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MANAGEMENT OF A WARTIME ECONOMY

10 May 1956

CONTENTS

	Page
INTRODUCTION--Colonel J. E. Walsh, USA, Chief, Mobilization Branch, ICAF.....	1
SPEAKER--Mr. Edwin B. George, Director of Economics, Dun and Bradstreet, Inc., and Chairman of Mobilization Programs Advisory Committee.....	1
GENERAL DISCUSSION.....	31

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Mr. Edwin B. George, was born in Wilkinsburg, Pennsylvania, and graduated from the University of Pittsburgh with an A.B. degree. From 1922-26 he was American Trade Commissioner to Far Eastern Countries and during 1930-34 he was with the Department of Commerce as Chief, Marketing Service Division and Chief, Domestic Commerce Division. During 1934-35 he was Executive Secretary, Advisory Council, NRA. From 1936 to the present time he has been Director of Economics, Dun and Bradstreet, Inc., and during this time he has served in an advisory capacity with the Government and Congress, in many agencies, such as Consultant to the Chairman of the War Production Board, and to the Administrator of DPA and NPA; Executive Secretary, Advisory Council, NRA; Consultant to Congressional Committee on Postwar Planning and Select Congressional (Herter) Committee on Foreign Aid; member of the Economic Policy Committee on the U. S. Chamber of Commerce. He is presently Chairman of Mobilization Programs Advisory Committee. Mr. George is contributing editor of Dun's Review and Modern Industry. In 1945 he was co-author of "The Use of Wartime Controls During the Transitional Period," issued by the Congressional Committee on Postwar Planning. This is his first lecture at the Industrial College.

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COLONEL WALSH: General Hollis, General Calhoun, Admiral Deutermann, and Gentlemen: This morning we continue our exploration and appraisal of the complicated security and mobilization planning task we face in this nuclear age. As you recall, yesterday we heard from Dr. Flemming and some of the planners in ODM. Very often people who are close to a situation lose perspective: sometimes they see the forest but miss an occasional tree. With that in mind, ODM has a Program Advisory Committee.

This morning we are fortunate in having the Chairman of that committee to speak to us. He is Mr. Edwin B. George, an economist of note. He has been the Chief Economist for Dun and Bradstreet for the past 20 years, and he is an outstanding author in the economic field. He has had a great deal of experience in these matters, as do most of the members of the Program Advisory Committee. He has a certain amount of detachment. He can view what is going on in mobilization planning with experience, but still is not closely identified with the problem.

We expect that Mr. George will give us a critical analysis of what is going on in the mobilization planning area now.

Mr. George is no stranger to this platform, having spoken here a number of years ago. I should like to take this occasion to welcome him back and to present him to this year's class at the Industrial College. Mr. George.

MR. GEORGE: Thank you, Colonel. General Hollis, Colonel Walsh, and Gentlemen: In Colonel Walsh's kind introductory remarks he did identify the two most intimate relationships I have in this world, one as an economist for Dun and Bradstreet, and the other as the Chairman of the Mobilization Program Advisory Committee. I do want you to know that, although lacking any other interest in common except that of Government and citizen, those two agencies enjoy a fierce rivalry in disclaiming responsibility for anything I may say here.

Virtually all peacetime mobilization programs arise out of one of two approaches: the mobilization base approach or the nonmilitary defense approach. Historically, the mobilization base approach has guided the mobilization program; it dominated ODM's thinking during the Korean war period. It has generally assumed a virtually unattacked domestic economy. Accordingly, it is suitable for a limited war situation or a general war without attack on the continental United States (Plans B and C).

With the growth in superweapons and the growing threat of their use against the United States, the nonmilitary defense approach has come progressively to the fore. In its genesis, this was defined as including all measures taken by civilian agencies to (1) minimize the effects of enemy attacks on cities, industry and Government; (2) assure continuity of essential production, governmental functions and community services in the event of attack; and (3) deal with the emergency conditions resulting from attack and restore those industrial defense facilities essential to support the national security.

