartisan yet engage in political activities and consistently advocate causes favored by the Communists?
 9. Does the organization denounce American and British foreign policy while always lauding Soviet policy?
 10. Does the organization utilize Communist "double talk" by referring to Soviet-dominated countries as democracies, complaining that the United States is imperialistic and constantly denouncing monopoly-capital?
 11. Have outstanding leaders in public life openly renounced affiliation with the organization?
 12. Does the organization, if espousing liberal progressive causes, attract well-known honest patriotic liberals or does it denounce well-known liberals?
 13. Does the organization have a consistent record of supporting the American viewpoint over the years?
 14. Does the organization consider matters not directly related to its avowed purposes and objectives?

This is a condensed list of organizations listed as subversive by the House Un-American Activities Committee and the U. S. Attorney General's Office.

- Abolish Peonage Committee
- Abraham Lincoln Brigade or Battalion
- Abraham Lincoln School
- Academic and Civil Rights Committee
- Academic and Civil Rights Council of California
- Action Committee to Free Spain
- Actors Laboratory
- Actors' Laboratory Theatre
- African Blood Brotherhood
- All-American Anti-Imperialist League
- All-California Conference for Defense of Civil Rights and Aid to Labor's Prisoners
- Allied Labor News Service
- Allied Voters Against Coudert
- Almanac Singers
- American Artists Congress
- American Association for Reconstruction in Yugoslavia
- American Association of Scientific Workers
- American Committee for a Korean People's Party
- American Committee for Anti-Nazi Literature
- American Committee for Democracy and Intellectual Freedom
- American Committee for European workers' Relief
- American Committee for Free Yugoslavia (The)
- American Committee for Friendship with the Soviet Union
- American Committee for a Free Indonesia - San Francisco
- American Committee for Protection of Foreign Born
- American Committee for Russian Famine Relief
- American Committee for Spanish Freedom
- American Committee for Struggle Against War
- American Committee for Yugoslav Relief

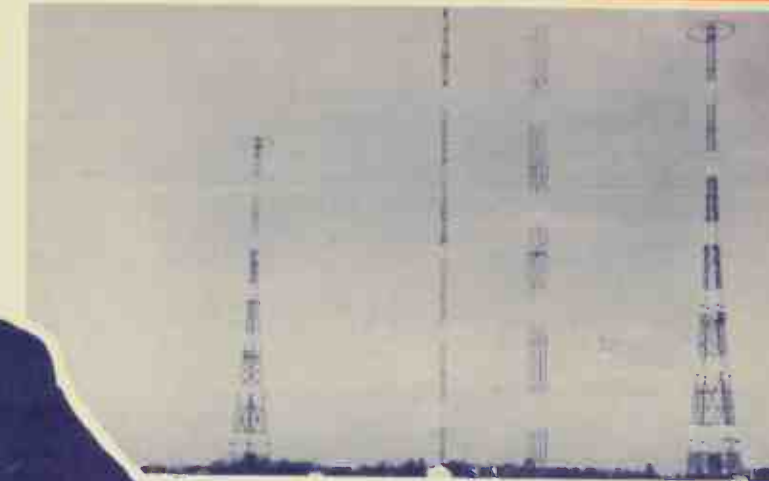
- American Committee of Jewish Writers, Artists, and Scientists
- American Committee of Liberals for the Freedom of Mooney and Billings
- American Committee to Aid Korean Federation of Trade-Unions
- American Committee to Aid Soviet Russia
- American Committee to Save Refugees
- American Congress for Peace and Democracy
- American Congress to Free Earl Browder
- American Council, Institute of Pacific Relations
- American Council on Soviet Relations
- American Federated Russian Famine Relief Committee
- American Federation for Political Unity
- American Friends of the Chinese People
- American Friends of the Mexican People
- American Friends of the Spanish People
- American Fund for Public Service (Garland Fund)
- American Labor Committee Against War
- American League Against War and Fascism
- American League for Peace and Democracy
- American Negro Labor Congress
- American Peace Crusade
- American Peace Mobilization
- American Round Table of India
- American Russian Institute of Southern California
- American Russian Institute for Cultural Relations with the Soviet Union
- American Russian Institute of San Francisco
- American Russian Music Corporation
- American Slav Congress
- American Society for Cultural Relations with Russia
- American Student Union

- American Writers Congress
- American Youth Congress
- American Youth for Democracy
- All Harlem Youth Conference
- American Friends of Spanish Democracy
- American Investors Union, Inc.
- American Jewish Labor Council
- American Labor Alliance
- American Labor Party
- American League of Ex-servicemen
- American People's Fund
- American People's Mobilization
- American Polish Labor Council
- American Pushkin Committee
- American Relief for Greek Democracy
- American-Russian Fraternal Society
- American Russian Institute (New York)
- American Russian Institute (Philadelphia)
- American-Soviet Science Society
- American Soviet Music Society
- American Youth for a Free World
- Appeal for Lawrence Simpson
- Artef
- Artists' Front to Win the War
- Associated Film Audiences
- Associated Magazine Contributors
- Book Find Club
- Book Union
- California Committee for Political Unity
- California Congerence for Democratic Action
- California Labor School
- California Legislative Congress
- California Youth Legislature
- Carpatho-Russian Peoples Society
- Cervantes Fraternal Society
- China Aid Council
- Citizens' Committee for Better Education

DEDICATED TO THE PUBLIC DEFENSE



Master Control, the heart of WHK, controls and keeps WHK on the air serving 1,000,000 radio families in Northeastern Ohio eighteen hours a day.



WHK's transmitter radiates a 5,000-watt signal to seventeen counties in Northeastern Ohio serving more than 1,000,000 radio families. (Located at Pleasant Valley and State Roads.)

(Above) Ralph H. DeLany, Chief Engineer of WHK, calls upon twenty-five years of engineering skill to keep on the air. The technical advancement of WHK is a direct result of his untiring efforts to make WHK one of the largest and best equipped stations in the county.

(Left) Bill Gordon, Cleveland's No. 1 disc jockey, on the air five hours a day, six days a week, reads a defense manual to be fully prepared to help his listeners and fans.

(Below) Studio One, with its seating capacity of 1,400, can be utilized for training programs, meetings and an emergency headquarters.



Joe Black, WHK staff announcer, and Lt. John Berichon of the Cleveland Fire Department, discuss Fire Safety in the home. "Fire Safety" has been on the air over WHK for more than fifteen years.



Eleanor Hanson, left, Director of Women's Activities, Tom Fletcher, standing, staff announcer of WHK, and Esko Townell, right, disc jockey-announcer of WHK, discuss civil defense plans for the station and WHK listeners.



Wayne Skakel, left, News Director of WHK, and Tom Fletcher, right, staff announcer, work together preparing a newscast from the wires of Associated Press. WHK's news room would be the focal point for all information covering the disaster area.



WHK's newscasters and Jack Pluntze, Assistant news Director of WHK, hold a briefing session for the civil defense area of Northeastern Ohio. Left to right, Esko Townell, Brian Hodgkinson, and Rob Evans. Standing Jack Pluntze.

TS OF AN ATOMIC BLAST

IT CAN HAPPEN IN CLEVELAND

CLEVELAND CIVIL DEFENSE STAFF

(Tentative)

John J. Pokorny, Director of Civil Defense
Harry N. Hobart, Deputy Director

(S-1) PERSONNEL AND WELFARE
Edward L. Worthington, Director
Charles H. Williams, Central Records
John J. Shaffer, Welfare Activities
Donald E. Hagaman, Housing and Evacuation of Homeless
Henry L. Zucker, Welfare Processing, Registration and Information Centers

(S-2) INFORMATION
Daniel J. Gorman, Director, Warden Services, Warning System, Estimates for Damage Control and Casualties
Robert H. Marquardt, Public Relations and Information
Mrs. E. D. Alexander, Speakers Bureau

(S-3) OPERATIONS AND TRAINING
Alvin J. Sutton, Director
Col. Mack Garr, Plans, Operations and Training
Fred F. Leustig, Training Deputy
William W. Lytle, Operations Deputy
Nathaniel W. Baker, Communications
Thomas E. Story, Radio Communications
Ass't. Chief Frank J. Cooney, Fire and Auxiliary Operations
Bn. Chief Francis X. Andrews, C.F.D., Rescue Operations
Insp. Patrick J. Lynch, Police and Auxiliaries
* 5 Sector Commanders (Police Officials) and one alternate for each
Captain Emil Ludwig, C.F.D., War Chemicals and Radiological Monitoring

* To be designated by the Director of Safety

(S-4) SUPPLY: (Includes engineering and utilities activities)
Emil J. Crown, Director
Edward P. Stapleton, Deputy Director
Leo Weil, Purchasing and Supply
George W. Hamlin, Metropolitan Water Supply System
E. C. Richardson, Sewer System
George E. Flower, Sewage Disposal Plants and Emergency Disposal
Vincent M. DeMolto, City Electric Power Supply
Kimball L. Wheeler, C.E.I. Co., Electric Power Supply
H. C. Southwick, East Ohio Gas Co., Natural Gas Supply
Fred T. Vitovec and
Harry Siskind, Street Repair and Clearance of Obstacles and Rubble
John C. Wenrick, Engineering Activities, Demolitions, Repair of Bridges, etc.
Stanley J. Ryan, Transportation, all types

(S-5) HEALTH:
Dr. Harold J. Knapp, Director
Mrs. Kay Gasker, Associate Director and Liaison Agent with Academy of Medicine
Dr. John G. Smith, Medical Care
Dr. H. G. Lockwood, Public Health
George W. Hamlin, Sanitation and Food Inspection
Dr. George L. Sackett, Professional Training
Dr. Samuel R. Gerber, Mortuary Service and Evacuation of Dead
Sue Z. McCracken, Nursing Service
Mildred McIntyre, Nursing Service, Deputy
E. B. Buchahan, Sanitation and Food Inspection, Deputy

RADIATION INJURIES

Because of the concentration of ionizing radiation nearly everyone not protected by earth, steel, or thick concrete within a radius of approximately 3000 ft. would probably die. The most serious cases would succumb within a few hours to 4 or 5 days after exposure. A second group would develop susceptibility to infection due to destruction of their white blood cells and would die from 4 days to 6 weeks after exposure. Another group would incur multiple hemorrhages and die within 2 to 3 weeks from this cause.

THEIR TREATMENT

Many people believe that very little can be done in treatment of radiation casualties. This is true of a lethal

GENERAL

There is little about the effects of either old or new weapons which is new to the health professions. The atomic bomb produces burns, lacerations, amputations, crushing injuries, and blast injuries which all surgeons are accustomed to treating. Radiation sickness is a new type of wartime injury, but it is not a new disease and its symptoms are recognized by physicians, particularly radiologists.

When the dose is 400 r or less, many lives can be saved with proper treatment. Immediate hospitalization, so as to insure complete rest, and avoidance of chills and fatigue, is the first step. Whole blood transfusions should be given as required, until the bone marrow has had time to regenerate blood cells. Adequate nourishment should be provided by intravenous feeding to supply necessary sugars, proteins, vitamins, etc. Infection may be controlled by the use of penicillin and other antibiotics.

Findings in Japan show that people exposed to heavy radiation suffer various injuries, sicknesses, and malfunctions which together are called the **acute radiation syndrome**. Physicians find that the severity of the symptoms is related importantly to two factors: The amount of radiation absorbed in a single dose, and the proportion of the body exposed.

No unusual ill effects directly attributable to ionizing radiation have occurred among Japanese survivors. Whether or not such after-effects will occur among these survivors will have to be answered in the future. After-effects from radiation exposure that cannot be fully assessed for many years are effects on heredity and effects on fertility. From investigations, it is found that the likelihood of parents having deformed children after suffering sublethal amounts of ionizing radiation is very slight.

With adequate warning which is heeded and adequate shelters which are occupied, the casualties can be greatly reduced. Furthermore, doctors with ample medical supplies, hospital facilities, and blood banks can save many of those injured by blast or burns.

GAMMA RAYS

Gamma rays are very similar to powerful X-rays and constitute the greatest radiological danger in an atomic blast. They penetrate deeply into the body and ionize the carbon, nitrogen, hydrogen, and oxygen atoms, disrupting the complex body combinations of these elements, changing the proteins, enzymes and other substances that make up our cells and bodies. As a result, the cells are injured or killed; if enough cells are damaged or killed, the person becomes seriously ill or dies.

dose; but many borderline cases can be saved by:

- Good medical care.
 - Whole blood transfusions. It has been estimated that, for a catastrophe such as at Hiroshima, approximately 250,000 pints of blood would be needed, 80,000 per week for the first 3 weeks.
 - Control of infection by antibiotics such as penicillin and aureomycin.
 - Intravenous feeding to supply necessary sugars, proteins and vitamins.
 - Control of the bleeding tendency by use of drugs.
- Whole blood would be required in great quantities, primarily to treat the casualties suffering from mechanical injuries and burns, secondarily to treat victims of ionizing radiation.

One may receive radiation producing far more serious tissue damage than a severe burn without any sensation and no damage will be apparent for several days.

In the case of such a high air blast as in Japan, some 15 to 20 per cent of the deaths probably will be caused solely by nuclear radiation. The remaining 80 to 85 per cent will be caused primarily by injuries suffered in the collapse of buildings and by burns, although many of these may also suffer severe radiation exposure.

A dose of 400 r (roentgens) of radiation received over the whole body in the course of a few minutes represents the median lethal dose which would be fatal to about 50 per cent of human beings. At the minimum distance of 2100 feet from the explosion, protection from a lethal dose would require something like 20 inches of concrete, 3 inches of lead, or 40 inches of packed earth.

CONTAMINATION

The chief external radiation hazard in a contaminated area will come from gamma rays thrown off by fission products or by materials made radioactive by neutrons or gamma rays during the explosion. Filter masks, clothing tight at the wrists, ankles, and neck, and tight-wristed gloves will afford protection against Alpha and Beta particle contamination. Material heavily contaminated with Beta-emitting material should not, however, be handled, even with gloved hands, since it can cause severe burns. Tongs or equivalent instruments should be used. Clothing should be discarded at the edge of the contaminated area to avoid spreading radioactive contamination. Thorough soap-and-water bathing would be a valuable precaution.

Gamma radiation from contamination will not approach the power of direct bomb radiation, but it still can be severe. The best protection against contamination that gives off gamma radiation is to use instruments to detect its presence and to avoid any areas of dangerous concentration.

At a bomb burst, contaminated particles of the size which will most readily pass from the small airpockets of the lung into the blood stream ascend rapidly into the atmosphere. The chances of inhaling a dangerous amount of these small particles is small unless explosion occurs during rain or heavy overcast. A combat-type gas mask will filter out 99.999 per cent of all such particles.

Any wound suffered in a contaminated area should be cared for in the same manner as any similar injury in an uncontaminated area. Clean such a wound with soap and water or potassium permanganate, cut out the damaged tissue, and cover the wound. Amputation is not indicated.

THOMAS A. BURKE
MAYOR

City of Cleveland

The City of Cleveland has been listed as one of the prime targets in the nation for atomic bombing by the enemy, should World War III become a reality. Our factories and mills produce more than three billion dollars worth of essential goods each year. We can be proud of this fact. We must, however, be prepared to face the dangers that such a production record carries with it.

If the time does come when enemy bombers destroy our productive capacity, we can, with some difficulty, replace the machines and instruments of production. We cannot replace the lives that will be lost if our citizens are not prepared for atomic attack.

Therefore, I urge each and every citizen in the Greater Cleveland community to heed the warnings and instructions being issued by the Office of Civil Defense. If we are prepared, we can save many thousands of lives that would otherwise be lost. Civil Defense is a personal responsibility which must be recognized by each of us.

