# THE NATIONAL CIVIL DEFENSE PLAN

18 January 1952

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RESTRICTED
Mr. James J. Wadsworth, Deputy Administrator of the Federal Civil Defense Administration, was born in Genesee, New York, and was graduated from Yale University in 1927. For ten years, starting in 1931, he was a member of the Assembly of the New York Legislature. From 1941 to 1945 he served as assistant industrial relations manager of the Airplane Division, Curtiss-Wright Corporation. From 1945 to 1946 he was director of the Public Interest Division of the War Assets Administration. He left government service in 1946 to serve as head of the Governmental Affairs Department of the Air Transport Association of America, resigning in June 1948. From June 1948 to June 1950 he was special assistant to Mr. Paul G. Hoffman, administrator for Economic Cooperation Administration. In June 1950 he joined the National Security Resources Board as deputy director of the Office of Civil Defense. On 18 September 1950 he was named as acting director of that office. Except for the period from 1941 to 1945, Mr. Wadsworth has been in direct contact with State and local governments since he first came into public life.
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GENERAL HOLMAN: The preparation of the United States for civil defense—both physically and psychologically—is of major concern to our Nation today. It presents a serious challenge, not only to our lawmakers and civil administrators but to industry and private citizens as well. It is of concern to the military because a strong civil defense means better support and greater military effectiveness.

Our speaker, Mr. James J. Wadsworth, is the Deputy Administrator of the Federal Civil Defense Administration. For the past year and a half he has been one of our foremost leaders in the development of civil defense plans and programs for the defense of our people and cities.

Mr. Wadsworth, we are privileged to have you with us again and to welcome you to the Industrial College.

MR. WADSWORTH: Thank you very much, General. It is a real pleasure to be back here. You didn't have this fine platform or this amphitheater the last time I was here. It seems to me that you had a balloon shed or something the last time. And I wasn't in civil defense then either. So it seems to me I am getting to be nothing but an ordinary bureaucrat bouncing around from one place to another.

I think the General in his opening remarks has done a good deal of what I might have wasted some time in doing, that is, selling the necessity for civil defense. I realize that it is not the purpose of a gathering such as this, that a sales talk is not for such as you.

This piece of paper is what I have prepared. However, I find upon rereading it this morning that I just can't seem to hold to it. Perhaps that is because I am so convinced that everybody else ought to be just as convinced about the necessity and the urgent need for civil defense that, no matter how factual I try to be, I always find myself getting a little into that kind of speech. So if I try to do some selling this morning, at least it won't last long and I can move into the areas which would generate questions.

I will say this—to cover the entire subject of civil defense adequately in the period of forty-five minutes is virtually impossible. So I have left out some things in which you might be interested. You can get them in the question period if you want them.

Japan, an aggressor nation, recognized as early as 1923 the prime military importance of providing an adequate protection for the civilian population and civilian industries in modern warfare and established
a national program of air raid protection drills. Germany, another aggressor nation, followed suit in the late 1920's.

Both their fears and precautions proved well taken. Students of military affairs tell us that far from proving ineffectual, civil defense in those countries prolonged considerably the time they were able to continue aggressive warfare.

It was not until 1935 that England passed its air raid protection laws and set up civil defense. Here I want to interpolate just for a moment. It is highly significant that, regardless of the peace after World War II, England has never relinquished its civil defense system, but has kept it on an active basis. Events subsequent to 1935 proved the life saving value of civil defense to a sorely beset nonaggressor nation.

Today, Russia, an aggressor nation, has a well-organized, 17-year-old defense. A few months ago the Soviets took steps to bring Russia up to date, merging all activities under central control with a new title of "DOSAFF," meaning "Voluntary Society for the Aid of the Army, Air Force, and Navy." The Kremlin ordered an "intensification of civil defense work throughout the Soviet Union, so that not a city, industrial area, village, or even a single collective farm, state farm, or machine tractor station would remain without a civil defense group."

Among the nonaggressor nations, Norway, Sweden, and Denmark are out in front in civil defense preparation. Indication of how seriously these programs are regarded is the fact that in Sweden it is not a volunteer matter. Every Swedish citizen is required by law to do such civil defense work as physical condition and state of health allow from the age of 16 until the age of 65. Training is compulsory, every house or plant owner is compelled to build shelters, and the owner foots the bill. A little bit different from our concept of it here.

Civil defense as a national program in being in the United States celebrated its first birthday last week. On 12 January 1951 the President approved the Federal Civil Defense Act of 1950 and established the Federal Civil Defense Administration as an independent civilian agency in the executive branch of the Government.

Being an ordinarily peaceful, nonaggressor nation, we hope we may never have an actual emergency need for civil defense. But we can't take a chance. Some sources which are accorded tremendous respect in this country say there is more than a fair chance we will need it. If we don't, then, as in the case of the insured house that never burns or the insured auto that never wrecks, the protection and the peace of mind will have been well worth the effort and expense involved, as well as for the other reasons. The Honorable Paul Martin, Canadian Minister of National Health and Welfare, who has the ultimate responsibility for
civil defense in our neighboring country, has made a statement in this connection which has become a rather famous quote. He said, "If you never need what you learn in civil defense, you lose nothing; but, if you never learn what you need, you may lose everything."