Periodic war games, continual review of plans, and the continuing growth of weapons effects (most recently the introduction of "fallout" as a problem) have all combined to make attack planning something like running on a treadmill. As fast as it appears that some progress is being made, a new assumption or concept is developed which suggests that our readiness may be even less than we thought, and we never thought that it was more than formative. Our plight in this respect is getting to be like what that of the soldier, I suppose, has always been. I will never say a dull moment, because I have virtually lived in an Army community myself in peacetime--Fort McKinley. I enjoyed the life very much, but I can't say that it was always exciting. At any rate since we civilians have gotten into the war-gaming business on our own we have not yet had any reason for complacency about our strategy or genius.

All of these concepts and related developments in planning have served to emphasize one thing: our success in surviving an attack will depend on not so much what we plan to do after it happens as on what we succeed in doing before.

I. Definition and Objectives of Nonmilitary Defense.

A. Definitions.

For purposes of communication I can think of nothing more essential than to distinguish the types of war we expect to be talking about at each stage of discussion and to be sure that we mean the same thing when we speak of "nonmilitary" defense.

The latter I am defining broadly to include civil defense of course, but even more importantly in some respects and stages, a depressing array of economic, industrial, political and social management problems. Perhaps the best concept for disclosing the breadth of this approach is "Management of a (Crippled) Wartime Political Economy," and even this concept is too simple in that the extraordinary social aspects of any new war are merely implied.

The unattainability of precision is further underscored by the fact that for this brief exploration I am going to pretend that only four types of war need be considered whereas we know that the kinds and degrees of resort to force to settle modern international differences can vary almost infinitely and should really be posed as a problem in permutations and combinations. The four types seeming to have a sufficient chance of happening to require anticipatory action are as follows:

1. A thermonuclear war in which destruction is so devastating as to approach annihilation.

2. A thermonuclear war in which enough resources and population are left functioning to permit effective mobilization of resources within a matter of weeks or a few months.

3. A modernized World War II in which through some convention, mutual fear, or other event, the use of thermonuclear weapons may be avoided except in tactical situations.

4. A war of limited objectives, involving only a partial mobilization of manpower and physical resources and not breaching the boundaries of the United States.

B. Objectives.

Obviously these must in turn vary with the type of threat. In merely announcing the organization of my remarks, I will not try to cut the objectives into fractions and make separate bundles of the pieces pertaining exclusively to each type. Not enough would be gained for the time required. Major distinctions must however, be recognized as I go along.

1. Deterrence to a potential enemy is as much an objective here as in the maintenance of a strong military posture:

Nonmilitary defense is an integral part of our total military strength, and the integrity of the fabric should be brought home both to Congress and citizens. The arbitrary dividing line between military and nonmilitary disappeared long ago as far as concerns defense-supporting industries. Now, under the threat of a new dimension of period, we find that we have to struggle against an excessively narrow concept of nonmilitary defense itself. As I shall try to show, the enabling legislation now on the books itself reflects this unconscious myopia. It is further demonstrated in the present allocation of our funds and efforts.

As a practical matter it is perhaps necessary first of all to reverse the mistaken belief that to be effective the program has to be dangerously expensive. Its more essential features will never require in annual outlays more than a tiny fraction of the current budgets of the Department of Defense.

Before leaving the point I would like also to illustrate the breadth of nonmilitary defense itself, within the breadth of this modern concept of deterrence. It reaches out to embrace the stability and growth of the entire economy, and a generous and even wasteful devotion of resources to vigorous research and development on weapons. The fact that the Russians divert so grotesquely larger a share of their national production to military purposes in peacetime makes it all the more important that we keep our national production far ahead of theirs. And we are so interlocked with our allies economically that any serious domestic depression could save Russia the trouble of machinating to shiver the alliance. As to weapons research, when has civilian engineering not profited from its discoveries? It may not be a particularly cheerful thought, but the tempo of our industrial progress has always been stimulated by discoveries made under the forced draft of military necessity.