Sincerely yours,

Thomas A. Burke
Mayor

Mayor Thomas A. Burke, of Cleveland.



CITY OF CLEVELAND
OFFICE OF CIVIL DEFENSE

CITY HALL

CLEVELAND 14 OHIO
December 5, 1951

MAIN 1-4800

Civil Defense has been made necessary because of the strained international situation and has been defined as a defense of the homefront by civilians and civil authority in time of war.

The responsibility for establishing an efficient, well-prepared Civil Defense Organization rests ultimately on each community. Since an attack by the enemy would be against cities and people, each community must be prepared to meet the problems that would result in case of atomic strikes.

We know that our potential enemy has the A-bomb and the means of delivering it to our cities. Because the bomb does not select certain groups of people Civil Defense becomes everybody's business. Cleveland being a highly industrialized community, is a logical target, but due to inaccuracy or accidental dropping of a bomb, no community can afford a placid attitude.

Civil Defense is a type of insurance. As individuals, we all need to know what to do in an emergency so as to help ourselves and our neighbors.

Your Civil Defense Organization also needs you as an active volunteer in any of the many phases of the program. You have a part to play in Civil Defense and cannot delegate this responsibility to your neighbors. Unless there is active participation by all, your Civil Defense Organization cannot operate efficiently and effectively.

John J. Pokorny
Director of Civil Defense
City of Cleveland

John J. Pokorny, Civil Defense Director of Cleveland

PERSONAL INJURY EFFECTS

INJURIES FROM ATOMIC EXPLOSION

- I. Those caused by the blast pressure or shock wave directly.
- II. Those caused when buildings are wrecked.
- III. Those caused from radiant heat.
- IV. Those caused by burns, either in the wreckage or otherwise.
- V. Those caused by nuclear radiation.
- VI. Those caused through residual contamination.

BLAST INJURIES

Direct blast injury may occur whenever the greatly increased air pressure comes into contact with body surfaces, causing multiple hemorrhages, particularly of the intestinal tract, the stomach, the lungs, the ears, and the sinuses about the nose. Direct blast is not a significant primary cause of death. Most blast injuries are the result of missiles, such as broken glass, falling bricks, etc.

The shock wave from the blast sweeps outward rapidly from ground zero and, in the case of Japan, took up to 10 seconds to travel 2 miles.

In the water, the dangerous level for pressure is about 500 pounds per square inch. In an underwater atomic explosion, any person immersed in the water probably would be killed or seriously injured up to 2,000 yards from the zero point.

Since practically all brick and light masonry buildings with weight-bearing walls in the blast area will be wrecked, wooden buildings flattened, and the doors and other partitions of blast-resistant steel-reinforced concrete buildings blown out, people in or near these buildings will be killed or injured by collapse of structures, and by missile effects of debris.

FLASH BURNS

The flash burns caused by an atomic explosion may be first degree, merely reddening the skin; second degree, causing blisters; or third degree, damaging all layers of the skin.

Severe burns are caused both by the radiant heat from the explosion of the atomic bomb (flash burns) and from the fires that break out in the wreckage (flame burns). The effects of visible light probably are not significant. Even those who look directly at the burst apparently suffer only temporary dazzling and loss of vision.

Atomic bomb flash burns are distinctly different from those caused by other types of explosions, since they are due to radiant heat rather than to hot gases, as in the case of shell bursts or gasoline explosions. Shadow effects are prominent. An ear, for example, might be badly burned, yet the skin behind the ear be unharmed.

As compared with flame burns, flash burns show a much smaller depth of penetration of the skin. This is due to the fact that the thermal radiation flash lasts only approximately 3 seconds. Within the depths to which the thermal radiations penetrate, the tissues appear to be completely destroyed; in a radius of 3600 feet from ground zero blackening

GENERAL

There are no particular problems involved in the treatment of individual injuries received as a result of an atomic attack. Standard treatment procedures can be used in treating mechanical injuries (cuts, lacerations, broken bones, concussions, etc.), burns, shock and radiation effects. Problems of a more serious nature are involved in the necessity of treating thousands of individual cases almost at once, in the immediate need for mountains of medical supplies and prompt evacuation of seriously injured to hospitals outside of the disaster area. There is nothing mysterious about radiation, as man is subject to a constant bombardment of cosmic rays. He accumulates minute amounts of radium in his body through life, and X-rays are used extensively in the treatment of certain illnesses. The only difference in atomic radiation is in the types of rays and the intensity.

FLAME BURNS

A conflagration may be expected to follow any atomic bomb blast. Fire damage light in underwater bursts.

Burns suffered from flames, in such cases, differ in no way from those encountered in any ordinary intense fires unless radiation injury has also been suffered. In Japan, there were many cases where excessive scar tissue (keloids) formed, and many of the survivors have contraction deformities not specifically related to exposure to the atomic bomb, but rather to slow healing, improper care, and infection. Burns suffered in non-atomic bomb raids resulted in comparable amounts of scar tissue, a tendency in Japanese as a race.

It would be unrealistic to prepare for fewer than 40,000 to 50,000 severely burned persons from a single atomic explosion. Fortunately, severe symptoms from radiation in those not killed outright do not ordinarily come on until several days after the acute exposure, so that those suffering from burns and mechanical injuries will actually constitute the chief immediate medical problem and make their heaviest demands on emergency facilities at a time when those suffering solely from acute radiation will require very little attention.

indicates that actual charring has occurred.

Direct injury from radiant heat occurs at the explosion of the bomb; Japanese people in the open suffered third-degree burns up to 1,500 yards and second-degree burns up to 2,500 yards. The effect was instantaneous.

Even loose clothing afforded some protection against atomic flash burns, and color also had a protective effect. White clothing tended to reflect the radiant heat, darker clothing to absorb heat. Burns sometimes were cross-hatched where light clothing was marked with dark lines. Tight clothing was less protection, and burns were inflicted at elbows and where straps crossed the shoulders, for example, while other places where clothing was loose were protected or less severely burned.

As far as burning caused by thermal radiation is concerned, the essential points are protection from direct exposure for human beings and the avoidance of easily combustible materials, especially near windows.



EDITOR'S NOTE: As this manual goes to press, a drastic change in the civil defense organization for Greater Cleveland is taking place. When material for the manual was gathered, the more than 60 separate communities within the confines of Cuyahoga County were engaged in building individual Civil Defense corps. There was no definite policy for coordinated action among the communities. Since then, however, the need for unified activity has moved the majority of incorporated cities and villages to band together in the Cuyahoga County Council of Civil Defense.

Under terms of the agreement between the County Commissioners and members of the council, the following action has been taken;

(a) The county has appointed a Civil Defense Director for all unincorporated territory in the county. He is John J. Pokorny, Director of the Cleveland Office of Civil Defense. Mr. Pokorny also has been designated co-ordinator of the county civil defense organization.

(b) A County Council of Civil Defense has been

established. It is composed of the Cuyahoga County Board of County Commissioners, the Mayor of the City of Cleveland, and the mayor or chief executive of each of the participating municipalities.

(c) A Civil Defense Advisory Committee has been formed to assist and advise the Civil Defense Coordinator. It consists of the Mayor of Cleveland, the Presidents of the County Board of Commissioners and seven members to be chosen by the County Council.

(d) The Advisory Committee has prepared a budget known as "Cuyahoga County Civil Defense Fund." Upon termination of the county organization, the remaining money in the fund will be distributed to participating communities in the same proportion as their contributions.

(e) Each community's share of the fund is figured at 50% on the basis of population, and 50% on the basis of tax duplicate.

(f) The agreement automatically binds the communities to a mutual aid pact.

AS WE GO TO PRESS

VOLUNTEERS FOR CIVIL DEFENSE

In March, 1951, a mass registration for Civil Defense volunteers was held in Cleveland. More than 11,000 volunteers signed up for the 16 job categories that will be needed if the city is bombed.

The Cuyahoga County Civil Defense Organization, now defunct, began the tremendous job of classifying registrants and constructing a schedule for training classes. Unfortunately, before the task could be completed the county organization was disbanded. When the Cleveland Office of Civil Defense was organized the following June, it took up where the county group had left off. The Cleveland organization is now in the process of assigning volunteers to classes and hopes, within the near future, to be ready with a trained corps of Civil Defense Workers.

Arrangements have been made for citizens who wish to volunteer for Civil Defense Work to do so at their local police and fire stations.



At the Cleveland Office of Civil Defense (L to R), Col. Garr, Deputy Director; John J. Pokorny, Director, and Bob Marquardt, Asst. Public Information Director, go over the latest literature from the Federal Civil Defense Administration.



The Public Information Staff of Cleveland Civil Defense at work on an important publicity release. Shown (L to R) are Mary Mallchok, secretary; Mrs. Edw. J. Alexander, head of the Speaker's Bureau; Bob Marquardt, Asst. public information director, and Dan Gorman, public information director.

CIVIL DEFENSE REGISTRATION CUYAHOGA COUNTY		DO NOT WRITE HERE	CODE	
PLEASE PRINT: LAST NAME		FIRST NAME	INITIAL	HOME PHONE
			<input type="checkbox"/> MALE	CITIZEN OF U. S. <input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> FEMALE	DATE FIRST PAPER
PRESENT ADDRESS		PREVIOUS ADDRESS		
NO. _____ STREET _____ CITY _____	NO. _____ STREET _____ CITY _____			
DATE OF BIRTH _____	<input type="checkbox"/> MARRIED <input type="checkbox"/> SINGLE	NO. CHILDREN UNDER _____	HAVE YOU REGISTERED BEFORE FOR PRESENT CIVIL DEFENSE ACTIVITY? <input type="checkbox"/> YES <input type="checkbox"/> NO	
EMPLOYED BY _____	ADDRESS _____	RESUMED PHONE _____	WHEAREY _____	
PRESENT OCCUPATION _____	PREVIOUS OCCUPATION _____	HOURS EMPLOYED FROM _____ TO _____	DO YOU WORK SERVICIOUS SHIFTS? <input type="checkbox"/> YES <input type="checkbox"/> NO	
EDUCATION NO. GRADES COMPLETED _____	DEGREE _____ MAJOR _____	SPECIAL SKILLS AND HOBBIES _____		
HAVE YOU HAD PREVIOUS CIVIL DEFENSE EXPERIENCE? _____	WHAREY _____	KIND OF EXPERIENCE _____	I CAN SERVE—DAYS AND HOURS PER WEEK _____	
MILITARY SERVICE FROM _____ TO _____	BRANCH _____	GRADE AT DISCHARGE _____	PRINCIPAL DUTY ASSIGNMENT IN SERVICE _____	
SERVICE CHOICE		CLASS	FREQUENCY	SIGNATURE
<input type="checkbox"/> AUXILIARY POLICEMAN	<input type="checkbox"/> MEDICAL CORPS			
<input type="checkbox"/> AUXILIARY FIREMAN	<input type="checkbox"/> NURSES AID			
<input type="checkbox"/> AIR RAID WARDEN	<input type="checkbox"/> DECONTAMINATION SQUAD			
<input type="checkbox"/> FIREWATCHER	<input type="checkbox"/> DEMOLITION & CLEARANCE CREW			
<input type="checkbox"/> CLERICAL WORK	<input type="checkbox"/> RESCUE SQUAD			
<input type="checkbox"/> MESSENGER	<input type="checkbox"/> ROAD REPAIR CREW			
<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> EMERGENCY FOOD & HOUSING			
<input type="checkbox"/> DRIVERS CORPS	<input type="checkbox"/> WELFARE ACTIVITIES			
OTHER (WRITE IN): _____		PLEASE DO NOT WRITE IN THIS SPACE		
SHOW YOUR PREFERENCE BY WRITING 1, 2 OR 3 IN BLOCK OPPOSITE THREE SERVICES YOU PREFER.		ASSIGNED AS	DATE	RECORD EXAMINED BY
		B	C	D
		E	F	G
		H	I	J
		K	L	M
		N	O	P
		Q	R	S
		T	U	V
		W	X	Y
		Z	AA	AB
		AC	AD	AE
		AF	AG	AH
		AI	AJ	AK
		AL	AM	AN
		AO	AP	AQ
		AR	AS	AT
		AV	AW	AX
		AY	AZ	BA
		BB	BC	BD
		BE	BF	BG
		BH	BI	BJ
		BK	BL	BM
		BN	BO	BP
		BQ	BR	BS
		BT	BU	BV
		BW	BX	BY
		BZ	CA	CB
		CC	CD	CE
		CF	CG	CH
		CI	CK	CL
		CM	CN	CO
		CP	CQ	CR
		CS	CT	CU
		CV	AW	AX
		AY	AZ	BA
		BB	BC	BD
		BE	BF	BG
		BH	BI	BJ
		BK	BL	BM
		BN	BO	BP
		BQ	BR	BS
		BT	BU	BV
		BW	BX	BY
		BZ	CA	CB
		CC	CD	CE
		CF	CG	CH
		CI	CK	CL
		CM	CN	CO
		CP	CQ	CR
		CS	CT	CU
		CV	AW	AX
		AY	AZ	BA
		BB	BC	BD
		BE	BF	BG
		BH	BI	BJ
		BK	BL	BM
		BN	BO	BP
		BQ	BR	BS
		BT	BU	BV
		BW	BX	BY
		BZ	CA	CB
		CC	CD	CE
		CF	CG	CH
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PREPARING FOR A RED ALERT AIR RAID SHELTERS

AIR RAID WARNING SYSTEM

As this publication goes to press, Cleveland is moving toward a decision on a system of sirens and controls for alerting the population in the event of an attack by enemy aircraft.

Several manufacturers of warning equipment have made surveys of the city and have recommended various warning systems. Cost estimates based on these surveys show that a complete alarm system will cost about \$200,000. Half of this amount is for sirens, the other half for installation. It is expected that federal and state funds will pay the bulk of the cost.

Late in August, 1951, the Cleveland Office of Civil Defense undertook a test of existing noise making facilities in the Greater Cleveland area to learn whether or not they were adequate for use as a warning system. Every factory whistle, boat whistle, industrial siren, police and fire siren in the city was blown at a pre-arranged time. The greater majority of the people in the city either heard nothing or only a faint sound. The test clearly indicated that a new air raid system is needed if the people of Cleveland are to be given adequate warning of an impending attack.

Since that test, Civil Defense officials have been seeking the best possible warning system at the lowest possible cost. It is expected that final plans for such a system will be completed in the near future.



Cuyahoga County Commissioners, (L to R) J. Gorman, H.W. Spelth, and J.F. Curry, make an inspection tour of one of the air raid shelters in the Cuyahoga County Court House.

There are no mass air raid shelters in view for Cleveland. Civil Defense officials feel that construction of huge underground shelters would be a useless expenditure of public funds. The short length of time between an air raid alert and the arrival of enemy bombers would not permit evacuation to public shelters.

Instead, an energetic campaign is being conducted to persuade every household in the city to prepare its own shelter. Residents are being asked to pick the safest spot in the house and stock it with emergency medical and food supplies. The emphasis is being directed toward individual preparation for an attack.

At the same time, public and commercial buildings are being inspected to determine their usefulness as air raid shelters. Once the safest place in each building is determined, building owners are asked to post signs indicating shelter areas and signs giving clear directions on how to reach these areas.

Commercial buildings and factories are being organized to provide occupants with a plan for protecting themselves in the event of an attack. Many business buildings and department stores as well as factories already have plans for action during an attack. In most cases responsible people have been appointed as wardens and others have been given first aid training. This, together with stockpiling of emergency supplies, give adequate protection to most of the workers in the city if they are at their jobs when an attack comes.

WHAT TO DO IF YOU HAVE ADVANCE WARNING



AIR RAID instructions

Published by the FEDERAL CIVIL DEFENSE ADMINISTRATION

AIR-RAID ALERT
(immediate attack)

3 minute wailing siren
or short blasts

ALL-CLEAR
(attack over)

3 one minute blasts
2 minutes silence between

1. Move at once to designated shelters or disperse as directed. In the event special shelters have not been prepared, go to the nearest subway or deep basement.