Our fighting men have relied on civilian support from the pioneer days, when women and children molded the lead bullets, loaded the muskets, put out fires started by flaming Indian arrows, and tended the casualties.

This civilian support of war effort has evolved through the wars to the point where in the present concept of atomic, biological, and chemical warfare, adequate protection of the civilian population and the civilian industries that support war effort has become as important as offensive and defensive military operations. In the words of the Secretary of Defense, civil defense is "a partner and coequal partner" with the armed forces, "a necessary and vital part of national defense."

This whole position is well stated by the Joint Chiefs of Staff:

"While the Joint Chiefs of Staff feel that civil defense itself is not a military, but rather a civil responsibility, the Armed Forces have in the past supported, and will continue to support, the very important mission of civil defense. If war should come, the entire military effort will be concentrated upon the primary mission of defeating the hostile armed forces. In the event of an attack upon the United States by enemy aircraft, our military forces will do everything in their power to shoot down enemy planes. However, it is the opinion of the Air Force that should such an attack come, a large percentage of enemy aircraft would probably be able to penetrate our defenses. In that event a competent Federal Civil Defense Agency must be prepared to function in order to return our workers and our factories to maximum production and restore communications in the shortest possible time. The military will be unable in such a contingency to direct this effort.

"There exists then, a requirement for an organization, planned and staffed beforehand, to take over in the event of an emergency of this nature. . . . If civil defense does not function effectively, our defense efforts will be very adversely affected."

Now, how does civil defense work? The pattern of civil defense for the United States involves a division of responsibilities between the Federal agency and the states. The Federal Civil Defense Administration, its administrator, and its deputy administrator, who must by law be appointed from civilian life, is responsible for:
1. Developing and standardizing the over-all plan.

2. Providing financial contributions to the states on a matching funds basis for certain types of equipment and other expenditures.

3. Disseminating attack warnings to the states and through them to communities and the individual citizen.

4. Stockpiling and distributing certain emergency supplies and equipment.

5. Training key personnel.

6. Carrying on a program of public education in civil defense matters.

7. Encouraging and facilitating the signing of pacts among the states for mutual aid in event of emergency.

8. Determining, after consultation with the military, the critical target areas of the country.

9. Exercising very broad powers in the event of an emergency.

Administration of this program is assisted by nine regional offices which are just beginning to be staffed to the ceilings and which we believe are necessary. We will decentralize as fast as possible to those regional offices and have them working directly and very closely with the state governors and the state civil defense directors.

Actual civil defense operations are a state responsibility to be conducted on the local level with volunteer workers supervised by full-time civil defense staffs. The state office supervises community planning, arranges mutual aid and mobile support between communities within the state, and arranges assistance pacts with other states. Operations are conducted by ten basic services, which can be adjusted at the local level as their needs dictate or as they desire. As long as the services are performed we do not particularly care how they use their language or terminology or how they might combine services with others. But basically there are ten: staff or administration, rescue, transportation, communication, welfare, engineering, fire fighting, police, health, and warden.

At the base of an adequate civil defense is the self-reliant individual, fortified with every possible training and plenty of practice, prepared to do everything he can to protect himself in an emergency with assurance and without panic. In addition he is prepared to extend efficient aid to his family, his neighbors, or the people down the street.
His efforts are duplicated in self-reliance and mutual assistance by family units, neighborhoods, industrial plant populations, communities, states, and even nations. That last word was added to the paper because, as you probably know, we have a civil defense pact with Canada, the basis for which in the preamble appears in language something like this: that in the event of a civil defense emergency Canada and the United States will operate as though there were no border at all.

Every person and every community has a part to play in an effective civil defense program. Remoteness from places considered probable targets or comparatively small size does not exempt any community from playing its part in the over-all program, since evacuee reception and care must be planned and mutual aid and mobile support organized.

This tying together of individuals, homes, industries, blocks, zones, communities, states, and nations is basically the bedrock upon which civil defense rests. In the perfected plan, a community takes necessary preattack steps—provision of shelters; dispersal of equipment, manpower, and facilities; and the like. If it is attacked, it rides out the storm, using every principle of self-protection to minimize loss and damage. Then its neighbors move in to help. Teams of radiation detectors, fire fighters, and rescue and other workers move to the stricken area. The wounded, dead, and the bombed-out people are moved out. Rehabilitation starts almost before the fires are out.

Even in the event of an attack without warning, civil defense preparations will be of invaluable assistance. Given only a few minutes warning, the casualties can be reduced as much as 50 percent.

Cooperation between the armed forces and civil defense, as integral parts of the defense team, has been close from the beginning.

Intensive surveys and studies by the military determined the effectiveness of civil defense operations in Japan, Germany, and Great Britain. A 1946 study by the War Department Civil Defense Board was directed by Lieutenant General Harold R. Bull. This study formulated the views of the War Department on the subject of civil defense, and most of the conclusions reached by that Board are still completely valid today and have been adopted by the Civil Defense Administration.

The Secretary of Defense, at the instance of the President, conducted another study in 1948 under the direction of the late Russel J. Hopley. It is entitled "Civil Defense for National Security" and is known more familiarly as the Hopley Report.
The philosophy of the Civil Defense Administration which was developed by the National Security Resources Board is an evolution from the Bull Report and the Hopley Report. There are few contradictions in theory or policy between them. It has been an evolution. There has been a sharpening of certain things and a toning down of others. But, generally speaking, we owe a tremendous debt of gratitude to the military for this basic, original planning before a Federal civil defense organization was set up by law.