2. It is a part of the enemy's many-sided effort to weaken and destroy our will to resist. Our Government itself cannot face outward with confidence if beset by a knowledge of internal helplessness against known means of attack. And there must be not only grim awareness on the part of the public as to what can happen, but a sublimation of that terror into a reawakening to values and a resolution that they if not we shall survive. This is the essence of preparedness to resist, and the enemy will know it.

3. The very practical complement of preparedness of mind is the preparation of means to recover our economic strength and capacity, promptly and effectively, after attack, and to attain maximum effectiveness (again in terms of the greatest speed and capacity possible under the circumstances) to support military operations.

In pursuing these objectives a problem of publicity is raised for us. We need it to carry Congress and the public with us. Abroad, it will support charges of "warmongering." As to the latter, we can't afford to pay too much attention. Despite its logic and its talk, the world knows the Politburo is both innately ruthless and opportunistic and that it is safer to antagonize America than Russia. Neutralism is a blend of many emotions, but they include fear of Russia and more than a dash of America's old isolationism. Much thinking is rationalized to justify letting the United States carry the burden of defense. Without a strong America and alliances there could be no choice of neutralism and the Kremlin would in vital matters be the neutrals' overlord. I think this would be the case even though I must and do recognize that the Kremlin's recent turnabout may be sincere, even though the proof of sincerity they offer in killing the legend of Stalinism is still theater. It is desirable in my judgment not only to be strong but to keep the world assured of our strength. Despite their criticism, many nations will yield less substance to both threats and blandishments from Moscow if they believe we are strong. We are dealing in part with world schizophrenia. Nevertheless the overtones are a handicap and could deepen unless our publicity is kept free of any chauvinistic flavor and is even turned to advantage on the propaganda front as well through casual reminders of past Russian irresponsibility, cynicism of past offenses against the world, and capacity for changing policies overnight.

It is plain enough that what I have principally in mind is the problem of managing a badly crippled economy with side glances where appropriate at the case of major military effort without enemy attack.

II. Background.

The evolution of thought about how to conduct nonmilitary defense may have kept pretty well abreast of the spectacular evolution in weapons and strategic plans. I stress thought because progress in means has been ragged. Let us take off from the rather clear policy and program that satisfied us at the end of the Korean episode:

a. Maintenance of mobilization base.

b. Renegotiation of military requirements (stress on feasibility and distinguish from meaning of the term in Defense Department sense).

c. Readying of orthodox price control and rationing.

d. Stockpile.

Five years for metals.

Intensified attention to machine tools.

e. Dispersal policy (embryonic in 1952).

Use of tax amortization and other stimulants.

f. Some mumbling about labor drafts.

III. The Organization Structure for Nonmilitary Defense and Economic Mobilization.

A. Without Major Enemy Attack on Continental United States.

To save time I will compress under this category a conventional war with Russia and a range of peripheral actions serious enough to engage substantial resources and of a character to pose a constant threat of general but largely conventional war.

1. State of Preparedness.

These situations fall within our experience and for the most part we know how to manage them. Organization must be adequate to handle familiar activities such as periodic testing of military

requirements for feasibility and yet maximizing them, materials controls, mechanisms for allocating resources at the right places in the right quantities and at the right time, industrial management (with provision for cutbacks of nonessential production; production schedules, set-asides, diversions of resources and capacity) and inventory control as a binder for the whole clutter of contraptions alien to our peacetime way of life--plus stabilization and effective use of manpower. You are not here to reminisce, so under this heading I will speak only of present organization plans, and of the most exasperating of all types of control--economic stabilization--where because of the intrusion of psychology and pathology you can't limit your degree of restraint to the pressures that you physically generate by your rearmament.

a. This part of the program may technically be called "stabilization through maintenance of near equilibrium and correction for nonequilibrium."