2. If no adequate shelter is nearby, you can still protect yourself against flying debris and some of the heat effect. Get away from frame buildings and trees. Lie down, preferably in a ditch, behind a wall, in a ravine. Protect your eyes from the flash by covering your eyes with your arm. If not, you may be temporarily blinded. Remain under shelter for a few minutes after the blast, to be sure all flying debris has landed.

3. If able, try and help any injured people near you. Administer first aid when possible. Put out any small fires in your vicinity. Each home should have a fire extinguisher available, as chances are that city water pressure will be gone.

4. When you have done what you can in your immediate vicinity, report to the place designated by civil defense

IN THE OFFICE



3A

defense authorities, as you will be needed to help in rescue work, evacuation of wounded, general fire fighting, and other emergency jobs. If no place to report has been designated, see if you can aid any of the emergency crews who will be in operation.

5. After the initial rescue work is done, check with a radiological defense man as to the safety of the area.

6. Take a shower and scrub thoroughly three or four times to remove any radioactive materials that may have gotten on you, using sodium bisulphite or potassium permanganate if badly contaminated, and if advised by competent authorities to do so.

7. Change your clothes, discarding the clothes you wore in the affected areas, especially shoes. **Bury them! Do not burn them!**

8. When feasible, check with a radiological defense adviser and a doctor to make sure you are well and safe.

9. Do not spread rumors. Enough confusion will exist without adding to it.

DON'T DO THIS!



3

CLEVELAND PUBLIC BUILDINGS WITH APPROVED AIR RAID SHELTER AREAS

The following buildings have been inspected and areas to be used for air raid shelters have been recommended. Some shelters are al-

ready designated with official signs and others will be so marked as rapidly as possible.

BONWIT TELLER, 1305 Euclid
B.F. KEITH BLDG., East 17 & Euclid
BOND CLOTHES, East Ninth & Euclid
B.L.E., Ontario & St. Clair Ave.
BUCKLEY BLDG., 1501 Euclid
CATHOLIC CHANCERY BLDG., Superior Ave. East
CLEVELAND STATE HOSPITAL, Turney Rd. & Warner Rd
COUNTY NURSING HOME, 2905 Franklin Ave.
C A C BLDG., Euclid
CENTRAL NATIONAL BANK, 509 Euclid
CROWN BLDG., 310 Lakeside Ave.
CROWN BLDG. ANNEX, 1150 W. Third
CUYAHOGA BLDG., 216 E. Superior Ave.
CLEVELAND BOARD OF EDUCATION, 1380 East Sixth St.
CLEVELAND PUBLIC LIBRARY, 325 E. Superior Ave.
CLEVELAND CENTRAL POLICE STATION, 2001 Payne Ave.
CRIMINAL COURTS BLDG., 1560 E. 21 St.
CUYAHOGA COUNTY JAIL, 1560 E. 21 St.
CUYAHOGA COUNTY COURT HOUSE, Ontario & Lakeside Ave.
COUNTY WELFARE DEPT., 919 Huron Rd.
COMMUNITY SERVICE BLDG., 1001 Huron Rd.
CLEVELAND STADIUM
CITY HALL, East Sixth & Lakeside
COLONIAL HOTEL, Prospect Ave.
COLONIAL ARCADE & BLDG., East Sixth & Euclid
CITIZENS BLDG., 850 Euclid
CENTRAL NATIONAL BANK, 610 Midland Bldg.
COWELL & HUBBARD, 1305 Euclid
DOAN BLDG., 1780 E. Ninth St.
ELLINGTON APT. BLDG., 1712 E. Ninth St.
EUCILD SQUARE BLDG., 1240 Huron Rd.
ENGEL FETZER, 1226 Huron Rd.
FEDERAL POST OFFICE BLDG., Public Square & Superior
FILM BLDG., 2108 Payne Ave.
FAIRVIEW PARK HOSPITAL, 3305 Franklin Blvd.
GREAT LAKES BLDG., 610 Midland Bldg.
HANNA BLDG., Euclid & East 14
HANNA BLDG. ANNEX, Prospect & E. 14
HALLE BLDG., 1228 Euclid Ave.

HALLE BLDG. ANNEX, 1230 Huron Rd. & Prospect
HIGBEE CO. BLDG., Public Square
HURON 6th BLDG., 622 Huron Rd.
ILLUMINATING CO., 75 Public Square
LEADER BLDG., Superior Ave & E. 6th Street
LOWE BLDG., 1515 Euclid
LOWES STATE THEATER, 1515 Euclid
MARSHALL BLDG., Superior Ave. & Public Square
MORRIS BLDG., 819 Vincent Ave.
MARINE HOSPITAL, Fairhill Rd. & East 124
NATIONAL CITY BANK, 1965 E. 6th
NAVY BLDG., 1901 E. 13 Street
NOTTINGHAM BLDG., 423 Euclid
O.P.S. BLDG., 1101-1109 Euclid
OTIS ELEVATOR CO., 1375 E. 6th Street
PICKWICK RESTAURANT, 230 E. Superior Ave.
PEOPLES SAVING & LOAN CO., 4401 Clark Ave.
PUBLIC HALL, E. 6th & St. Clair Ave.
RICHMOND BROS. CLOTHES, 736 Euclid
ROCKEFELLER BLDG., 614 Superior Ave.
SOCIETY FOR SAVINGS BLDG., 145 Public Sq.
STERLING LINDNER DAVIS, Euclid & East 13
STOUFFER RESTAURANT, Euclid
SWETLAND BLDG., 1010 Euclid
THE HIPPODROME BLDG., 720 Euclid
TERMINAL TOWER BLDG., Public Sq.
TRUMAN BLDG., 1030 Euclid
THE MAY CO., 2 Bldg., Euclid Ave. & Ontario
THE BAILEY CO., Ontario & Prospect
UNION COMMERCE BLDG., E. 9th & Euclid
WM. TAYLOR & SON, 630 Euclid
WJW BLDG., 1375 Euclid
W.T. GRANT & CO., 240 Euclid
WILLIAMSON BLDG., Euclid
WELLMAN BRONZE, 2525 E. 93 St.
WOOLWORTH BLDG., 1317-1325 Euclid
1017 EUCLID BLDG.
1440 CHESTER BLDG.
1900 EUCLID BLDG.

WHAT TO DO IF BOMB FALLS WITHOUT WARNING

Your first indication of an atomic bomb burst will be an awesome glare in the sky hundreds of times brighter than the sun. **DON'T LOOK AT THIS GLARE.** YOU WILL EXPOSE YOUR FACE AND BODY TO FLASH BURNS AND DEADLY RADIATION.



1. IF YOU ARE IN THE OPEN, DROP TO THE GROUND INSTANTLY, BACK TO THE LIGHT, AND TRY TO SHADE YOUR BARE FACE, NECK, ARMS AND HANDS. THIS WILL NOT PROTECT YOU FROM GAMMA RAYS BUT WILL PROTECT YOU FROM BURNS which can hurt you far beyond the limits of radiation effects. (See photo No. 1)

KEEP YOURSELF DOWN FOR AT LEAST 10 SECONDS. THE IMMEDIATE DANGER IS THEN OVER AND YOU CAN GET UP AND LOOK AROUND AND DECIDE WHAT TO DO NEXT — IF YOU ARE ABLE.

2. IF YOU ARE IN THE STREET, DUCK BEHIND A TREE OR INTO A CORNER OR A DOORWAY IF IT

IS ONE LEAP OR SO AWAY. BEND OVER, BACK TO THE LIGHT, SO AS NOT TO EXPOSE UNPROTECTED PARTS OF THE BODY — BUT IF SHELTER IS SEVERAL STEPS AWAY, DO NOT TRY TO MAKE IT. FALL TO THE GROUND AS IF YOU WERE IN THE OPEN AND THEN WAIT 10 SECONDS.

THEN PRESS YOURSELF TIGHTLY AGAINST A BUILDING IF YOU CAN, TO AVOID SHATTERED GLASS OR FALLING BRICKS. (See photo No. 2)

3. IF YOU'RE AT HOME OR IN THE OFFICE, DROP TO THE FLOOR, BACK TO A WINDOW, OR CRAWL BEHIND A DESK OR TABLE. THERE IS A LITTLE TIME LAG BETWEEN THE GLARE AND THE BLAST WAVE, SO FOR A FULL MINUTE STAY AWAY FROM THE WINDOWS AND THE DANGER OF FLYING GLASS. SAFEST PLACE INSIDE A BUILDING IS AGAINST AN INTERIOR PARTITION WHICH MAY BE STRONG ENOUGH TO RESIST COLLAPSE.

(See photos No. 3 and 3A)



AVOID PANIC — BE CALM... MASS HYSTERIA

TRAFFIC CONTROL IN AN EMERGENCY

Recognizing the fact that should Cleveland be subjected to atomic attack outside help from other cities in Ohio would be of prime importance, Civil Defense planners have designated 10 principal routes over which help can enter the city and evacuation of casualties and homeless can be effected.

These routes were chosen partly because they would not be likely to be choked with debris from fallen buildings. In the event of an attack, they would be under complete control of Civil Defense authorities who would see to it they were cleared first and kept clear for essential traffic.

Plans for controlling other roads in and out of the city call for patrolling by auxiliary police. These volunteers receive training in traffic control as part of their regular instruction. It is felt that a welltrained traffic control force will mean the difference between mass panic and an orderly evacuation of those parts of the city which are rendered uninhabitable.

Cleveland's "Web Defense" (see Map right) consists of main arterial highways radiating in all directions from the industrial center. The web has been divided into 5 sectors (outlined on map in red), with each sector in charge of a sector commander. Sector control headquarters for each sector is indicated on the map as a red triangle. Main control headquarters for the entire web is indicated as a red square. Civil Defense forces will be spread out in depth along the perimeters of the three circles radiating out from the disaster zone.

MODEL C.D. COMMUNITY

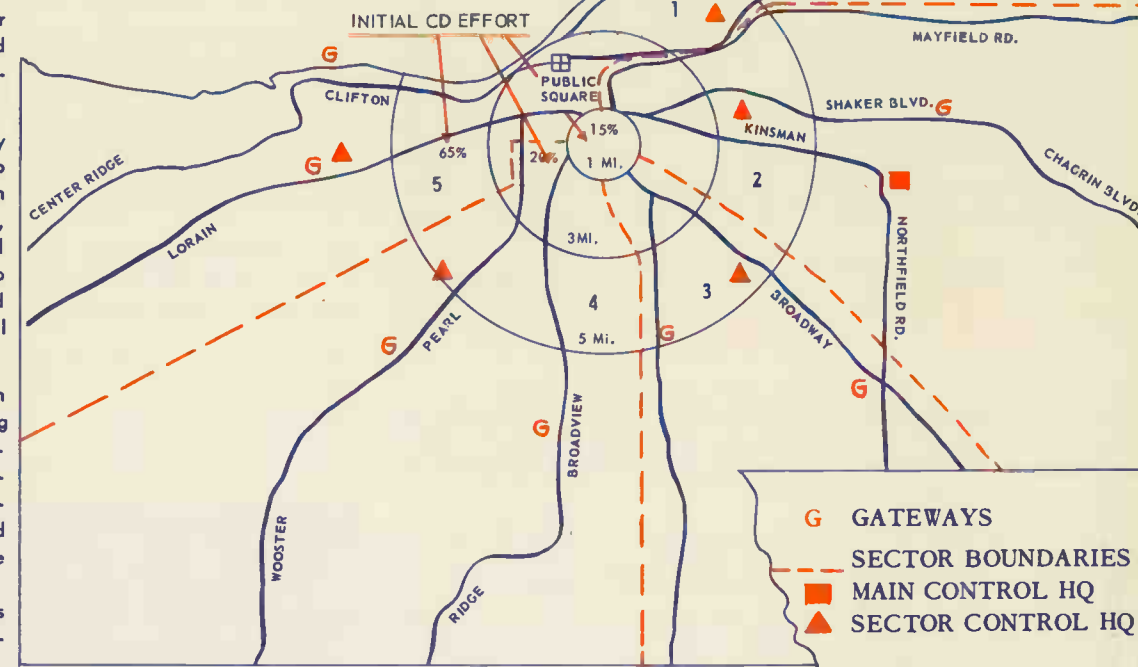
Lakeview Terrace, in the heart of the target area on West 25 Street north of the Main Avenue Bridge, is organizing for defense. At the request of residents, the Cleveland CD Office is setting the community up as a model village to show what can be done to prepare for attack. The emphasis is on individual survival, using the theory that if a person is alive ten minutes after the blast, even in the target area, his chances for survival are excellent IF he knows what to do. Classes in First Aid, Auxiliary Police and Fire Training are under way. Lessons learned at Lakeview Terrace will be applied to the rest of the city.

View showing a small section of Lakeview Terrace, which is being set up as a model CD community.



WEB DEFENSE

Cleveland's "Web Defense" plan, which will be activated immediately should disaster strike, is here outlined.



CLEVELAND C. D. OFFICE OF INFORMATION

The Office of Information occupies a unique position in Cleveland's Civil Defense organization. In addition to keeping the people of the city informed of developments in defense planning, this office is also charged with the responsibility for developing an air raid alarm system for the city and for organizing an effective warden service. It also collects and classifies civil defense information, including the mapping of the overall defense plan, and works with industry for the development of an adequate plant protection program.

A staff of four full-time workers carry out these duties. This staff, as part of its regular duties, operates a speakers bureau, conducts a weekly radio program and publishes an information bulletin each week.

Recently, to enlarge the scope of public relations activities, a group known as the Civil Defense Public Relations Committee was formed. Members of the committee are experts in every medium for the dissemination of information. Civil Defense officials in the city expect that the efforts of this committee will make it possible to get the Civil Defense message into every home in the community and create an active interest in Civil Defense among our citizens.

(L to R). CD Director John J. Pokorny; Sam Sague, WSRP President; Col. Frank Manak, Dir. of 5th Area Command for CD, and Dan Gorman, Dir. of Information for Cleveland CD, go over plans for a series of civil defense broadcasts.





DEFENSE OF THE HO

AUXILIARY POLICE

Auxiliary police for civil defense are being trained by the Cleveland Police Department. Regular classes are held each week for their instruction. The course covers a period of twelve weeks.

Auxiliary police trainees are given training in first aid, police science, traffic control, sabotage control and general police law. Particular emphasis is directed toward traffic control. If the city were to be subjected to atomic bombardment, an effective traffic control plan would mean the difference between panic and orderly flow of supplies and people. Only with complete control of the routes in and out of the city can help be brought in and evacuation of casualties be carried out effectively.

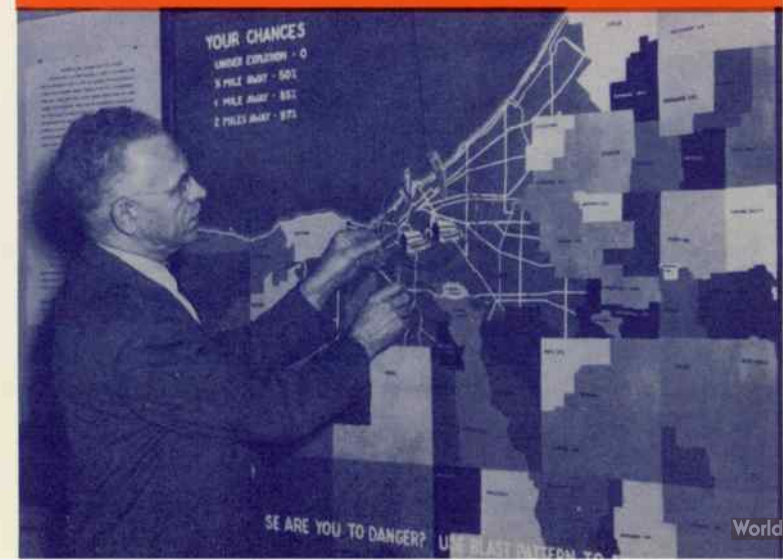
Upon completion of their training, Auxiliary Policemen are assigned to duties with the regular police force. Some are assigned to patrol cars, some to beat patrolmen and others to the traffic squad.