Evidence that the relationship between the armed forces and civil defense is close after a year of operation is the fact that officers of the armed forces are assigned to civil defense functions throughout the country. In the Washington headquarters of our agency we have a Military Liaison Office which is directed by Colonel Barnett W. Beers, who is known throughout not only this country but also Europe as one of the outstanding experts in civil defense.

Let me also refer you to the Armed Forces Information and Education Division publication, "Armed Forces Talk, No. 387." This "talk," intended for use of commanding officers in informing their personnel, is concerned in its entirety with civil defense and emphasizes the cooperation of the military.

As a direct result of this close cooperation, the Civil Defense Administration is gradually assuming a position where it can relieve the armed forces of some civilian duties, such as evacuation of civilians from certain areas and the handling of civilian casualties.

Another activity in which the military and civil defense have joined forces is the matter of civilian volunteer auxiliaries to military activities. For example, certain antiaircraft activities are under contemplation; and, in the event of war, certain types of patrols for coastal reconnaissance may be required. A ground observer corps to assist the aircraft observer system is already in being, thanks to the efforts of state and local civil defense directors in cooperation with the Air Defense Command.

We are closer to the Air Defense Command than any other branch of the military. Through its excellent cooperation we have been able to perfect plans to take over, in accordance with the mandate of the Federal Civil Defense Act, the dissemination of civil air attack warning. We will have in each of our defense control centers a small group of people who will be at the division commander's elbow and will take over the evaluation of the situation as it shows upon his board; and upon his suggestion and recommendation will send alerts to the various communities which seem to be in danger of imminent attack.
After the attack it will be the responsibility of the Federal Civil Defense representative to decide when to take an alert off the city in order that the civil defense force may start operating. This also will be done, of course, in consultation with the military commander.

This cooperation that we have received from the Air Defense Command is further exemplified by the fact that a mutual agreement has been made whereby at Colorado Springs we will have a high-level policy liaison individual assigned permanently to General Chidlaw. We are very, very grateful for the way in which the Air Force, particularly the Air Defense Command, has helped us in this regard. Naturally, we were not in a position to take over air attack warning when the law was first passed; and we had to settle a great many details, as you can well imagine, before the memorandum of agreement was finally signed and sent to the Secretary of Defense for approval.

I know that you of the Industrial College of the Armed Forces have a particular interest in the civil industrial economy, in the impact that civil defense activities may have on it. That is a field in which in many ways I don't feel myself quite as competent as I might be. Perhaps your questions will bring that out only too well. Federal Civil Defense shares with you an immediate interest in two phases of our industrial program: procurement and supply and industrial plant protection.

We know that approximately 67 million of our people live in what we have designated, with the cooperation of the military, as critical target areas. An attack on these and other areas will cause great devastation and require vast quantities of fire-fighting equipment, first-aid materials, rescue facilities, clothing, feeding, housing, and many other types of supplies and equipment which are not ordinarily available in the quantities which will be required.

Our entire concept in providing for civil defense equipment, manpower, and materials is that the fullest use must be made of existing resources before a single cent of local, state, or Federal money is spent. Since our system depends largely on cooperation between the target and the support areas, we provide for the organized use of existing resources, following the principle that location and organization are far more important than quantity. We know that no single community can be self-sustaining under all-out attack. If we were given either the right or the funds by the Congress to furnish huge quantities of civil defense equipment and supplies to such a community, that would still not make it able to rely on its own resources, since an attack, particularly an atomic attack, could just as readily destroy all the additional equipment. So we have followed from the first the idea that a system of support from surrounding areas is far more realistic, because it does not call for a tremendous procurement program or an unusual drain in this mobilization period on men, money, or materials.
We recognize the concurrent need of military, normal civilian, and emergency civilian requirements. During a national emergency civilian production must be maintained while meeting the enormous additional needs of the military services and civil defense. Each of these three must be maintained without endangering the other. This demands careful phasing of orders. No matter how imminent the danger to civilians, civil defense must not take over the total output of any type of health supply and thus make it unavailable to the armed forces or to civilian hospitals.

We work very closely with the Defense Production Administration. We occupy there a position somewhat comparable to that of the armed forces. Like the armed forces we are also subject to National Production Authority regulations. These are safeguards that insure wise allocation of critical materials.

Incidentally, we have just been granted authority by NPA to handle our own construction applications and to assign and issue allotments of steel, copper, and aluminum.

We in FCDA think of our supply problem in three phases: procurement, warehousing, and distribution.

Procurement is handled under three methods of financing: first, by the Federal Government for Federal reserve supplies to be placed in strategically located warehouses; second, jointly by Federal and State Governments on a matching fund basis; and, third, by the Federal Government with state funds at the latter's request.

In lieu of establishing a large organization to perform procurement duties, we have been able to enlist the aid of other Federal agencies and to make use of their procurement facilities which, of course, has saved us a tremendous amount of money. In this respect we have had invaluable assistance from the Munitions Board, a service which has further insured against duplication or overlapping and against unwise allocations of critical supplies. We are also indebted to the Public Health Service, General Services Administration, and other agencies. Incidentally, we are purchasing all our medical reserve supplies through the Armed Forces Medical Procurement Agency.