Whether or not to invoke price-wage controls in the event of a fairly sizable peripheral action threatening general mobilization is a headache. Nobody wants these if they can possibly be avoided. If prolonged they can be ruinous to our kind of system. The kind of inflation resulting from brush fires is partly mechanical and partly pathological. With the one we ought to be able to deal with a mixture of traditional indirect controls--such as heavier taxation on consumption and tighter monetary restraints--and physical excising of production of civilian goods where necessary to make room for military goods, supplemented by strong priority and inventory restraints. Even in this case great pressure would be put on prices of the displaced goods, about which we can only query, Is that as bad as the galling and distorting effect of market controls? But public reaction will never be mathematical. The public will most likely plunge and send almost all prices soaring. Taxes and tight money can never stop this sort of inflation, because this is a rich country with fairly equitable distribution of income and assets, and the great majority of people have their own reserves out of which to hurt themselves. When the discovery is made that supplies of most necessities will still be ample excitement might theoretically subside and prices--notably excepting those of consumer durables--subside with them. But that logic neglects the intervention of our institutions. Strong unions will seize upon the elemental upsurge of prices to demand compensating increases in wages, and in this area, as well as that of some prices, the law of gravity is voided. What goes up won't come down

again, a phenomenon that we have to dub the wage ratchet. Up to this point a freeze seems strongly to be indicated, but then new troubles begin. It will not be very effective, hardly at all for the prices of farm staples and subsequent wage adjustments, rollbacks are usually impractical, thousands of adjustments must be made in the interests of both equity and production, and in time price controls tend to atrophy anyway. Liability to flareups out of a bed of prolonged international tension could be chronic, and prolonged price controls can do great damage to our basic health. Political weight however will fall on the side of attacking symptoms, i. e., the initial pathological upsurge--and incidentally of relieving Congress of the necessity of raising taxes as far as it should.

b. Comments on Principles of Current Organization Plans (new chart).

The concept is that of a relatively small organization in the Office of the Director of War Resources. Operating responsibilities are delegated to a War Production Administration, a War Manpower Administration, and a War Stabilization Agency; and to six resource agencies--Food, Housing, Health, Communications, Transport, War Energy and Natural Resources.

The Central Office (OWR) must nevertheless be large enough to conceive an internally consistent program and enforce it through the instrument of directives, audits, appeals, and personal observers and catalysts working out of the Director's Office but not trespassing on line authority. The point I am emphatically stressing here is that there must be no repetition of the paradox of an all-powerful central agency chasing after problems that have become rancid with age, and whose roots lay in irreconcilable doctrines and elements that shouldn't have had any independent life in the first place. A master program must be laid down by OWR on the basis of a facts on needs and resources submitted by the agencies that square them as nearly as possible with the size and mix of military program that the JCS and Department desire. Thereafter the OWR must stay on top of it.

There are still minor quarrels to be resolved. War food should be set up as a separate agency and not be enveloped in the Department of Agriculture. Farm equipment should be in WPA and not WFA. War energy and natural resources should be separated. At the moment I am reporting contentions, not judging.

But the statutory conflict between the FCDA and the supposed central authority is still the big rub. This enigma is giving trouble without any atomic complications, but inasmuch as the agency was set up to cope with somebody's notion of nonmilitary problems arising after atomic attack I will consolidate my remarks under that heading in a minute or two.

I have little faith in paper boxes as abstractions. One tough unfamiliar problem can make shreds of them, and we have accordingly urged that top-flight personnel be drafted to run a few substantive problems through the system for testing purposes.

B. With Major Enemy Attack on Continental United States.

A customary distinction under this heading is between a status in which planning for such an attack is completed (D) and one in which we are caught partially unprepared (D). I will not labor it here, and will focus for the most part on the theme of what has to be done to achieve preparedness to the extent reasonably possible. The setting is that at the moment most planners are laying different stress on the various elements entering into a complete plan--civilian care and treatment, management of manpower, resource and capacity control, industrial rehabilitation, military buildup, provision for swift retaliation, stabilization, etc., all of which in practice must of course be integrated.