Volunteers may register for this duty at any Police or Fire Station in the city, or by calling the Civil Defense Office (TOWer 1-4600), at City Hall.

* * * * *



A series of graphic panel exhibits entitled "Seconds to Survival," originally planned by the Cleveland Museum of Natural History, have recently been on display at the Public Library. The exhibit above compares Hiroshima and Cleveland in the amount of havoc that could be wrought with a bomb blast. The map of Cuyahoga County below features a moveable plastic overlay that can be used to show the extent of blast damage at any point where it may be placed.



if bombs should fall...how to care for the injured

EXAMINE PATIENT CAREFULLY

- Control excessive bleeding if present. (See below)
- Provide artificial respiration if breathing is stopped.
- If you suspect extensive injury—even though not sure—treat patient as if injury is present.
- Use lipstick on forehead to mark tourniquet cases with a "T" and patients who have been bleeding heavily with an "H." (for hemorrhage).
- Splint all fracture cases before moving. A magazine or similar item fastened around the injured area will do.

CONTROL OF BLEEDING

- All bleeding must be stopped. Even slight loss of blood over an extended period of time may be fatal.
- Direct pressure applied over or on larger wounds with sterile gauze or reasonably clean cloth will control most bleeding. (Should always be tried first.)
- Along with direct pressure on the wound, pressing with the fingers on pressure points between the wound and the heart will often stop arterial bleeding.
- A tourniquet on the limbs should be used only in most extreme cases of bleeding. If used, tourniquet must be loosened every 15 minutes for a period of 7 or 8 seconds.

SHOCK

Shock is brought on by a sudden or severe physical injury or emotional disturbance. In shock, the balance between the nervous system and the blood vessels is upset. The result is faintness, nausea, and a pale and clammy skin. If not treated the patient may become unconscious, and eventually lapse into a coma.

Treatment

- Keep patient lying down.
- Don't give fluids unless delayed in getting to doctor, then give water. (Some medical authorities suggest giving patient salt and soda solution—1 tsp. salt, ½ tsp. soda to qt. of water.)
- Never give liquid to an unconscious person.
- Cover patient both under and around his body.
- Do not permit patient to become abnormally hot.
- Reassure patient, and avoid letting him see other patients, or his own injury.

BURNS

When skin isn't broken, apply petroleum jelly or burn ointment to area and bandage snugly with sterile gauze or gauze soaked in a solution of baking soda (3 tbs. to qt. of water). If burn is deep or covers much of the body, apply sterile gauze or clean cloth with baking soda solution, or dry dressing. (Never use grease or ointment) Call doctor and keep patient warm (not hot) and in prone position with head covered; avoid exposure to cold.

- If burn case must be transported a short distance, cover burns with clean cloth.
- Don't dress extensive facial burns. (Doing so may hinder early plastic surgery.)

WOUNDS Minor Cuts: apply pressure with sterile gauze until bleeding stops. Use antiseptic recommended by your doctor. Bandage with sterile gauze. **Minor Scrapes:** if dirty, wash with mild soap and water, blot dry and cover scraped area with recommended antiseptic. Allow to dry—no bandage necessary. If scrape is deep and dirty, see your doctor. **Puncture Wounds:** if puncture wound extends deeper than skin surface, try to induce bleeding. Cover with sterile gauze and consult doctor immediately. Serious infection can arise unless properly treated.

SPRAINS Elevate injured part and apply ice bag or cold cloth immediately after injury to reduce swelling. If swelling is pronounced, do not attempt to use injured part until seen by doctor. All serious "sprains" should be X-rayed for possible fractures.

FRACTURES

Pain, deformity or swelling of injured part usually means a fracture. If fracture is suspected, don't move person unless absolutely necessary, and then only if the suspected area is splinted. Give small amounts of lukewarm fluids and treat for shock.

EYE INJURIES

Foreign Bodies: remove by gently touching with moist point of clean handkerchief. Apply mineral oil or castor oil to corner of eye, and allow to flow over eye.

Chemicals: if any chemical splatters into eye, wash with milk or running water . . . without pressure. Apply two or three drops of mineral or castor oil and consult doctor at once.

Wounds: if eyeball is involved or dimness of vision is prolonged, get patient to doctor immediately. Cover both eyes with loose dressing.

UNCONSCIOUSNESS Never attempt to give anything by mouth. Lay patient flat, turn head slightly to one side, loosen any tight clothing about neck. Always summon a doctor unless you are sure it is a simple fainting spell. In simple faint, lower patient's head to restore circulation.

RADIOACTIVITY PRECAUTIONS

Although not as dangerous as other injuries, the effects of radiation should be guarded against, especially if you were within one mile of an atom bomb explosion, and were not adequately protected by shelter at the time of the blast.

- As soon as possible, remove all outer clothing.
- Scrub body vigorously with soap and water, paying special attention to skin folds, hair and finger nails.
- Bury contaminated clothing.
- If you suspect radiation injury (indicated by pallor, continued bleeding, undue fatigue, or infected wound), see doctor at once.

CIVIL DEFENSE HOUSEHOLD FIRST AID KIT

These emergency first aid items are for a family of four persons or less. Assemble them, then wrap in a moisture-proof covering and place in an easily carried box. Paste this sheet to the box cover and place the box in your shelter area.

FIRST AID ITEM	QUANTITY	USE
1. Antiseptic Solution Benzalkonium Chloride Solution, 1 to 1000 parts of water.	3 to 6 oz. bottle	For open wounds, scratches and cuts. Not for burns.
2. Aromatic Spirits of Ammonia	1 to 2 oz. bottle	For faintness, adult dose ½ teaspoonful in cup of water; children 5 to 10 drops in ½ glass of water. As smelling salts hold bottle under nose.
3. Table Salt	1 box	For shock—dissolve 1 teaspoonful salt and ½ teaspoonful baking soda in 1 qt. water. Have patient drink as much as he will. Don't give to unconscious person or semiconscious person. If using substitutes dissolve six 10-gr. sodium chloride tablets and six 5-gr. sodium bicarbonate (or sodium citrate) tablets in 1 qt. water. For some slight protection against nerve gas—dissolve 4 teaspoonfuls of baking soda in 1 qt. water. Wash parts of body exposed to nerve gas with it or saturate cloth and place over face as gas mask.
4. Baking Soda	8 to 10 oz. box	
5. Triangular Bandage compressed, 37 x 37 x 52 in., folded, with 2 safety pins.	4 bandages	For a sling; as a covering; for a dressing.
6. Large Bath Towels	2	For bandages or dressings. Old soft towels and sheets are best. Use as bandages or dressings. Cut in sizes necessary to cover wounds. Towels are burn dressings. Place over burns and fasten with triangular bandage or strips of sheet. Towels and sheets should be laundered, ironed, and packaged in heavy paper. Relaunder every 3 months.
7. Small Bath Towels	2	
8. Bed Sheet	1	
9. Medium First Aid Dressing 8 in. by 7½ in., folded, sterile with gauze enclosed cotton pads. Packaged with muslin bandage and 4 safety pins.	2	For open wounds or for dry dressings for burns. These are packaged sterile. Don't try to make your own.
10. Small First Aid Dressing 4 in. by 7 in., folded, sterile with gauze enclosed cotton pads and gauze bandage.	2	
11. Paper Drinking Cups	25 to 50	For administering stimulants and liquids.
12. Eye Drops, Castor Oil	½ to 1 oz. bottle with dropper	For eyes irritated by dust, smoke or fumes. Use 2 drops in each eye. Apply cold compresses every 20 minutes if possible.
13. Flashlight	1	Electric lights may go out. Wrap batteries in moisture proof covering. Don't keep in flashlight.
14. Safety Pins, 1½ in. long	15	For holding bandages in place.
15. Razor Blades, Single Edge	3	For cutting bandages and dressings, or for removing clothing from injured part.
16. Toilet Soap	1 bar	For cleansing skin.
17. Splints, Plastic, Wooden, ½ to ¾ in. thick, 3½ in. wide by 12 to 15 in. long.	12	For splinting broken arms or legs.
18. Tongue Blades, Wooden	12	For splinting broken fingers or other small bones and for stirring solutions.
19. Water Purification Tablets	Bottle of 100	For purifying water when it can't be boiled, but tap water officially declared radioactive must not be used for any purpose.
20. Measuring Spoons	1 set	For measuring or stirring solutions.

WARDEN SERVICE

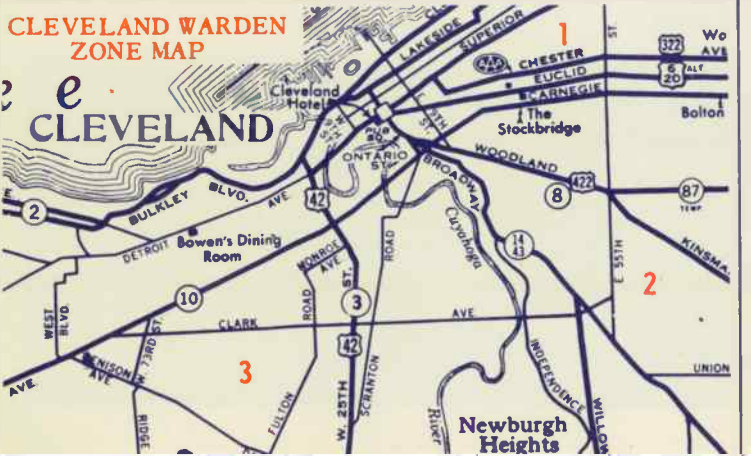
The block warden is one of the most important figures in the civil defense picture. He is the man who is in direct contact with the citizen for whose benefit civil defense is organized. It is the warden's job to see that every household on his beat is prepared for defense in the event of an attack.

When the Civil Defense Organization called for volunteers in March, 1951, 1400 people in the city indicated their willingness to serve as wardens. A total of 43,000 wardens are needed to adequately cover the city at the rate of one warden to every 25 families.

Steps are being taken to increase the pace of organization for the warden service. To date six of the city's 33 wards are completely organized, due to the effective work being done by the three zone offices in Cleveland. Warden Training is under way. The next job to be done is the recruiting of more wardens to fill in the gaps in the organization.

CLEVELAND ZONE WARDEN OFFICES

- Zone 1** — Norma Wulff, Dir. Officer in charge, Sec.,
Cleveland Board of Education, Observation School,
1380 East 6 St. Cleveland 14. Sterns Road 2064,
Telephones: CH 1-3660, Cleveland 6.
IV 1-4447; IV 1-3933 Telephone — TY 1-6767
- Zone 2** — Clark Kist, Dir. Officer in charge,
Provident Savings & Loan, Thomas Stanton,
4119 East 131 St., Secretary Margaret Lehmann,
Cleveland 5. 11529 Buckey Road,
Telephone WY 1-0909 Cleveland 4,
Telephone — SW 1-3409
- Zone 3** — Patrolman Lewis Daniels, Acting Director
15619 Lorain Ave.
Secretary Marie Hart,
First Police Precinct,
Lorain Ave. & Trisket.
Telephone WI 1-1344



YOUR BOMB SHELTER

The head of every household should seriously consider where his family would go in the event of an air raid warning. While circumstances vary widely certain general rules will be helpful in aiding you to select the safest shelter area in your home. In the case of apartment houses, or apartment hotels, the property owner or manager should survey his building to determine the best shelter area for its occupants.

(1) In the large apartment house, or apartment hotel, several stories in height, the best shelter area may be an inside corridor, hall, or stairwell on a lower floor and as far away from outside walls as possible. In a private dwelling the basement will probably be best.

(2) Shelter area should have a minimum of glass, and in no case should area have large glass windows, or large glass doors.

(3) Shelter area should have a minimum of 2 exits. In case of a basement one exit should be an outside one. In setting aside a basement shelter area in a private home some consideration should be given to reinforcing the ceiling of the area to prevent possible col-

lapse of structure above into your shelter.

(4) A means of ventilation should be available, or provided. Nearby sanitary facilities would be desirable.

(5) The area should contain no steam furnace, or boiler; no large gas mains, or steam pipes, unless these can be cut off where they enter the building.

(6) There should be no inflammable, or corrosive, liquids stored in the area.

(7) Some means of emergency lighting (battery operated) should be provided; also emergency communications.

(8) Area should be large enough so that each occupant will have at least 6 square feet of floor space.

Even an AUTOMOBILE, with closed windows, offers some protection for its occupants if car is more than 1½ miles from ground zero. Its steel body, and shatter proof glass are safety factors, while the car radio may offer a means of emergency communications or bulletins. If the car is in a garage some additional protection will be afforded.

EQUIPMENT AND SUPPLIES FOR YOUR BOMB SHELTER

Your bomb shelter should be equipped with certain necessary items that may be extremely valuable when it comes time to emerge into the bomb-blasted outer world.

FLASHLIGHT OR BATTERY-OPERATED LIGHTING FACILITIES — will be found valuable since all light circuits will be put out of commission at the time of the burst.



FIRST-AID KIT — will be found essential for rendering aid to injured or to members of your own family or group.



Individual items in FCDA officially recommended first-aid kit are listed on opposite page.

PORTABLE RADIO — to keep you in contact with emergency broadcasts concerning the disaster.



FOOD AND WATER — A few cans of staple food and water in a tightly sealed jar may be most useful. Properly covered or canned foods should undergo little or no contamination. Contaminated water, when distilled, is perfectly safe for drinking purposes. The radioactive material remains behind in the residual scale and brine. **MERE BOILING OF WATER CONTAMINATED WITH RADIOACTIVITY IS OF NO VALUE.**



FIRE EXTINGUISHER — A small hand fire extinguisher will permit you to put out any small fires in your immediate vicinity. This may prevent these fires from spreading into a general conflagration and will be a godsend to the firefighting groups which will have their hands full trying to cope with major fires.



GLOVES — Rubber gloves will serve to cover any small overlooked skin wounds that might permit entry of the radio-active particles into the blood stream. Heavy work (cotton or leather) gloves to slip over the rubber gloves might



BLANKETS — may be needed for warmth or shock protection.



TOOLS — of a simple nature, such as a shovel, saw, hammer, hand ax, crow bar, pliers, knife, etc., may be necessary to remove debris from exit of your own shelter or in doing rescue work.



COVERALLS — (preferably of a light color and loose fitting to tuck into your boots or overshoes) will provide an effective and practical working outfit that can later be discarded along with your other clothes when you have left the radioactive area.

ROOTS OR OVERSHOES — will prevent radioactive particles adhering to your shoes and at the same time will be most helpful in working in flooded areas. If overshoes or boots are not handy, you can wrap your shoes with cloth which can be discarded later along with any radioactive particles.



THE FRONT IS VITAL

AUXILIARY FIREMEN

The goal of the auxiliary fireman training program is a strength of 5,000 men. Training of volunteers for this duty is now being carried forward by the Cleveland Fire Department.

Classes for Auxiliary Firemen run for about 12 weeks. During this period volunteers are given training in the fundamentals of firefighting and special training in controlling fires where radiation is a danger. When trainees finish their courses, they are assigned to fire stations near their homes where additional practical training is given them on a weekly basis.