I would like at this point to emphasize that we require that state civil defense organizations screen their requirement estimates very carefully. Public and private facilities, equipment, supplies, and manpower resources available within the state must be deducted. And so must requirements which could be met by mutual aid agreements among communities or by organization of mobile support forces by the state itself.
Warehousing, like procurement, is a civil defense problem on community, state, and Federal levels. The materials which are purchased with Federal funds become the property of the Federal Government; and accordingly it is its responsibility to warehouse, store, protect, and distribute such items. We have established warehouses at strategic points, as I mentioned. These are generally communities far enough from critical target areas so that, even with the expected margin of error in accuracy of attack, they would not be subject to attack, but close enough so they could get supplies from those warehouses to the attacked area within a few hours. The location of state and community controlled warehouses has been taken into consideration in spotting Federal warehouses. As in procurement, we have also benefited by the cooperation of the military and other government agencies in acquiring warehouse space.

Distribution is primarily a postattack service. It involves the emergency use of various facilities, particularly transportation. Here again our plans are synchronized with needs of the military. In that we work very closely with the Defense Transportation Administration.

This brings us to the matter of industrial plant protection. We have to be very careful in civil defense not to overuse the term "plant protection." In World War II it included internal security measures which are not the responsibility of Federal Civil Defense or of local civil defense. Internal security measures of protection against possible sabotage or subversive acts are still the responsibility both of the military, where the facilities are highly classified, and of the FBI. Civil defense, in my mind, should not stick its nose into that sort of business. We call our part of the job "Facilities Self-Protection." We limit our activities to measures designed to minimize the effect of whatever might happen either through all-out enemy attack or through sabotage.

Full-scale preparedness for defense includes the development of adequate plans for the protection of the Nation's industrial facilities. All practicable steps are being taken, in cooperation with industry and labor, to see to it that this sort of protection is provided.

Our program includes this protective system, as I said, to minimize the effects of enemy action; and, second, necessary countermeasures that will restore the facilities to normal operations in a minimum of time. We have available to us a key facilities list, which will be given to state and local civil defense directors, so that they will know the facilities which must be given top priority in rehabilitation or even in emergency hook up to power, water, or otherwise in the event of attack. We believe we are going to build a very well-informed civil defense organization out at the community level, which will preclude the necessity of having to run things from Washington and give orders as to what should be done, when, and with what.
Primary responsibility for facilities self-protection rests upon the owners and operators of the facilities.

Some questions arise there as to possible relief that might be given in the matter of amortization or tax relief where the owners of facilities put in civil defense protection. I am not competent to discuss this technically, but merely wish to emphasize that the private owner or the corporation having a facility can put money into civil defense and can expect to get some sort of return or recognition of this insurance expense. Of course, if he has a cost-plus-a-fixed-fee contract, he can include this as a cost, as I understand the situation.

The security protection of Federal property is primarily the responsibility naturally of the Government. The respective State and local governments are responsible for the protection of their own municipal buildings, public utilities, and public institutions. In the event of matching funds, as I have told you, where the state or community puts up half the cost, the title passes to the state or community upon delivery of the items. We do not want, as the Federal Government, to keep any interest in the title, but will merely have a spot-check inspection system to make sure that the property for which we paid half the cost is kept in good order.

The civil defense facilities self-protection program is intended to, (1) assist in the installation of adequate civil defense programs in plants where none now exist and (2) assist in the coordination of the present activities within the plant, adding those civil defense services not already provided.

As we visualize it each plant will have a virtually complete civil defense organization within its walls. It will have the health, the warden, the fire fighting and rescue, and all the rest, just the way the community has. It will have teams organized to go out and help the community in the event the plant itself is not struck.

It should be readily apparent that civil defense protection for industrial plants located within communities is part of the over-all civil defense planning for community protection.

Now, there is one part of our program on which I have not dwelt very heavily in this paper. I think I would just like to take a minute or two to point it out to you.

We have a dual responsibility in the act of informing the public and of setting up training programs for civil defense work. On the informing the public part of this work, we really have progressed further than on any other part of our program. Not only has Congress given funds for that part of our program, but we have had tremendously
fine cooperation from all public information media. It has been estimated that we have received, for instance, at no cost to the Federal Government time and space in newspapers, magazines, radio, and television to the extent of some three times dollarwise as much as we have been able to spend ourselves. We have free radio and television services going all the time. Motion picture producing companies have made movies for us without a single cent of cost to the Federal Government. And so on down the line it goes.

So, in public information we are doing fairly well. We have distributed over 57 million pieces of paper; these papers have included six or seven public booklets, air raid alert cards, pamphlets describing household first-aid kits and various other things—all of them very inexpensive. Many millions of them have been bought by the general public from the Superintendent of Documents. This brings revenue to the Government. In fact, the public information part of our program has brought more into the Federal Government than the Federal Government has spent for it.

The other side of the picture, the training program, however, is not so bright. I understand that two or more of the faculty of this college went out to our staff college at Olney, Maryland. So they know what goes on out there. It is a staff college course. It is not intended to be other than that. It is merely orientation and indoctrination and education.