1. Tentative Acceptance of Nonattack Organization as a Framework Within Which to Expand and Adapt.

In fact of course entirely new and grotesquely different functions will leap into being with no human experience behind them, and we must imagine the realities for which structural provision must be made. Granted that any preconceived structure will be paralyzed or the usefulness of parts of it be reduced to a reserve status, under the first impact of atomic attack, some features will survive or be revived.

a. The President will still be Commander in Chief.

b. There must still be a central nonmilitary war administrative agency exercising the powers of the President under his direction.

c. There will still be at least embryonic administrative units for production, manpower, and stabilization; and resource agencies responsible for food, housing, transport, energy, and natural resources. They may be czars without czardoms for awhile, but they or their embryos in existing Government departments and agencies will have anticipated as far as possible the conditions in stricken areas and industries and have prepared manuals of instructions or at least guidelines as to the things that must be one even in chaos. And among their own first duties would be to assemble as much and as good information as possible on the extent of destruction and the location and composition of surviving facilities as groundwork for slow but gradual reintegration.

2. Special Features of Organization for Atomic War.

a. Resolving Present Built-in Conflicts of Authority.

A great problem that would confront us at the outset of a postattack period would be the potential clashes of authority in adopting and enforcing basic policies. As we stand today, we have built-in clashes of authority that would spring to life immediately after an attack occurred. People concerned with war planning have recognized this danger, but so far little of a tangible nature has been accomplished to assure us that the clashes of authority would not be disastrous. In terms of the Federal statutes now on the books, the authority of the President is now dangerously and thoughtlessly dissipated along several operating arms with overlapping powers. At the other terminal, we have under our form of Government a whole series of islands of authority in the person of State Governors, State Legislatures, and local civic authorities.

Our present concept of civil defense, coupled with its present statutory base, would give a dangerously slanted direction to postattack efforts. The objective would all too likely be the mere restoration of the status quo in civilian shelters, utilities and industrial installations. Every community and State would quite naturally and excusably seek to have the damage caused by attack fully repaired or replaced. There would be a clamor for the resources, in manpower and materials, to accomplish this result. In a life and death struggle we simply could not afford such a use of scarce resources. The bare minimum help for human survival, the minimum care of injured survivors, and the restoration of only those industrial resources which would contribute to ultimate victory--these would be all that we could afford.

It is all too easy to say that, once an attack occurred, all of the authority could be centralized in the hands of the President and all of these potentially opposing authorities could be brought into line by the mere issue of military proclamations by the Commander in Chief.

This is too facile a solution: It couldn't happen without clean and well-bedded lines of authority emanating from the President; it ignores the tremendous value of being able to utilize decentralized strong points of authority, to which people would naturally turn. There is thus a great area of intensive study and planning in the resolution of these potential conflicts in such a way that the resulting machinery would assist and not obstruct the carrying out of essential policies.

I must say that everyone is trying, and being fair about it as far as the statutes permit. By the terms of a recent agreement, FCDA's status as a claimant for resources in wartime has been officially established, but its additional function as an independent operating agency with a war-triggered statute still presents serious difficulties, i. e., (1) conflict with Military G-5, State Authorities, and OWR Regional Coordinators seems inevitable, and (2) authority for the distribution, rationing, and requisitioning of materials, equipment, facilities, and services under Public Law 920 suggests a conflict with OWR Agencies' responsibilities that needs prompt clarification. OWR now lacks inspection authority over what FCDA does on rationing. A body that is at once a claimant for supplies and has authority to requisition independently presents an enigma the exact like of which I have not run across before. Fortunately the two directors are friends and desire to keep down difficulties, lamely we have recommended a joint planning group to prevent mayhem down the operating chain where friendship sometimes gets thin, but I personally see no solution except through new legislation that restates administrative verities. In the terrible contingency of atomic war courtesy and decency, which can sometimes move mountains in normal administrative relationships, isn't going to move them very far.

b. Regional Authorities.