Cleveland's fire fighting plan in the event of atomic attack is thoroughly worked out. The Fire Department has participated in several exercises in which they had an opportunity to test various phases of the plan. Basically, the plan calls for a dispersal of equipment and personnel to points outside the target area as soon as the warning alert comes over the wires. From these safety points, firefighting equipment would move in to surround the sweeping fires which follow any atomic explosion.

Volunteers for Auxiliary Fireman posts may register at any fire station in the city, or by calling the Civil Defense Information Office, (TOwer 1-4600), at City Hall.



Making a catchall for drafting water in emergencies using a salvage cover. Auxiliary Firemen Trainers at Engine House No. 42. Captain Elmer Ludwig in background at right.



A graphic demonstration showing how Cleveland CTS buses can be rapidly converted for the handling of casualties in the event of a disaster.



Actual supplies listed in the Federal Civil Defense Administration's officially recommended first-aid kit for home use were recently displayed at the Public Library in connection with its atomic exhibit called "Seconds to Survival."

CLEVELAND DISASTER MEDICAL PLAN

Plans for a Civil Defense emergency medical organization are being developed by the Academy of Medicine's Disaster and Relief Committee. For more than 18 months this committee has held a weekly meeting to map a program for putting all medical personnel and facilities to work in the event of an atomic disaster. The program is being laid out on a county-wide basis.

The Disaster and Relief Committee's plan calls for 2,300 physicians, all of whom have been registered and classified. About 450 pharmacists, 400 undertakers, 814 dentists and 200 laboratory technicians have been registered and classified. In addition, more than 6,000 registered nurses in the county have been listed for emergency duty.

To handle the enormous number of casualties which would result from an atomic explosion over the city, the committee has planned for 32 emergency hospitals, 96 supply depots, 48 mortuaries, 5 blood collecting centers, and 5 emergency control posts for directing the work of field teams. Hospitals and supply depots will be set up in schools, country clubs and churches. Mortuaries would occupy bowling alleys, skating rinks and dance halls. Sites for these installations are being arranged now.

Mass immunization for the people of Cleveland will be on a volunteer basis. A campaign is being conducted to urge all citizens in the county to have themselves immunized against typhoid, smallpox and tetanus.

ASSISTANCE OF COOPERATING ORGANIZATIONS ATOM BOMB EXPLOSION



Civil Air Patrol officers hold an informal briefing session during a recent civil defense exercise, "Operation Capet." (CAP Photo)

CIVIL AIR PATROL

The Civil Air Patrol has offered its services to the Cleveland Office of Civil Defense as the eyes and ears of the organization. In this area the Fourth Group Ohio Wing has demonstrated its usefulness in practice runs under simulated conditions.

On the 13th and 14th of October, 1951, the Group Mobile Support Unit of the Fourth Group, Ohio Wing, conducted an exercise in which smoke bombs were set off and pilots of the group were given the mission of spotting them from the air and relaying the information back to a headquarters. The bombs were located without delay by pilots of the group, flying their own light aircraft. This was a practical demonstration of how the Civil Air Patrol could serve in time of emergency as an information gathering service for Civil Defense. Rapid coordination of the rescue services could be effected by air observation in radio contact with ground forces.

The Civil Air Patrol is also investigating the possibility of equipping their planes with loud speakers which could be used for directing the flow of evacuees or for giving information to groups of people who have been isolated.

AMATEUR RADIO

The Amateur Radio Emergency Corps of Cuyahoga County is equipped and ready to offer free emergency radio communication service to Civil Defense should the need arise. All members of this group are licensed amateurs, using their own equipment.

A complete plan for active cooperation with Civil Defense authorities has been worked out by the corps. Upon receipt of a "yellow" alert, all members would be immediately notified and would go into action. They would automatically notify amateurs outside the area, providing a contact with danger free zones. Working on the theory that no commercial power would be available immediately following an attack, this group has made provisions for use of emergency power in mobile stations--usually the operator's own auto. It is planned to employ a fixed station for amateur use in Civil Defense headquarters for the direction of mobile and portable amateur stations.

The plans made by the Amateur Radio Emergency Corps would provide more than enough communication in this area if every other means of directing rescue and fire fighting efforts were to be knocked out. In addition to being available for civil defense operations this group is ready to serve any civic agency at any time, should the need arise.

COMMUNICATIONS IN CIVIL DEFENSE

Emergency communications in Cleveland are built around the existing police radio network. Communication on a county-wide basis by police radio has been a fact for several years. It is through this system that alarms would be broadcast. Police radio would be the first to receive notice of an impending attack from Air Force Air Command. Immediately upon receiving the yellow alert, the police radio dispatcher would automatically notify all Cleveland police cars, police stations, and all suburban police and fire installations. The Cleveland Fire Department would also be alerted, as would commercial radio and television stations.

A complete plan of action has been worked out for emergency use of the police radio network for directing operations following an attack and for providing communications with neighboring cities.

Commercial radio and television in the city is also a part of the Civil Defense communications plan. The Cleveland stations would be alerted immediately should a fleet of enemy bombers be reported heading for the city. All stations would immediately go off the air to prevent their beams from being used as directional homing signals for enemy bombers. They would get back on the air only upon advice received from the Civil Defense organization.

Upon returning to the air, commercial radio would put all its facilities in service for Civil Defense use. A system of alternating stations for use to get messages to the people of the city has been worked out. The valuable service rendered by Cleveland radio during the paralyzing snow storm of November, 1950, is only an indication of what can be done to prevent panic and mass hysteria by a well coordinated communication system.



Amateur "Ham" radio operators, utilizing the facilities of their amateur radio stations, such as this one, constitute a vital link in the emergency communications plan of Cleveland Civil Defense.



A regular meeting of the Communication Committee of Cleveland Civil Defense, in the WHK Building. Members include representatives from all types of communications in the area.

BLAST DAMAGE



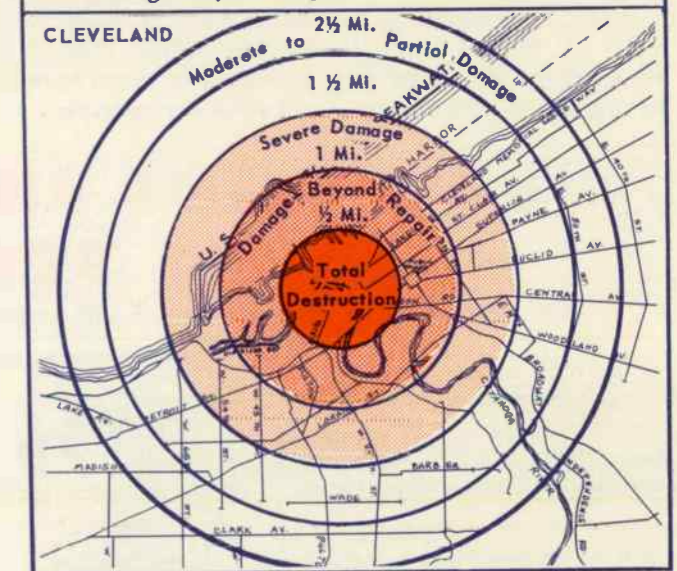
GROUND ZERO COMPLETE DESTRUCTION 1/2 MILE SEVERE DAMAGE 1 MILE MODERATE DAMAGE 1 1/2 MILES PARTIAL DAMAGE 2 MILES LIGHT DAMAGE

BLAST DAMAGE CHART (Air Burst) (AEC)

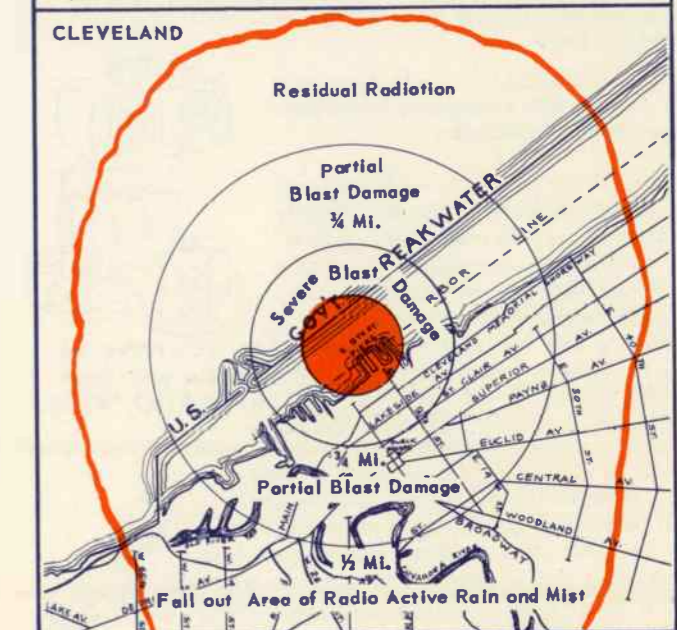
Feet	Damage (Statistics relate to Japanese explosions.)
0	Ground Zero — or directly beneath the air burst.
1,500	Mass distortion of heavy steel frame buildings.
2,000	Limit of severe structural damage to earthquake resistant reinforced concrete buildings.
2,500	To this point virtually complete destruction of all buildings, other than reinforced concrete.
3,500	18-inch brick walls completely destroyed.
4,000	Roof tiles melted by heat.
4,500	Light concrete buildings collapsed.
5,000	12-inch brick walls severely cracked.
5,500	Electrical installations and trolley cars destroyed.
6,000	Severe damage to entire area. Severe structural damage to steel frame buildings.
6,600	Structural damage to multistory brick buildings.
8,000	Severe damage to homes, heavy damage to window frames and doors, foliage scorched.
8,300	Moderate damage to area.
9,000	Heavy plaster damage.
10,000	Blast damage to majority of homes. Severe fire damage. Flash ignition of combustible materials.
10,300	Partial damage to structures in area.
11,000	Flash charring of telegraph poles.
12,000	Light damage to window frames and doors, moderate plaster damage.
8 MILES	— Limit of light damage.

AIRBURST BLAST DAMAGE CHART

Total Destruction Severe Damage
Damage Beyond Repair Minor Damage

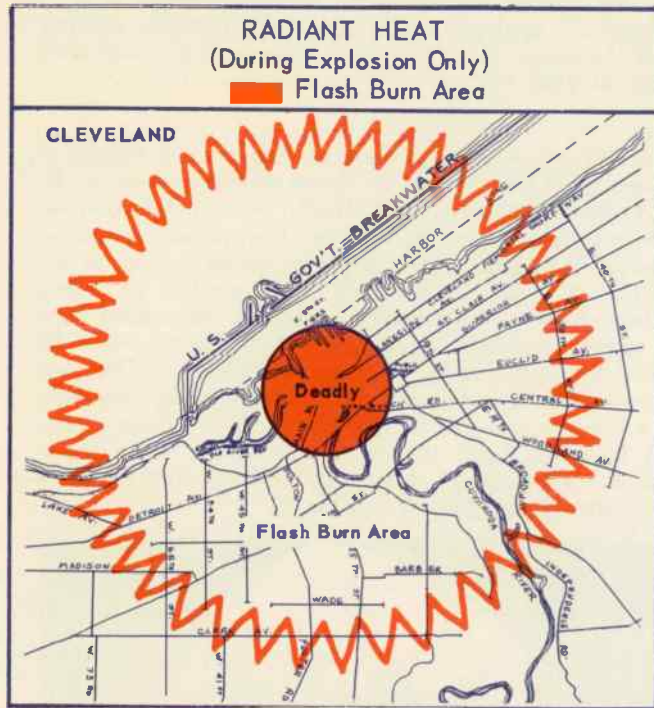
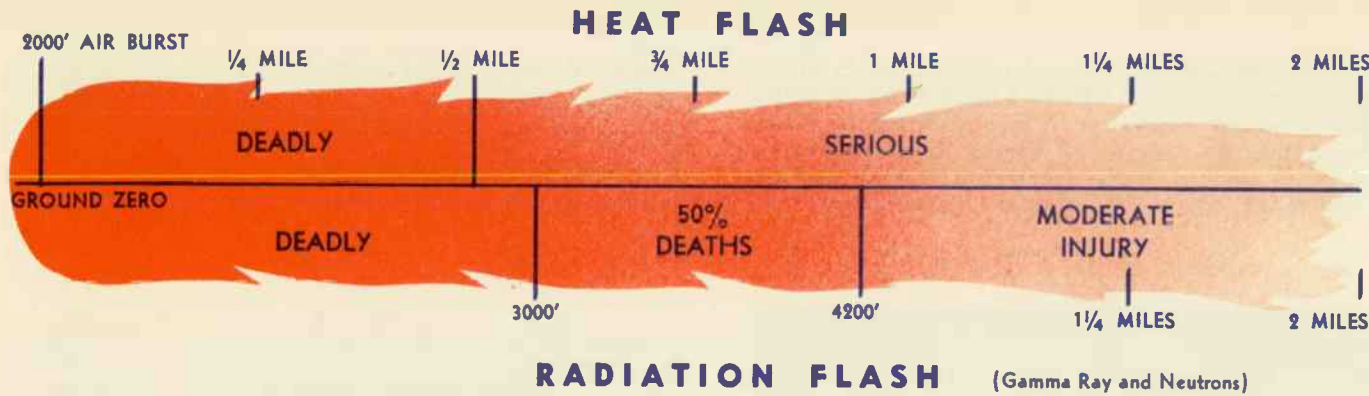


UNDERWATER BLAST DAMAGE CHART



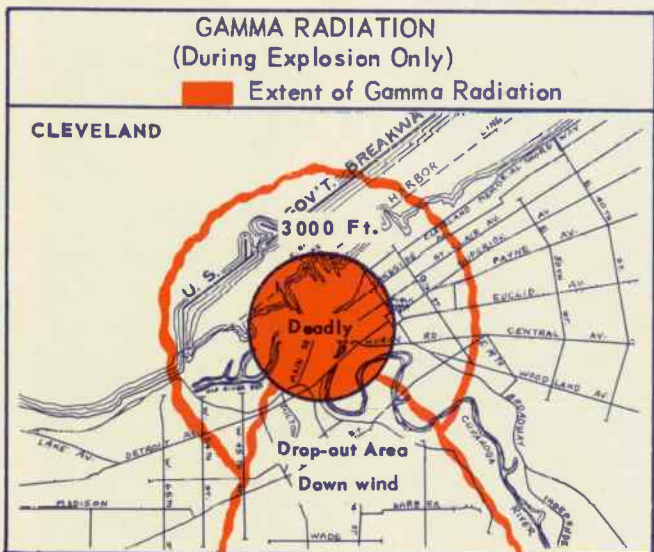
While giant skyscrapers with reinforced concrete structures and long periods of vibration should withstand the shock very well the masonry would be stripped off, girders twisted and people literally blown out of the top floors of the buildings if within the primary blast area.

DAMAGE EFFECTS OF AN ATOM BOMB IS ESSENTIAL IN CIVIL DEFENSE



THERMAL EFFECTS

At the time of the explosion a terrific heat flash is generated. It goes out in straight lines from the explosion and lasts but a fraction of a second, but during that time it can burn unprotected skin at distances of 2½ miles and has been felt up to 5 miles. It has scorched telegraph poles at 2 miles. FIRE, set directly by the flash of radiant heat, or started by the ignition of gas from disrupted mains, or short circuits, can destroy huge areas. In Nagasaki, it was estimated that almost immediately after the detonation, fires were started in dwellings within a radius of 3,000 feet from ground zero. Debris-choked streets usually hamper or make fire fighting difficult. If survivors will personally fight the small fires in their immediate area, huge conflagrations may never develop. The thermal effect of an A-Bomb air explosion in Cleveland is shown at left.