However, we have opened up in the past several months two other schools over at St. Mary's College, California, and the other at Stillwater, Oklahoma. We have had great difficulty in operating these schools, largely because we have been precluded by law from paying any part of the travel or subsistence cost for the students who attend these schools. It was Congress' determination that the local communities and the states should be interested enough to send their representatives to the Federal school and pay their own way, because they would get free tuition. But it has not been easy to stir up interest.

As you all know the difference between a voluntary program and a tax-supported program is tremendous. The military or armed forces training program is comparatively easy, because they pay for the wages, travel, and subsistence of the students. But when you are working with volunteers and when you expect these volunteers to give up perhaps their entire vacation and pay their own way to attend these schools, it is difficult. A great many of them have done it. But you can see how hard it is just from the standpoint of the key people that we want to give training, because we are doing it on the multiplier system. These key people will go back and train the instructors, who in turn will train the great mass of civil defense workers.
In spite of that we are attempting to put on a program which will finally train over 15 million civil defense workers. That will give you an idea of the enormity of our problem.

There is a lack of response; I think that is because of the way we put on our first course. It was much too heavy on the lecture side and not enough on how to do things, training by doing. But we have changed our curricula in these technical schools and we think we are going to be able to get new people to come in.

In addition to that we are considering putting our show on the road, not only the staff college, but certain simple basic courses that can be taught without the transportation of a great deal of heavy equipment.

I think you will be interested in the results of a survey which was conducted for us by the University of Michigan. That university, as you probably know, has one of the best and most scientific public opinion surveys. It has been used for years by the Treasury Department to evaluate the results of war bond drives, and by many of the top industries in evaluating the results of advertising.

About June 1950 they put on one survey which reveals what we would naturally expect—that the general public knowledge and appreciation of civil defense was quite low. We were not at all dismayed by that. About a year later, just about the time the Korean truce talks started, they put on another survey. The result of this survey was a perfectly amazing increase in general knowledge and appreciation of civil defense. In fact the people from Michigan tell us that after roughly one year of operation we have already had better public acceptance than any of the other campaigns they have studied.

I will close by telling you that we have worked hard over the past year, and we are happy over the progress made. Nevertheless, we are in complete agreement with the President who said just the other day that the Nation as a whole has not made adequate progress in building an effective civil defense.

So we are buckling down to another year of hard work. Always before us is the fact that America's strength rests on the will of our people to resist aggression and in our power and ability to out-produce and out-fight a potential enemy.

The Attorney General in his December report on military procurement procedures concluded: "Armed with facts, and joined in common effort, the military and civilian agencies can avoid unnecessary dislocation. Lacking such facts and such common effort, the increasing tempo of our defense program will inflict great and possibly irreparable injury upon our competitive system, create waste, and jeopardize our ability to meet military needs."
Needless to say we heartily concur. Civil defense is based upon facts, facts that disprove many fallacies about atomic warfare. But, above all, it is based upon common effort. It is based upon our firm belief that civil defense is everybody's business.

QUESTION: What is the national policy on the building of air raid shelters, and what is the Civil Defense agency's recommendation for policy, and what effect will it have upon the national economy if carried out?

MR. WADSWORTH: There is at this time no national policy except the policy of the Federal Civil Defense Administration. Congress has not as yet accepted our recommendations in that regard. Briefly, our policy is this:

First, that a survey be made, block by block, house by house, in all the more critical target areas, particularly within a community in those subareas which are industrial, institutional, or commercial in nature. In other words where there is the greatest density of population during certain hours of the day. That survey will bring about an understanding of how many places, how many actual structures, can be used without any modification in order to afford at least fairly adequate shelter.

Second, it will show those shelters which with some modification can be considered as fairly adequate. After we have discovered those areas and how many people can be sheltered, based on a rule of thumb of six square feet per person, we will arrive at our deficit; we will then recommend that new shelters be built for those people.

In very general terms we believe that in the more densely populated areas, during daylight hours--because we are going on the assumption that more effective attacks can be made upon population and industries in the daylight hours than at night--there will be nearly 31 million people needing some sort of shelter. We have estimated through spot-checks on some of the largest cities that some two million people at present can be sheltered within the existing structures without any modification. This is only an estimate but it is a pretty good educated guess.

Another 14 million can be sheltered in structures which will need some modification--like beefing up, the removal of glass from inner partitions, and various things of that sort--which leaves us roughly 15 million people for whom shelter will have to be provided.

Our cost estimate runs roughly like this: for modification 196 million dollars, equally shared between the states and the Federal Government; and for new shelters 1,730,000,000 dollars, also equally shared between the Federal and state levels. Total shelter program, therefore, is less than 2 billion dollars.
As to the impact of such a program upon our economy, the only figure that we have to cite is that this less than 2 billion dollars should be compared to the total construction industry's production in the United States in the year 1950 of some 27 billion dollars.

In terms of steel and concrete, we are assured by those who ought to know that the impact upon our economy will not be so great as to seriously jeopardize any part of it.

**QUESTION:** I am interested in hearing your comments on what specific action the Civil Defense Administration could take in the event of the destruction of some major hydroelectric plant and its main transmission lines, upon which a large segment of the population and industry depend. How is that tied in with the engineers and other people, and who would attempt to repair them and put this service back in?