Everyone realizes that the country would be cut into temporary islands of unbalanced resources in every stage of horror, suffering, misery, with microgovernments exercising iron control over resources and men. Even with the most careful advance planning,

latent conflicts of authority among State and local authorities, representatives of OWR and FCDA, and regional military commands would break into the open. And ODM's advance planning is so far rudimentary, although intelligent, in the opinion of many students of the problem absolute authority would have to be vested in an appointee of the President serving as the regional Director of OWR responsible administratively to the national director as soon as circumstances permitted. In him all power over available regional resources (if not political authority) would be vested in the first instance. One of his first acts would probably be to delegate authority over life sustaining and vital rehabilitation goods in the area to the Regional Director of FCDA, but military and other imperative needs would also have to be met and (some of them have already been mentioned) ultimate discretion would remain with him. So far neither legislation nor blueprints has been carried quite that far, and even in peacetime exercises there is needed a shift in official ideology from the concept of coordination to that of command.

What is in mind is a regional and area approach under overall Federal guidance. For while it is true that local initiative amidst chaos and death may be the only effective form of action for probably weeks at least, the final responsibility of the Federal Government for the conduct of war will under the Constitution remain fixed, and all plans should contemplate a reversion of immediate responsibility to it as soon as possible. In any event, it is generally recognized that planning will have to be on a disaster-area basis and not on State, county or city boundary lines.

The ODM and cooperating agencies are already testing Federal functions at the initial points of atomic impact so that a minimum number of problems would have to be submitted to central agencies. Still awaiting solution are acceptable boundary lines for regions between Army field commands and those of other agencies differently drawn for their own special purposes; also a modus operandi between ODM's "Regional Defense Mobilization Committees" and projected Civil Defense Regional Coordinating Boards. One thing is clear, and that is that the RDMC Chairman will have to have extraordinary personal qualifications. And forthcoming efforts to integrate Military and Nonmilitary Command structure will keep raising the question of how civilian and military officials can most effectively mesh their functions and authority in stricken areas for different purposes.

It will have been noticed that most of the major features of an atomic wartime structure are still in inchoate form.

IV. Policies, Actions, and Plans Fitted to the Postattack Situation as it Can.

All these will differ so radically with even the type of atomic war projected that an analyst simply must make a choice. I am arbitrarily choosing a "broken back" situation. Following a heavy attack, and assuming that one equally heavy would have been inflicted upon an enemy, the country might enter into a period of one or two years in which the objectives would be survival, increasingly effective defense against the repetition of attack, and laying the foundation for a deferred counter-effort. I may say that among the civilian planners with whom I work, the likelihood of such a "broken back" period is the possibility to which most tend to adhere. Indeed this is probably clear enough from my argument against the lodging of powers with a civilian defense agency that equals and can run against the different powers of a supposedly central agency charged also with responsibility for crash rebuilding of a military force and an industry to back it up.

You will have noticed the broad coverage--Policies, Actions, and Plans. In some of the respects I shall consider we can formulate policies and/or act now, and in others merely plan. To the extent practicable, I have classified each project according to its potentialities by these tests.

A. Policies, Actions, and Plans Affecting People.

1. (Action): Evacuation and/or Shelters.

This is the province of the FCDA but both knowledge and policy seem to be in flux and a few points are worth making here.

All debate has to start from the fact that with the destruction of less than 200 metropolitan areas would go three-fourths of both our industrial plant and our scientific, managerial, and highly skilled personnel. Many elastical variations are played on this theme. Effective change would be much greater because our system is actually a fabric of finely interlaced parts and any great holes that would be torn in it would paralyze production far beyond their own diameter. This is not to mention the extensive casualties outside of target areas that would be inflicted by radioactive fallout.