RADIATION EFFECTS

GAMMA RAYS, pulses of electro-magnetic radiation, traveling with the velocity of visible light, are very penetrating. They are usually lethal to anyone in the open up to 3,000 or 4,000 feet from the bomb burst. They do most of their killing in the first second, or not at all. The second gamma ray hazard comes from the radioactive fission products left from the blast, or deposited from the cloud. Fission products from an air burst bomb must be regarded as something of a nuisance but a negligible factor in causing death. In the case of an underwater burst, however, residual radioactivity is much more extreme and may remain a hazard for a considerable time.

AMERICAN RED CROSS

FIRST AID — In connection with the civil defense program the Government has asked the Red Cross to train millions in first-aid. The Greater Cleveland Chapter of American Red Cross offers the following courses in FIRST-AID:

Junior -- 15 hr. course, for those 12-14 yrs. of age being offered in many schools.

Standard -- 22 hr. course (including 4 hour atomic supplement), for those over 15. Many industries either require, or urge their employees to take this course.

Advanced -- 12 hr. course, open to those having completed Standard course.

Instructors -- 15 hour course, open to those over 20 yrs., who have completed Standard and Advanced courses.

Red Cross courses are also offered in:

Volunteer Nurse's Aide Instruction -- 36 hours class room, and 46 hours supervised practice in hospital. Course, open to H.S. grads., 18 to 55 years of age.

Home Nursing -- 12 hour course.

Information concerning enrollment in any of the above courses may be had by calling Red Cross, SUperior 1-1800.

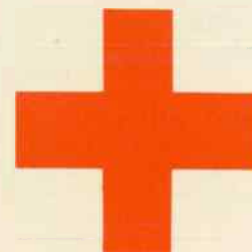
THE BLOOD PROGRAM -- The Government has designated Red Cross as the official coordinating agency to meet the need for blood for the armed forces and to stockpile blood products for civil defense. There is no more vitally important necessity than the procurement of the 50,000 pints of blood which must be collected in Greater Cleveland by the end of this fiscal year.

The Regional Blood Center, at 1227 Prospect, is open Mon/Thurs 1:00-9:00p.m. and Tues/Wed/Fri. 10:00 a.m.-4:00 p.m. for your convenience in donating blood.

Call the Blood Center SU 1-1800 TODAY for an appointment. Every patriotic and unselfish individual will wish to help in this humanitarian service.

WELFARE SERVICES -- The responsibility for over-all planning, organizing and directing, and financing all phases of civil defense for war-caused disaster rests with the civil defense authorities. However, Red Cross Chapter disaster preparedness organizations and trained personnel will be made available to assist civil defense in the following functions: 1. Mass feeding; 2. Emergency clothing; 3. Emergency shelter; 4. Welfare inquiries.

Acting within these classifications the Greater Cleveland Chapter of American Red Cross has already established over 300 Welfare Centers (headquarters in disaster for all welfare services) in Cuyahoga County. A complete housing survey of this 6 county area has also been made which shows that 150,000 homeless people could be provided temporary shelter in the event of a disaster.



This map of Cuyahoga County which hangs in the Disaster Service Office of the Greater Cleveland American Red Cross Headquarters shows the more than 300 Welfare Centers which have been established for use in the event of enemy attack, or other disaster.



Civilian patients such as this little tot, as well as armed services personnel on the battlefields, benefit from the blood that YOU give at the Cleveland Regional Blood Center. (Red Cross Photo)



Here Cleveland firemen receive Red Cross first-aid training. (Red Cross Photo)



Here Ohio Bell Telephone employees practice first-aid techniques in a course sponsored in the interests of civil defense. The instructors were trained by the Greater Cleveland Chapter of Red Cross. (Ohio Bell Telephone Photo)

CIVIL DEFENSE PROGRESS IN OHIO

- 1. Organization.** Each of the 88 counties, and each of the 78 cities of 10,000 or more in Ohio, have responded to Gov. Lausche's call to organize for Civil Defense.
- 2. Observation Corps Program.** Ohio has 637 observation posts which will, in an emergency, be staffed by at least 16,000 volunteers. Personnel for most of the posts have been trained.
- 3. Filter Centers.** There are two in Ohio, one at Canton, and one at Columbus. Each has recruited and trained more than half of the 1500 volunteers required.
- 4. Warning System.** The State has provided a warning system that can, in a matter of seconds, notify each community of an impending raid.
- 5. Fire Defense.** A fire service bulletin and an auxiliary fireman's training manual have been produced and distributed to volunteers. An Industrial Fire Brigade bulletin is in second draft.
- 6. Police.** The police and security forces of the state have jointly compiled two fundamental bulletins, Police Services, and Auxiliary Police. In addition, the highway patrol has recruited and trained 5000 veterans to serve as Auxiliary Highway Patrol personnel in emergency.
- 7. Wardens.** This program includes a policy organization bulletin as well as a training manual which have been supplied to all parts of the state. The actual training of wardens is underway in many localities.
- 8. Health Services.** Three bulletins have been produced by the State Director of Health. These bulletins have been given careful consideration by a committee of all health resources in the state.
- 9. Radiological Defense.** 16 scientists trained in radiological defense work, are now in the process of training science teachers and others concerned in: (a) radiological defense education of the public, and (b) radiological monitoring. Monitoring instruments and lead-lined containers of radioactive isotopes have been purchased by the state.
- 10. Communications.** A basic bulletin embracing the emergency use of telephone, telegraph, TWX, radio, television, messenger and other communications mediums, including a supplement on the use of Radio Amateurs, has been distributed.
- 11. Transportation.** A survey has been completed of all certificated buses, school buses, city buses, common motor carriers, and contract carriers. A bulletin on the emergency use of all types of transportation is in preparation.
- 12. Civil Aviation.** A survey has been made of the entire private or Civil Aviation lift in Ohio. Plans have been developed for the emergency use of 4500 private aircraft.
- 13. Industrial Security.** A complete study concerning the security of Ohio industry has been carried out by a representative on loan from the Industrial Commission with the assistance of a representative group of 28 Industrial Security specialists.
- 14. Rescue.** This program on a standby basis involves 650 trained, equipped, and mobile rescue workers in the eastern and southern parts of the state organized by the Bureau of Mines. Assistance would be rendered by all fire fighting resources and the State Highway Department, and Ohio Contractor's Assoc.
- 15. Identification.** A bulletin concerning identification of Civil Defense volunteers has been developed.
- 16. Forests.** In cooperation with Federal, State and local agencies, the various forest resources of Ohio are to be brought into the Civil Defense program.
- 17. Wide Use of Women in Civil Defense.** This program has been developed by the Exec. Sec. of the Ohio Development and Publicity Commission, with assistance of leaders of women's organizations. More than half of the Civil Defense work will be done by the women of Ohio.
- 18. Children and Youth.** The program has been developed by the Exec. Sec. of the Ohio Commission of Children and Youth. A comprehensive bulletin concerning their protection and participation will be distributed.



Governor Frank J. Lausche of Ohio.

OHIO STATE



FRANK J. LAUSCHE
GOVERNOR

THE STATE OF OHIO
OFFICE OF THE GOVERNOR
STATE HOUSE, COLUMBUS

To the Citizens of Ohio:

Let us understand that Civil Defense is more than a plan and an organization. It is the recognition on the part of every citizen that in times of peace and in times of war whenever an emergency arises it becomes necessary to help ourselves and especially to help our neighbors.

The great destructive force of the atomic bomb will undoubtedly temporarily incapacitate a community. Those communities will need the help of their neighbors. It is impossible to over-emphasize the need of giving aid to our neighbors in feeding and housing the homeless and in aiding the injured. If atomic bombs fall upon America everybody everywhere in the untouched areas can look upon the homeless and the injured and say to himself, "there but for the grace of God go I."

The military forces are doing everything in their power to make preparation for the defense of our nation but no system of defense is infallible, hence it is necessary that we civilians be prepared too. If we are, we will be able to dig ourselves out of the devastation. We will be able to help our neighbors and we will be able to avoid the panic that so frequently comes when disaster strikes. Civil Defense, let us understand, is not a short term measure.

Until peace again reigns throughout the world the pattern of American life must include readiness on the part of Civil Defense, and that means you and me to face whatever comes and to face it squarely.

Sincerely,

Frank J. Lausche
FRANK J. LAUSCHE
GOVERNOR

COMMUNICATIONS

By Ohio Bell Telephone Company

Communications has been termed the nerve center of Civil Defense, and telephone service is the most widely used medium for effective functioning of all CD activities in emergency.

The Ohio Bell Telephone Co., the Ohio independent telephone companies, Western Union and the broadcasting stations have demonstrated their ability to furnish adequate service both from a quality and reliability standpoint at all times.

Civil Defense communications include plans for expediting the handling of essential calls for performing vital CD functions during emergency. These include supplementing normal communication facilities with alternate means when necessary. All existing land lines and radio communications and services are to be used to their fullest extent, but other types of existing emergency facilities must be considered for use during the period of any temporary inadequacy of existing means which might result from damaged buildings and equipment.

In critical target areas, alternate facilities such as radio (mobile, amateur and broadcast) telegraph and messenger, both foot and vehicular, would also be used in the event the primary means of communication should become disrupted.

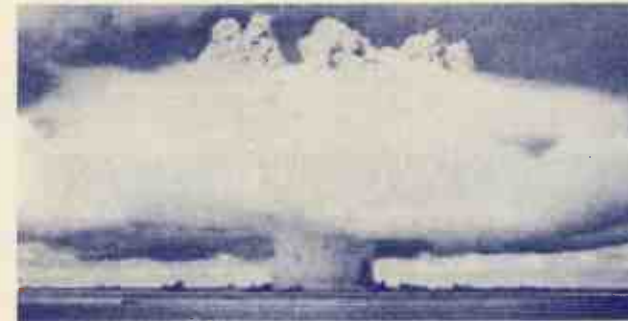
Many measures are being taken by Ohio Bell to safeguard telephone facilities so that in the event of sabotage or hostile attack, service will still be available to emergency forces, including those of Civil Defense. These include locking man-holes and cable vaults; alternate routing of local trunk and long distance circuits; auxiliary engines to furnish power in case the commercial power supply is interrupted; placing primary trunk and central office cables underground; locking all telephone buildings; providing employees with identification cards; employee citizenship and loyalty checks; providing space in each building for shelter areas and for the warden's organization; duplication and dispersion of important records; and providing standby mobile radio transmitters and receivers at remote locations.

ATOM BOMB!

THE ATOMIC BOMB differs from other bombs in several important ways: (1) **ENERGY** released by an atomic bomb is roughly equivalent to that produced by the explosion of 20,000 tons of TNT bombs; (2) the explosion of the bomb produces highly penetrating, invisible **RADIATION** in the form of lethal gamma rays. In addition there

is also; (3) intense **HEAT** (1,000,000° C. in center of fire-ball) and **LIGHT** (at 5.7 miles, the brilliance is 100 times that of the sun viewed at the earth's surface); and (4) **RADIOACTIVE RESIDUES** which remain after the explosion emitting harmful radiations.

TYPES OF EXPLOSIONS



shielding. On account of falling debris, streets would likely be clogged and fire fighting would be rendered very difficult. . . . **SUB-GROUND LEVEL BLAST** — According to the AEC an atomic bomb could be made to burrow 50 feet or more into soft earth before exploding causing a "Grade D" earthquake. It would upset chimneys, collapse weak buildings, etc., to a radial distance of approximately 1350 to 3300 feet.

UNDERWATER BLAST — In test "Baker" off Bikini, a tremendous column of water was produced, which completely absorbed the initial flash of neutrons and gamma rays. When it began to fall back to the lagoon surface a critical base surge — a 200 to 300 foot wave of radioactive fission products — rolled over the ships in the harbor drenching them with highly contaminated radioactive products. Fall-out droplets were a further serious radioactive hazard many miles "downwind." In order to produce a critical base surge the water must be fairly deep. Fortunately little water of such depth exists in harbors or water adjacent to any of our larger cities. However the blast effect of an underwater explosion in even shallow water would cause considerable damage to any nearby docks or shore installations. . . . **AIR BURST OVER WATER** — In an air burst over water exposed structures, such as masts, spars, radar antennae, etc., within a radius of 3,000 to 3,500 feet may be expected to suffer very severe damage.



GROUND LEVEL BLAST — On account of the blocking and shielding effects of the huge skyscrapers a ground level or "basement" blast in say New York, or Chicago, would have a relatively small area of critical destruction. Very close buildings would probably collapse and those nearby would suffer loss of masonry and be materially weakened. Primary radiation would be materially checked by the shielding of the buildings but there would be a small area of intense residual radioactivity near explosion center. It would probably be 6 hours before it would be safe to walk across the area but to stay for any length of time would be out of the question without proper

AIR BURST — An air burst of bomb at a height of about 2,000 feet, setting up thousand-mile-an-hour winds, very powerful suction and deadly, instantaneous radiation, appears to be the most destructive use of atomic energy. The heat wave in this case would not be as important as fires of secondary origin started by falling debris, shorting of electrical circuits, etc. The instant burst of gamma rays that would flash from the bomb would be lethal to anyone in the open up to 3,000 feet. The blast wave would be terrific, destroying almost everything within a half-mile radius of the explosion, and all but the strongest buildings would collapse to about one mile. Radioactive contamination of ground, building structures, etc., is practically negligible in an airburst.



THE MIGHTY

CIVIL DEFENSE

Speaking to the American Society of Newspaper Editors recently, Federal Civil Defense Administrator Caldwell cited 4 reasons why these are the the gravest days in our history.

1. The Russians have atomic bombs and planes in sufficient numbers and excellent to assault ALL of our major cities in one attack.

2. There is little or nothing we can do to stop them. The best to be expected is that some 10 percent of the attacking force may be downed or deflected.

3. That attack can come with little or no warning. The best we can hope for is a few minutes notice.

4. The Russians are capable and ready to deliver this destruction whenever they feel like it -- whenever it is most profitable to do so.



Millard F. Caldwell, former Governor of Florida, Administrator of Federal Civil Defense.

A POTENTIAL MILITARY WEAPON

We are currently engaged in a conflict in which use of the atomic bomb is quite probable. It is highly important that you understand the effects of this weapon and how you can best protect yourself. We shall present in the following pages a simple digest of such facts from governmental and other authentic sources we feel to be of greatest value.

The atomic bomb is an extremely potent military weapon but not "absolute" in the sense that its possession alone guarantees victory. Thus far the United States has exploded several atom bombs and we have learned of the devastation that can be caused. In Hiroshima, 71,000 people were killed and 68,000 injured in a city of 245,000. About 75 A-bombs, according to Dr. R. E. Lapp, would probably have done as much damage to target areas in Germany as was done by all the strategic bombing during World War II. With all its tremendous heat and blast effects, accompanied by its unique radiation effects, it is still not unlimited in the amount of damage it can do. You need not worry, for example, about rumors to the effect that atomic explosions might contaminate the earth. It would take something like a million A-bombs to do the trick.

The atomic bomb is certainly to be feared and respected but there is no reason that it should cause panic. Now that the damage that it can cause, and the probable extent of such damage, is known, it has been possible to formulate certain simple rules that will go a long way towards insuring your safety and eliminate to a great degree the element of fear.

In any discussion of the atomic weapon it should be

remembered that constant improvements in design and type, or usage, can be expected. A top military spokesman recently forecast the use of A-bombs as the next probable step in battlefield warfare and said that they can be used with deadly accuracy against troops, tanks and other military targets.

RADIOLOGICAL WARFARE — The use of radioactive gases, dusts or mists as a weapon, is a possibility and we should be prepared for it according to Prof. Ridenour of the University of Illinois, but because it is a mystery weapon its most important effect might be psychological since it probably couldn't be used to kill people. It probably would force them to abandon homes, towns and military installations, however.