**MR. WADSWORTH:** The repair of such facilities is the responsibility of the engineering services of the local community. The engineering services are made up of the industries, such as utilities, construction, wrecking even, and all the other things that come under the general heading of engineering.

We also contemplate that for special facilities such as hydroelectric plants we urge the procurement at the local level, with possibly a small amount of Federal reserve, of stand-by generators that can be utilized in the event that the main system of the city is knocked out. But, as far as rehabilitation of destroyed facilities, such as hydroelectric plants, is concerned, the civil defense organization locally, with what help it can get, of course, from the surrounding communities, will handle that through the engineering services.

**QUESTION:** How much money has Congress appropriated for this fiscal year for the Civil Defense Administration? Second, how do you determine the allocation of this money among the states? How do you determine how much will go to New York, California, and so forth?

**MR. WADSWORTH:** The 1952 appropriation was 74,950,000 dollars. Parenthetically, I might say that we asked for 535 million dollars. That is broken into several major programs. Out of the roughly 75 million the sum of 56 million dollars is for our Federal reserve--50 million for medical supplies, 6 million for engineering equipment.

We were given 7.5 million in all for matching purposes. That sum is broken roughly this way: 2.25 million for fire-fighting equipment, 2 million for communications and attack warning type equipment, about 1 million for rescue equipment, and the rest scattered.

The way we allocate matching funds is this: Because the amount falls so far short of an over-all program, we decided on the "first things first" basis, of attempting to put all the money into the critical
target areas. Therefore, allocations are made to the states for the critical target areas on a straight population of all critical target areas ratio. In a place like New York State we just count the people in the critical target areas and that percentage of the total of all critical target areas is the amount of money that is allotted.

QUESTION: What plans do you have or are envisioning for training radiological defense teams and rescue teams of the civil population, that will probably have to be trained how to act in this area, in the decontamination area after an attack?

MR. WADSWORTH: Starting back last spring, the Atomic Energy Commission ran a series of courses for selected personnel sent to the various atomic energy facilities for radiological monitoring training. It is done on the multiplier personnel basis. Studies have been conducted in radiological training under supervision of those key people at the AEC places. Then they in turn train others who in turn train others.

Our main trouble has been lack of training equipment. A good deal of equipment has been loaned to us by the AEC.

On rescue we plan to give basic rescue courses at our technical training school. The first is a light type of rescue, where the wardens themselves might be able to do that with their own teams. Then regular, full-fledged rescue teams will have to be trained, which will take much heavier equipment. Finally, we will have an advanced rescue course which must be taken by all team leaders.

Rescue has gone very slowly so far. It is only in the last few months that interest in acquiring special rescue equipment has been cropping up in the states. Part of the money asked for and given us in the 1951 supplemental budget--5 million dollars--was given to us for matching with the states for training. A good many of the states and cities now are coming in for rescue trucks and other component equipment on which they will train their rescue people. So far most of the rescue training has been done at the local level through the local fire departments, most of whom have some rescue equipment.

QUESTION: What influence does the agency have in municipal and plant construction in the way of inducing dispersion and so forth?

MR. WADSWORTH: Our agency doesn't have that primary responsibility. That rests with the National Security Resources Board. So far, as I think everybody recognizes, there has been extremely little influence.

QUESTION: In the college here there appears to be a very excellent means of getting information out to selected members of the public throughout the country. They have these teams that travel throughout
the country and hold a series of meetings in selected areas, all care-
fully set up in advance, as a means of bringing in top people in the
community. Then also they follow those up with correspondence courses
for the military Reservists in the districts. Do you have any such
program as this to overcome this problem of getting people to come to
your college and that sort of thing?

MR. WADSWORTH: Yes, we have. We have already conducted two such
traveling jobs—we call it "Operation COOP"—with selected teams. Our
technicians train people to go out into the states.

The first shot is at the state capital. There they gather with
the top staff of the state civil defense director. They go over their
plans together. There is a critique. All the material that is perti-
nent to the situation is brought in and discussed. If the state has put
out technical manuals, those are run over and discussed with representa-
tives of the state and an evaluation is made.

Then about five weeks later a follow-up is made with the people
further down the line. They go more specifically to the cities. This
first team also goes to at least one major city in each state on the
first trip. Then they follow up to find out exactly what is being done
to carry out the recommendations that were agreed upon at the first
meeting.

In addition to that, we now have under consideration a plan for
putting the staff college show on the road for roughly one week out of
every month. In other words it will be here for three weeks and then
for a week it will go out to either a cluster of important cities or
one of the important metropolitan industrial areas and put on the show.
The only thing that has been holding us up is the fact that we do not
have the funds for that purpose.

QUESTION: It seems to me that the Federal Government and the
states are going to be stockpiling lots of medical supplies and that
there is going to be the problem of deterioration and the lose in
potency. Are any arrangements being made whereby these things can be
located in stocks at hospitals where they can be used before they spoil,
that is, rotated?

MR. WADSWORTH: Yes. There are in our medical stockpiling program
very few items that do not have almost indefinite life.