H-BOMB (Hydrogen Bomb) . . . It is no secret that research and experimentation on the development of the H-bomb is going on. It is not possible to predict when, or if, such a weapon will be produced. It is interesting to note however that according to the AEC a hydrogen bomb 1,000 times more powerful than the original A-bombs would be only 10 times as destructive.

ATOMIC GUIDED MISSILES — President Truman recently announced that we have developed fantastic new weapons.

In testimony before the senate appropriations committee Gordon Dean, Chairman of the Atomic Energy Commission, disclosed the U. S. will have atomic guided missiles "and things of that type" in 1952. In a speech in Los Angeles Dean said, "We have today a tactical (atomic bomb) capability which is very impressive. . . . It can be used against men in the field and against military targets."

STATE OF OHIO
ADJUTANT GENERAL'S DEPARTMENT
COLUMBUS 14

STATEMENT BY MAJOR GENERAL LEO M. KREBER, THE ADJUTANT GENERAL OF OHIO AND DIRECTOR OF OHIO CIVIL DEFENSE.

"THE SUCCESS OF CIVIL DEFENSE WILL DEPEND ON TRAINED PEOPLE"

The effectiveness of this whole Civil Defense program must, in the end, be measured in terms of people. Trained people, who understand the facts, who understand the organization of Civil Defense, who can take their proper places in that organization and train others to do the same. Unless the people of our country — whoever they are, and wherever they live — take their heads out of the sand and face the facts, no Civil Defense program can be successful. The painful truth is that our NATIONAL WILL to survive and to fight back can be no stronger than the personal preparedness of each and every citizen.

So, you ask yourselves the question - 'What can we do about all of this?' Well, I can tell you truthfully - That Your State Civil Defense Organization has been actively setting up the frame-work for an operating agency that will utilize all the services, all the equipment, and all the personnel of every volunteer group in the State of Ohio. The success of this will depend on the training of all the people.

Civil Defense is both the shield and the sword of the home front! Its aim is to protect the people, production and property of the entire nation. It is a job so staggering that it will take all the resources of every city of this country - should a mass attack come. If an attack comes, it will be a grand slam assault on many cities in many states. Its purpose would be to create the greatest possible panic and terror, and the maximum number of casualties within the span of a few hours. The purpose of such an attack would be to break the back of our will to survive as a nation. There is little doubt that the enemy could accomplish these aims, unless we were prepared through Civil Defense to reduce the impact of the assault.

In the interests of education and training your Ohio Civil Defense organization has prepared and distributed a series of publications in the form of Information Bulletins. Some thirty of them have been released to date, and they touch on the administration and operation of every phase of Civil Defense Education, in addition to providing excellent training manuals.

"Be Prepared, Not Scared", is the slogan for Ohio Women in support of Civil Defense. This slogan might well apply to all of us. Preparedness is the key to survival in these times. Women must face the challenges of today by intelligently, energetically and persistently doing their very best in Civil Defense work.

The Local and County organizations of Civil Defense throughout Ohio need the help and understanding of all citizens. We must make certain that everyone is alert to the dangers that face us and alert to our individual responsibilities. We must enlist every able-bodied person in Civil Defense, and weld them into a cohesive and flexible organization which will meet any emergency in a sane and productive manner.

We hope that no such emergency as an Atomic disaster will ever come to our State and Nation, but we must be ready in the event it does happen.

We as Americans have always thought of freedom as something that meant prosperity and the pursuit of happiness and peace. We now know that - so long as nations of men oppose liberty - freedom means a readiness to pay whatever price the strength of the opposition entails.

We are determined to complete our plans for Ohio Civil Defense, to protect the lives, property and industries of our citizens. We must prepare against every contingency so as to make attack by an aggressor unprofitable. In Ohio we need the help of every man, woman and child. With the combined efforts of all, we will make Ohio strong, capable of taking its place in the National security.



Maj. Gen. Leo M. Kreber, Adjutant General of Ohio, and Director of Ohio Civil Defense.

FILTER CENTER, AND GROUND OBSERVER CORPS

The Ground Observer Corps (filter center and observation post personnel) when completely staffed will be composed of approximately 16,000 civilian volunteer defense workers of Ohio. There are 2 filter centers in Ohio, one at Columbus, the other at Canton. Each will require approx. 1500 civilian volunteers to completely man the filter center on a 24 hour basis. There are approx. 640 observation posts, which will require 20 persons per post to operate on a 24 hour basis.

The mission of the Ground Observer Corps Filter Center is to receive, plot and evaluate information concerning the movement of aircraft within that filter center's area, as reported to them by the observation posts; to relay this evaluating data to selected control points of the aircraft control warning system and to adjacent filter centers.

The training of the filter center personnel consists of two-hour classes during the daylight and evening hours. When the volunteer has received 16 hours of instructions, he is considered to be a fully trained plotter. After an additional 8 hours of training, this plotter is then fully acquainted with filtering and evaluating the information as shown on the filter center plotting board, and is considered fully trained for any position he is called on to handle.

The Observation Posts throughout the State are located approx. 8 miles apart and form a grid. The organization of each post consists of a Supervisor, Chief Observer and 18 Observers. It is the duty of the Observation Post personnel to report the movement of any aircraft within their specified zone of responsibility. This information is forwarded by priority telephone messages to the Filter Center for the area.

The Radar Net extending around the perimeter of our country has certain deficiencies and it is only by supplementing this type of surveillance by a human factor, namely the Ground Observer Corps, that our country is assured of a complete coverage against aircraft attack. Ohio possesses a considerable number of cities over 100,000 in population, together with a large farming section and an extremely critical industrial area. As a consequence of these highly diversified factors, the people of Ohio are definitely aware of the need for a Ground Observer Corps and are responding wholeheartedly when informed of the need for their services. At the present time, both the Filter Centers at Columbus and Canton, together with the Observation Posts throughout the State are undermanned and to correct this deficiency, an intensified orientation and organization program is being undertaken by the State Civil Defense Office in conjunction with the Air Force personnel.



The Filter Center at Columbus in action during a recent Air Raid Alert Test. On the right are shown Brig. Gen. Kenneth Cooper; Maj. Gen. Leo M. Kreber, Civil Defense Dir. of Ohio, and Gov. Frank J. Lausche, talking with Filter Center officials.

CIVIL DEFENSE IN CUYAHO



Part of Parma's Auxillary Fireman Group

PARMA

Civil Defense in Parma is progressing slowly but surely. Our full quota of Auxiliary Police have been trained by Sgt. Leonard Benedict of the Parma Police Dept. in accordance with the training manual set up by Inspector Story of the Cleveland Police Dept. and accepted as a standard by the CD Zone Directors of Cuyahoga County. We have also trained Auxiliary Police for the smaller communities of Parma Heights, North Royalton, Broadview Heights and Seven Hills.

Classes of Auxiliary Firemen have completed their training and are ready to go into action when needed.

Numerous classes have completed the Red Cross Standard First-aid course and others are nearing completion of the course at this time.



Air Raid Warden training is about to get underway. Our short-wave radio communication system, under the capable direction of Dr. F.N. Natherson is ready to go into action at any time with both mobile and stationery equipment.

Transportation, Medical, Radiological, Housing, Demolition and other branches are being organized.

Harry P. Barth, CD Dir. of Parma.

LAKWOOD

The aim of Lakewood's Civil Defense like any other Civil Defense program, is to teach the people methods of self-protection which will minimize the effects on the population of any enemy bombing, or sabotage. Since the Governor has placed on all Mayors the responsibility for Civil Defense it has also been necessary to organize and train a volunteer organization to assist the existing City Safety Services and to cooperate with the Cleveland organization in caring for all injured and homeless that might be sent to Lakewood.

To do this Lakewood has trained part of a Warden Organization which will have one or more members in every block and part of a staff for 2 Auxiliary Hospitals at Harding and Emerson Jr. High Schools; also 3 200-man First Aid Teams whose supplies will be kept at Lakewood Elks Hall, and at the Harrison and Horace Mann Schools. Training has also been given to Auxiliary Policemen, and Auxiliary Firemen and is planned for Road Clearance, Rescue Emergency Food and Housing teams.

Every school, church and hall has been contacted and have volunteered to serve as Emergency Housing Centers.

Bids for Air Raid Warning Equipment have been opened and installation awaits the decision of the Cuyahoga County Mayors Association as to what uniform system all communities will adopt.



Fred E. Bernard, Co-ordinator of Lakewood Civil Defense.

As we go to press a unified plan is being drawn up that will permit Cleveland and the 60 communities that make up Cuyahoga County to work in harmony as far as overall civil defense planning is concerned. Mutual aid agreements between communities is a vital factor in the plan. Mayor Thomas A. Burke of Cleveland will

5TH CIVIL



(L to R) Kimball L. Wheeler, Exec. Dir. and Col. Frank C. Manak, Commander of Ohio's Fifth Civil Defense Area, examine a map of Cuyahoga County, during a problem in web defense. In event of a major disaster Col. Manak would take over direction of relief and rescue in 6 counties--Cuyahoga, Erie, Geauga, Huron, Lake and Lorain.

EAST CLEVELAND

Under the Leadership of City Manager Charles A. Carran and Civil Defense Director G.T. Apthorp, East Cleveland Civil Defense is being organized as a segment of the Cuyahoga County Web Defense plan. The City has been divided into six districts, each composed of six posts, with each post having a population of approximately 1000. District and post wardens are being assigned and trained and training is proceeding in first aid and in auxiliary police and fire duties.

Plans for the immediate future call for execution with the other municipalities of a county-wide civil defense planning and operating agreement; a call for additional volunteers; the acceleration and augmenting by other courses of the training program; installation of public warning system and control center; establishment of first aid stations and emergency hospitals including medical supplies.

When complete, we expect to have about 2500 citizens trained and assigned as wardens, auxiliary policemen and firemen, rescue teams and other specialized branches of C.D. service. We will operate as part of the Cuyahoga County organization.

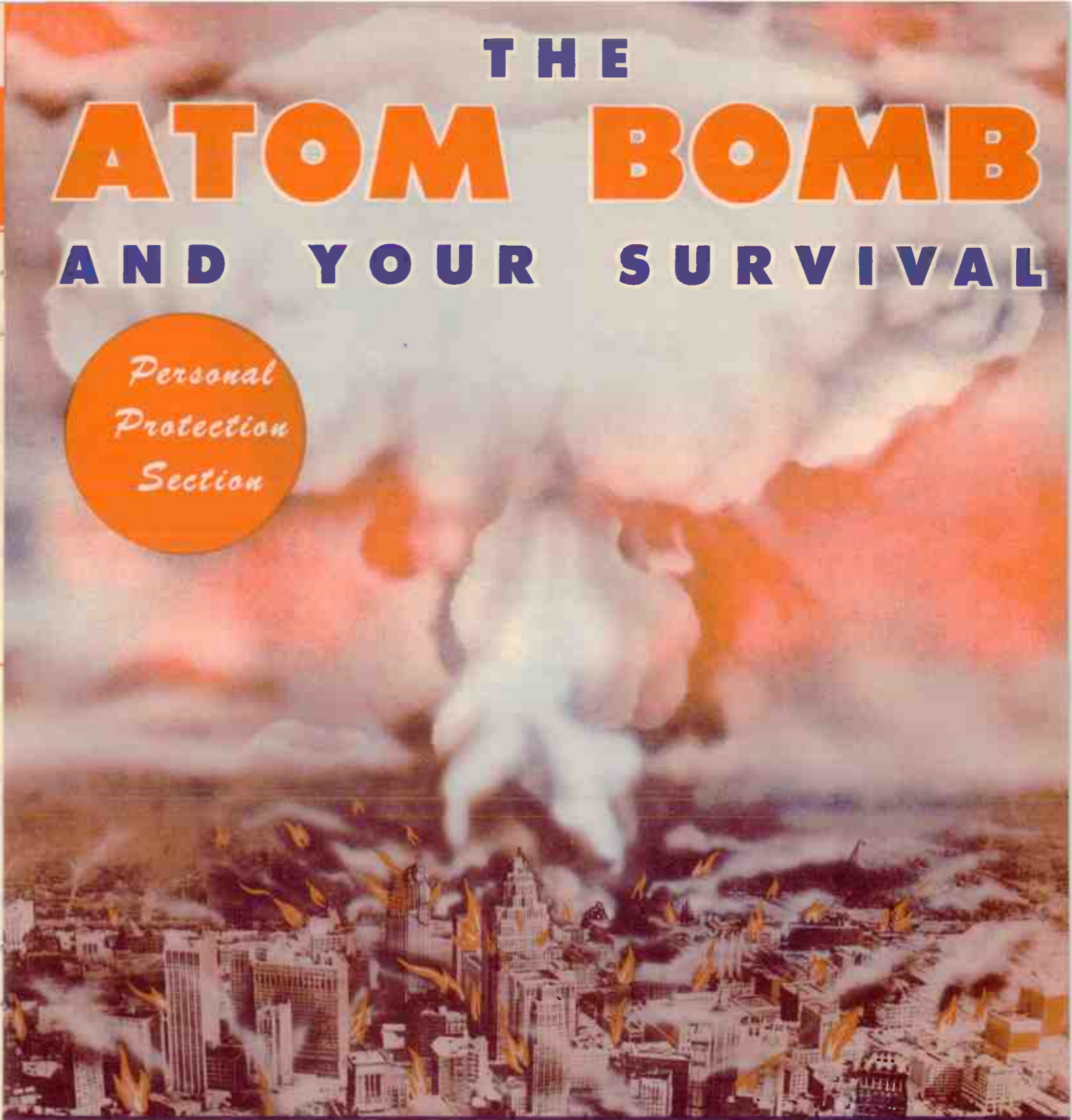


Charles A. Carran City Manager

"MODERN MI

"Modern Minute Men," a splendid twenty-five minute movie, produced as a public service by The Ohio Bell Telephone Company, featuring in graphic form how YOU and your family may be saved in the event of an atomic bombing in your city, has been playing in the theaters of Cleveland, and in other

THE ATOM BOMB AND YOUR SURVIVAL



The next ten pages of this Civil Defense Manual consist of vital information about the atom bomb; descriptions of the effects of an atomic explosion, and concise instructions as to what you can do to insure the greatest degree of safety for yourself, and your family, in the event of an attack.

All material is presented in a condensed, easily understood, graphic style and has been carefully compiled from official government sources, and with the close cooperation of many civil defense officials.

GA COUNTY AND THE AREA

HELP PROTECT OUR COUNTRY

The President of the United States in restating the responsibilities of the Federal Bureau of Investigation has called upon all law enforcement officers, patriotic organizations and individuals to report information pertaining to es-

pionage, sabotage and subversive activities to the FBI.

The following suggestions listed on this page are offered to assist patriotic organizations and individuals in complying with the President's request.

WHAT YOU CAN DO

1. THE NEAREST FBI OFFICE IS LISTED ON PAGE 1 OF YOUR TELEPHONE DIRECTORY. YOU CAN COMMUNICATE WITH THE FBI BY TELEPHONE, LETTER OR CALL AT OUR NEAREST OFFICE.

2. Furnish all facts in your possession. Many times a small bit of information might furnish the data we are seeking. If you have any information on sabotage, espionage, or subversive activities, contact the FBI.

3. The FBI is interested in receiving facts; we are not interested in what a person thinks but in what he does which undermines our internal security. Avoid reporting malicious gossip or idle rumors.

4. Do not circulate rumors about subversive activities, or draw conclusions from information you furnish the FBI. The data you possess might be incomplete or only partially accurate. By drawing conclusions based on insufficient evidence grave injustices might result to innocent persons.

5. Once you have reported information to the FBI do not endeavor to make private investigations. This can best be done by trained investigators who have access to data acquired over the years on individuals engaged in subversive activities. Hysteria, witch hunts and vigilantes weaken internal security. Investigations involving internal security require care and painstaking effort. We all can contribute to our internal security by protecting the innocent as well as by identifying the enemies within our midst. In cases involving espionage it is more important to identify spies, their contacts, sources of information, and methods of communications than to make immediate arrests.

6. Be alert. The greatest defenders against sabotage are the loyal American workmen who are producing the materials and weapons for our defense. They can be the "watch dogs" of defense in every walk of life.

7. The forces which are most anxious to weaken our internal security are not always easy to identify. Communists have been trained in deceit and secretly work toward the day when they hope to replace our American way of life with a Communist dictatorship. They utilize cleverly camouflaged movements, such as some peace groups and civil rights organizations, to achieve their sinister purposes. While they as individuals are difficult to identify, the Communist Party line is clear. Its first concern is the advancement of Soviet Russia and the godless Communist cause. It is important to learn to know the enemies of the American way of life.

John Edgar Hoover, Director
Federal Bureau of Investigation

RED CORE POISED TO STRIKE US

J. Edgar Hoover testifying before a senate appropriations subcommittee said that the fifth column menace from 43,217 known Communists is "far greater than in the last war with the Nazis and subversive elements.

Continuing he stated the Communists "for strategic purposes are emphasizing the need to infiltrate heavy industries such as coal, steel, rubber, machinery, transportation, mines and factories engaged in vital defense efforts.

He said their concentration is strongest in such industrial centers as New York, California, Illinois, Michigan, Ohio and Pennsylvania,

"The interruption of the flow of military supplies to our armed services and the undermining of the Civilian will to resist a campaign of sabotage could be as successful as military action against our fighting forces."

REPORT THESE MATTERS DIRECT TO FBI

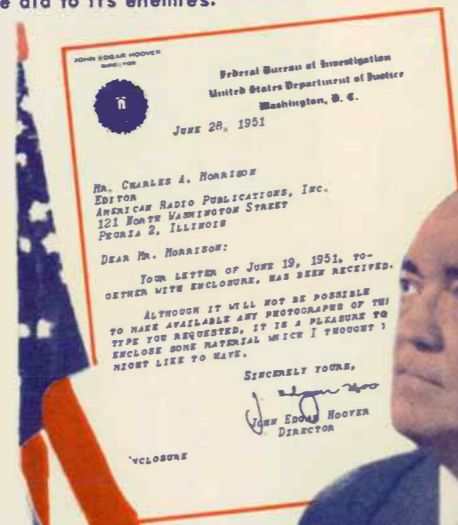
The public should be alert to report all information directly to the FBI which relates to the following specific matters:

1. Allegations of espionage, sabotage, or subversive activities.
2. Foreign submarine landings.
3. Suspicious parachute landings.
4. Possession and distribution of foreign-inspired propaganda.
5. Theft or unauthorized possession or purchase of large quantities of firearms, ammunition or explosives, or short-wave transmitters and receivers.
6. Poisoning of public water supplies.
7. Chartering of airplanes for flights over restricted areas.
8. Fires and explosions of an unusual nature affecting any phase of the defense program.
9. Suspicious individuals loitering near restricted areas.
10. Possession of radio-active materials.

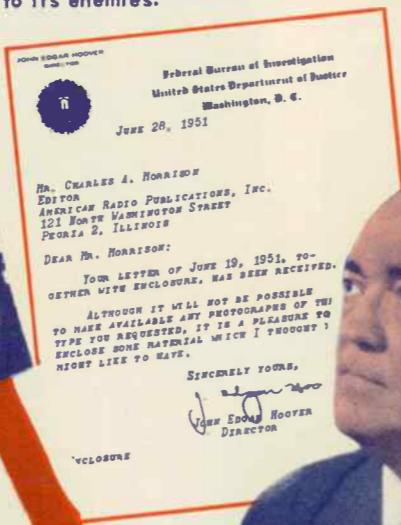
Espionage may be generally defined as the obtaining of confidential information regarding the national defense and furnishing it to unauthorized persons to the detriment of the United States or the advantage of a foreign power.

Sabotage is any act designed to destroy or damage national defense materials - to impede production, injure plant premises, to destroy public utilities, or to produce defective national defense goods.

Under the "term" "subversive activities" would be activities on the part of any individual or organization which are intended to forcibly overthrow the American government or to give aid to its enemies.



J. EDGAR HOOVER



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head the county-wide plan and a County Coordinator will coordinate all civil defense activities and planning. Meanwhile individual cities of Cuyahoga County have been moving ahead in their civil defense planning. A resume of the activities of a representative few of these cities are outlined on this page.

DEFENSE AREA



More than 85 Civil Defense representatives from the 6 counties making up Ohio's Fifth Civil Defense Area, attended a two-day civil defense staff school recently held in Cleveland's Public Auditorium. In the photo a problem in the "web defense" of Cleveland is being worked out.

SHAKER HEIGHTS

The Civil Defense organization of Shaker Heights was completed at the department-head level during the winter of 1950-1951. This organization embraces all functions of Civil Defense, including Air Raid Wardens, Police, Fire, Medical, Highway, School, Shelter and Transportation facilities.

Shaker Heights has additionally been organized into 16 neighborhood divisions, each with a Division Chief responsible for a complete Air Raid Warden organization.

The Civil Defense plans of Shaker Heights are based on the very simple formula that there are two essentials for a civil defense program.

- 1) An adequate air raid warning system
- 2) Thorough instruction of the people in self-defense.

We must depend upon the county to develop an adequate warning system as this must obviously be uniform throughout the metropolitan Area, but our Air Raid Organization is now distributing to all Shaker Heights homes the following instructive matter.

- 1) Survival Under Atomic Attack.
- 2) Fire Fighting for Householders.
- 3) Emergency Food Supplies.
- 4) Emergency Action to Save Lives.
- 5) First Aid Kit.

Civil Defense in Shaker Heights, beyond the program outlined above, will be adjusted from time to time to meet the exigencies of the situation.



Robert B. Dennison
Dir. Civil Defense,
Shaker Heights.

NUTE MEN"

theaters throughout the State of Ohio. This film which carries a message by, and the endorsement of Governor Frank J. Lausche, is now being made available to civil defense organizations throughout the nation who may wish to borrow it.



An Auxillary Police Unit in Cleveland Heights. Civil Defense uniforms shown were purchased by the men.

CLEVELAND HEIGHTS

The Cleveland Heights Civil Defense Organization began to function early in Jan., 1951. At that time Auxiliary Police and Auxiliary Fire Units were activated, and began training courses under the direction of the regular City Fire and Police Departments. The city has appropriated funds for the purchase of training rifles and helmets for the Auxiliary Police, and the men have purchased their own uniforms. The fire department has regular fire uniforms on order. Both Fire and Police auxiliary groups are continuing their training and it is anticipated that small moveable pumping units will be available for the Auxiliary Firemen in the near future.

Plans have been drawn up for the establishment of a uniform alarm system employing 25 small siren units distributed around the city, all of which would be set off simultaneously from city hall in the event of an air raid warning.

The city has been divided into 3 zones for the purposes of an air raid warden network. Each zone in turn is divided into units which in turn are divided into sectors, the latter numbering approximately 185 for the city as a whole. Unit and sector wardens have been established in 2 of the 3 zones and it is contemplated that the third zone will be set up shortly after the first of the year. A course in medical self help adopted from that given in New York State has already been given to Unit Chiefs in Zone 1 and they are engaged in instructing their sector chiefs in the course. Sound motion picture films have been purchased to aid in this training and a projector has been contributed.

Amateur radio units have been coordinated into the training program and at present a transmitter is being installed in the City Hall and one in the Drs. Hospital to provide auxiliary communications. It is anticipated that two more transmitters will be built in 1952 in large schools in two of the suburbs to complete the auxiliary communications network. Health and welfare centers will be tied into the overall program.



John B. Calfee,
Defense Director of
Cleveland Heights

LORAIN

Lorain Civil Defense was organized in September, 1950, at the request of Mayor P.J. Flaherty and upon authority of a special Civil Defense Ordinance approved by City Council. Willard B. Zimmerman, local business man, was appointed as Director and he set up a board of business, industrial and professional leaders to head the city organization. In this group are: Carl Olson, Asst. City Director; Earle Seidner, Director Training & Operations; Ralph Thibaut, Director Personnel; M.J. Powers, Director Supply; Dr. M.C. Kolczun, Director Health; Earl White, Director Industry; Gene Hopkins, Director Information; Mrs. Gerald Krupp, Director Women's Division and Ralph Neumeyer, Director Public Relations. In the past year much progress has been made and almost 1000 persons have received basic training sufficient to make them of immediate value in event of an emergency. Especially active have been the Civil Police Unit - more than 200 men completely trained and equipped, and the Women's Division, which is making a block-by-block survey of the City. Air Raid Warden and other classes are underway. City council has provided funds for administration of the program, with a part-time secretary and with headquarters in the Chamber of Commerce Office. Lorain, near Cleveland, is preparing to cooperate in the "mobile defense" program for inter community assistance in this area.

W.B. Zimmerman, City
Director, Lorain Civil
Defense.



TARGET CLEVELAND



This is Cleveland, leading industrial and manufacturing center. Seventh city in size in the U.S., Cleveland has a population of 914,808. The metropolitan area including Cuyahoga, and part of Lake County, has a population of 1,456,511.



Magnificent Cleveland Museum of Art, overlooking the Fine Arts Garden, is a gem of classic architecture in white Georgian marble.



Cleveland Airport, the largest municipal airport in the world. A major aviation center served by 9 major airlines Cleveland also has a downtown lakefront airport.



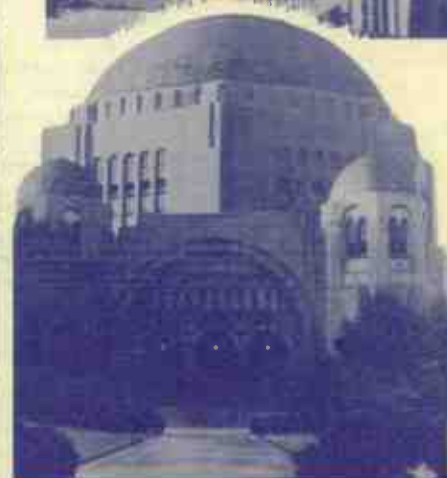
Entrance to Cleveland's fine harbor, showing the United States Coast Guard Station in the foreground. In the background looms the 52-story Terminal Tower.



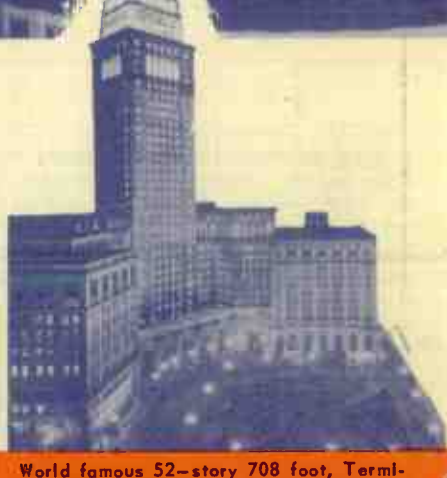
The U.S. Naval training submarine Gar at its berth in Lake Erie off the Cleveland lakefront (Air Force Photo)



Com. Bricker M. Ganyard, USN Inspector-Instructor, Naval Reserves, & Officer-in-Charge, Naval Reserve Training Facilities, Cleveland Ohio.



Symbolic of Cleveland's many fine houses of worship is the Temple (Jewish Reformed)



World famous 52-story 708 foot, Terminal Tower, dominant unit of the Terminal Group. To the right is the Cleveland Hotel; to the left Higbee's Department Store. In the foreground is Public Square, downtown Cleveland.



The Ohio Bell Telephone Building in downtown Cleveland is a carefully guarded communications center. (Ohio Bell Telephone Co. Photo)



Historic, and picturesque, Old Stone Church, on Public Square, in downtown Cleveland.



Cleveland's Public Auditorium and Exhibition Hall, one of the largest in the U.S., cost \$12,000,000. Its main auditorium seats 13,156; the Music Hall 3,000. The total exhibit area is 259,000 square feet, including a huge underground hall.



There are approximately 3,163 industries in Greater Cleveland with a total annual value of products in excess of 3 billion dollars. Shown is the Tapco Plant of Thompson Products. (Thompson Products Photo)



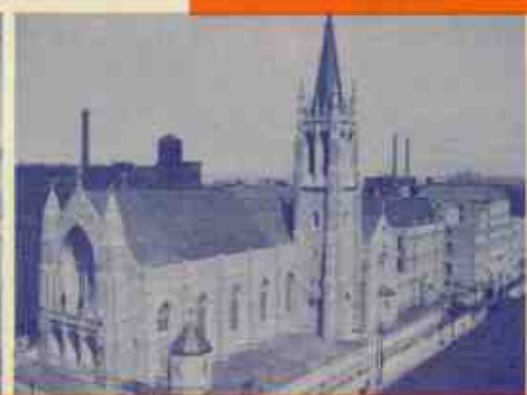
The Multi-million dollar Lewis Flight Propulsion Laboratory of the National Advisory Committee for Aeronautics, largest of its kind in the world, does basic research and development of aircraft propulsion devices, accessories, instruments, fuels and lubricants.



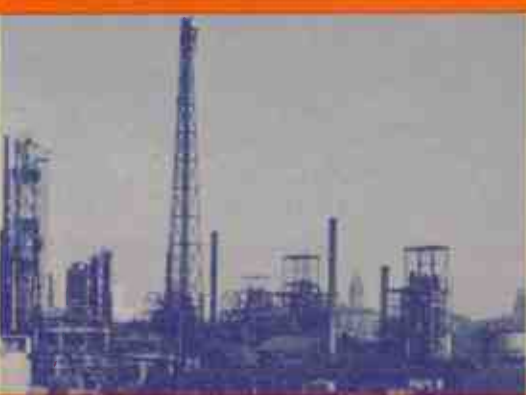
Nela Park, East Cleveland, houses the executive and laboratories activities of the Lamp Department of the General Electric Co.; is the home of the famous G.E. Lighting Institute.



One of the nation's outstanding libraries, the Cleveland Public Library has 2,634,000 volumes in its collection; has 31 branch libraries. (Cleveland Public Library Photo)



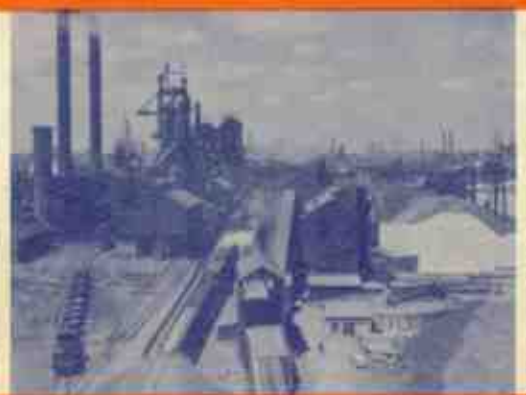
Beautiful St. John Cathedral, consecrated by Hoban in 1948. (Catholic Universe Bulletin Photo)



One of the tallest industrial structures in Ohio, is the new Cat Cracker at the No. 1 Refinery of the Standard Oil Co. in Cleveland (John Trauger - Standard Oil Co. Ohio)



In ore receipts Cleveland leads all lower lake ports with 15 million gross tons in a busy year. Here the Erie Railroad's gigantic Hulett unloader is removing 17 tons of ore from a ship's hold on each trip. (Erie Railroad Photo)



Cleveland's industry is based upon the production of iron and steel. This plant of Republic Steel Company in Cleveland has the world's largest steel strip mill. (Great Lakes Photo by Carl McDaw)



As a leading transportation and shipping center Cleveland has extensive rail facilities. Here, one of the many streamliners passing through the city daily emerges from the underground Union Terminal (Erie Railroad Photograph)