In addition to that, through the Armed Forces Medical Procurement
Group, we have been conducting packaging research study and the results
are now available to the states. Whenever they want to ship their
material, we show them how to package the units and we tell them how to
pack them for ultimate life.
However, on the antibiotic side there are certain items that deter-
iorate; but the shortest period of time, the shortest expected life
of any antibiotic, is three years. We are making arrangements with the
manufacturers so that at the end of two years we start rotating this
stock by getting it back into the commercial stream, into the hospitals,
so these things can be used before they do deteriorate, and so we can
replace them. We do have a regular stock control system on that.

QUESTION: I believe that the operation of civil defense depends
primarily upon continuous telephone communications. If I am correct
in that assumption, would you discuss the plan you have set up to over-
come interruption either by bombing damage or sabotage to your con-
tinuous communication?

MR. WADSWORTH: Our total plan contemplates a backing up of lines
with radio so that for the immediate emergency, if they haven't got any
lines, they can use radio. At the same time the individual Bell systems,
with all the independents, are working together and are working out a
series of by-pass loops which could take over in the event the regular
lines are knocked out.

I am not enough of a technician to explain it, but our people in
that field are very much satisfied with the way that is working out.
We do feel that with the radio backup we won't be without service at
any time.

QUESTION: It seems to me that you will have very much of a heavy
traffic problem in an air raid in these major cities; you will have a
heavy stream of panic-stricken people trying to leave the city at the
same time that your assistance will be trying to come in. I just won-
dered in special situations like that what special measures could be
taken.

MR. WADSWORTH: Several things are being done along that line. In
the first place, we have asked the Northwestern University Institute of
Traffic Control to put on a special course of that type for state police
people, city police people, and so on. In the second place, we are
working through the state directors with each major city and working out
an operation plan, one of the most important parts of which is the desig-
nation of certain streets for certain types of traffic.

With the local police, the auxiliary police, and any other means
that we have, those local people will be routed--all refugees going out
on one street and all aid coming in on another street--on a one-way basis.
That will be part of what we call web defense, where not only egress and
ingress to the city are controlled on one-way streets, but also belt
lines around the city laterally.
QUESTION: I have read with considerable interest about the testing of the Chicago plans and the testing in New York City. To what extent are your plans being tested for adequacy and to what extent are those tests being supervised by representatives of your office?

MR. WADSWORTH: There have been a great many tests made. The first three tests tried to get the civil authorities to handle the emergency with what they have rather than with special aid; those were in Washington, Seattle, and Chicago. Since then we have not actually supervised any tests; but in practically every state which has what they consider a critical target area there have been one or more tests made.

Our regional people always work very closely with the state and local people in the setting up of problems. We have also in many cases set up hypothetical problems for the city to solve. A decided lack of program was shown in every case. It is one of the best means whereby the seriousness of the situation can be brought to the attention of the mayor of the city, the state director, and everybody else.

QUESTION: When you have several radio stations in one area, what provision do you have for silencing all except the one that is sending out civil defense messages?

MR. WADSWORTH: We have a project which should be put into effect within a matter of weeks and which will provide for a "cluster" of AM stations around all the major cities and all TV and FM to be taken off the air. This will also call for a drastic reduction in power. That has been worked out with private firms and with the Federal Communications Commission. The Executive order on that is all prepared and ready for signature.

QUESTION: What plans do you have for using the State and National Guard in addition to air raid defense? In the last war the Army plan recommended that the Adjutant General of the state be the leader of the civil defense in his state. What change has been made in that in the civil defense plans?

MR. WADSWORTH: We have not actually told any state to change it. In fact, I think in some eight or nine states the adjutant general is still the head of the civil defense of the state. We do recommend that wherever possible it be a civilian situation.

As to the State Guard picture, I don't know how many of the National Guards have been Federalized and activated; and any State Guard will have to take its place. But that part of the governor's forces that are in the National Guard or State Guard will have very serious duties, particularly in things like riot control, panic control, and traffic control.
However, we leave it up to the discretion of the governor as to whether he wants to fit his State Guard into the civil defense pattern, or whether he wants the civil defense pattern to be one thing and the State Guard another. He can run it as he sees fit.

We recommend, of course, the utilization of all services. But whether the State Guard goes under the command of the civil defense director, or whether he wears two hats, it seems to me, is not an important concern as long as he makes full utilization of all available resources.

QUESTION: I would like your comment on the role of the civil air patrol and the auxiliary air patrols on which a lot of plans have been made. What do you have?

MR. WADSWORTH: Under the last agreement with the civil air patrols, they are going to share with us their mobile support units. In each state a certain segment of the civil air patrol will be somewhat reserved for civil defense purposes. However, they still come under the jurisdiction of the Air Force; and only upon a civil defense emergency and at the instigation of the state wing commander will the civil air patrol come under the control of the civil defense director. But in each case they will work so closely together that there won't be any jurisdictional disputes. There has been a great deal of arguing about it, but I think we have it pretty well cleared up.

QUESTION: I am thinking of several other agencies that would be involved at a time like this, such as the Red Cross and the Salvation Army. Do they work independently of you? Also the Red Cross has a number of warehouses throughout the country at strategic points. Do you utilize those in storing some of your supplies?

MR. WADSWORTH: Of course we work very closely with the Red Cross. We have made it the official collection agency for our blood program and for first-aid instructors, and so forth; and also for home nursing and nurses aid, which is considered very important in civil defense.

But when the chips are down, when it becomes a national civil defense emergency, the National Red Cross will become part of the civil defense team. Except where specific action or more peculiarly skilled outfits work as teams together, the Red Cross would lose its entity. It would still have the Red Cross emblem; but when we wanted to send its personnel to one place or another, it would be the civil defense director who would have the right to do so.

We have not attempted to reach an agreement with the Salvation Army. We are leaving that to the local level. We know, of course, that it will be of very great importance in welfare activities, in feeding, clothing, and handling refugees. At the local level and the state level agreements are being worked out. We have no national agreement with them.
COLONEL VAN WAY: I wonder if you would describe further your plans for using the local civil bodies, such as the American Legion and the Boy Scouts.

MR. WADSWORTH: That has not been done so much at the national level. That is done from the local level.

We take the position federally that from the civil defense standpoint, come a civil defense emergency, everybody becomes a part of the civil defense team. We try to keep any one organization from assuming responsibility for any single phase of civil defense. In other words suppose that an American Legion post should approach the local civil defense director and say, "We will take over the entire auxiliary police problem" or the Salvation Army should say, "Give us full responsibility for welfare." We don't think that is good, because we think those are governmental responsibilities at all levels.

So we haven't made any national agreements except where we have come to agreement with private units as to the place that their organization can fill during a civil defense emergency.

QUESTION: A new Super Market opened up yesterday in my community, with a lot of advertising and balloons around the city. One particular advertisement said, "Civil defense identification dog tag free." Have you adopted an identification tag for the civilian population?

MR. WADSWORTH: That is a completely local activity. We recommend that each locality do issue dog tags and explain that they will have to be financed by the locality. Tags are being sold now for fifty cents apiece, which just about covers the cost.

The only trouble with the indiscriminate type of dog tag program is that someone might in a give-away program give out tags which won't withstand heat and will shrivel up, the string around the neck will fall apart, and things of that sort. So we have put out specifications for what we believe is a proper dog tag--how it should be made and what it should carry. We are in no position, nor do we want, to finance any dog tag program.

QUESTION: Wouldn't those dog tags have to carry the blood type of the individual?

MR. WADSWORTH: Yes. That is one of our recommendations--that the tag carry the blood type. It would carry the religious denomination, the full address, and the next of kin. There often is no next of kin. We don't think that is very important.

QUESTION: During the war I was quite struck by the effectiveness of the British system of civil defense and particularly the action in panics during air raids. I wonder to what extent your plans have drawn from the organization and procedures that they set up during the war.
MR. WADSWORTH: We have drawn from them very heavily. In fact it is a continuous drawing. We are continuously sending people to England and they are continuously sending people here. We have borrowed some of their best instructors to help us in our training schools.

As to the action of the public in panics, we haven't any idea how the American public would react to the first attack. The British people didn't react too well to the first small series of attacks. But they got used to them. They knew that civil defense was working and they grew used to the attacks. In fact toward the end of the war the British were rather cool toward the shelters; they preferred to stay home.

So we have drawn very, very heavily from the British experience. We know they have a really tried-and-tested method of organization. You will find a great many parallels in ours.

COMMENT: Last October I took an automobile trip through New England. In the state of Massachusetts I noticed a very wide distribution of CD route signs, with CD symbols on them. They were in addition to the regular road number signs under the Federal system. I suppose they were a part of the state's plan for an emergency. They were posted on the main highways.

MR. WADSWORTH: Were they of a permanent nature--metal signs like the regular ones?

COMMENT: Yes, they were permanent.

MR. WADSWORTH: That was an offshoot of a special test job we did in Massachusetts with the state director of civil defense and with the civil defense in all the main cities. That is the method adopted by the citizens of Massachusetts for part of their traffic control system.

COMMENT: The signs are more permanent than just an experiment.

MR. WADSWORTH: I know, but they are the result of this test. We looked at them and thought it was a good idea. That is part of the traffic control system of Massachusetts. The signs show which routes are to be used by the mobile units and all the others down the line.

COLONEL VAN WAY: There is one trouble with the use of those signs by the average motorist. Those signs say, "This route will not be available in time of emergency," but there is nothing to give any idea to the motorist as to what is available if they had to get from here to here.

MR. WADSWORTH: That would have to be handled by a system of road blocks at the terminations of highways and crossings, so that the motorists would get verbal instructions from the people there as to where they could go.
QUESTION: I would think that some kind of formal contracts would be necessary between the neighboring communities for mutual assistance in such an emergency. Are there any national plans existing for that?

MR. WADSWORTH: Yes. There are a great many. We call them mutual aid pacts. We have them not only between communities but mutual aid contracts are now being signed at a very gratifying rate by adjoining states. Plans are being set up by the state directors.

For instance, New York and New Jersey have a very well-worked-out plan. The New England States have signed a complete regional pact, so that any New England State can and will get aid from the others on a very well-planned-out basis. That is going a little slowly in the Midwest and in the Southwest; but it is going very well in the Northeast.

COLONEL VAN WAY: Mr. Wadsworth, we are greatly indebted to you indeed, sir, for giving your time to spend this hour or so with us. You have added greatly to our instruction in clarifying this interesting situation.