It is still worth providing protection for structures because in the miles of combat ground zeros will not always be where they are supposed to be and any area could conceivably be peripheral. Methods of hardening structures can range from sprinkler systems to rarely practical underground construction. There seems to be considerable opinion now that deep underground shelters would infrequently be obliterated. Much present thinking at least seems to be that substantial returns could be expected from moderate investment. A complete evacuation policy on the other hand depends on longer warning than now seems likely, and we have scarcely scratched the problem of where evacuees should go or how to protect them from contamination. Strategic evacuation, on crisis rather than warning, is still getting and seems to merit investigation. The East River study (second round) recommends a blend.

2. (Policy and Plans): Labor: Should Government request voluntary enlistments in labor battalions which could be moved by military command principles to any job anywhere? Or, should there be a basic "compulsory labor" power which would merely freeze labor on existing jobs at existing locations to prevent migration, plus agreement to be assigned locally and temporarily to other jobs. Manning of essential plants elsewhere--where facilities were preserved but the labor force lost--might be by voluntary "enlistments" through a crude registration system.

Should any such labor-supply system be integrated with the local draft board setup in whatever form they would operate after attack?

There are no right answers as yet. And to set up compulsory labor mobilization and direction after attack would be a stupendous job.

3. (Policy): The shift in emphasis from computation of requirement for strategic military plans and for supporting industry to computation of (a) survival and (b) emergency military requirements. This would involve the establishment of separate living standards for wrecked, crippled, and undamaged communities respectively. An abundance of action is called for under the policy statement but I will defer it for considering under the "stockpile" caption.

4. (Plans): Taking the Measure of Public Sanity.

This is one fundamental, important area where almost no work has been done up to now. It is a problem which underlies all work planning which we are to be doing in the area of actual operating policies.

How would the American public react to the novel and chaotic conditions that would follow a severe attack? I am not presuming to say that any planners can make a single and exact prediction. But we certainly ought to explore a range of probabilities, and set up sound guidelines within the whole spectrum of possibilities. Thus if the attitude of panic and fear was to be extreme and fairly long lasting a definite series of operating policies is in order. At the other extreme, if our public reacted as stoically as did the British in 1940, we could build our operating policies on a quite different foundation. At least a sound intermediate position shows reactions that should also be explored. One in particular is the probable attitude of people in initially untouched areas who might fear subsequent attacks; their reactions might raise even more serious problems than those that would face us in the actually damaged areas.

I know that this basic problem of war planning has been discussed in a preliminary way in our highest councils, but it needs a great deal more imaginative and penetrating study than has been given it. It is not a subject for either the economic or military planners alone. Scientists will need plenty of time for their tasks. They would not be expected to come up with a single answer, but should present to the planners working on more detailed problems several ranges of probabilities to form the foundation of a series of alternative lines of action.

An integral part of this area of planning study should be an exploration of the methods that might be used to assess the situation in the critical weeks when many basic decisions would have to be made. This is a different kind of data-gathering than the collection of damage reports. Or rather it involves the collection of reports on a different and more fearful kind of damage, that of social and spiritual sanity. The effort would require an entirely different kind of machinery and skill.

B. Actions and Plans for Use of Resources (Including Stockpiles).

1. (Action): We all know that except for a few stray tendrils our present stockpile still has its roots in the last war, dominated by the concept of rapidly expanding production. Radical revisions are still needed for a "broken back" version of atomic war. It's a question of something old and a good deal new, as witness the following (at the moment without regard to new criteria of quantities):

Raw materials originating in foreign territory likely to be lost or cut off.

Finished munitions to enable us to conduct war without the aid of new production for many months after attack--including ICBM's.

Food and other subsistence goods for such a crisis (requiring principally protection from contamination).

Medical and surgical supplies for millions of casualties.

Components, selected end-industrial items, and crucial long-lead-time equipment and apparatus.

The present balance is poor. More realistically, none has been conceived. And that is a different matter from saying that no ideal balance is possible. It is true that different mixes would be required by different assumptions about the diffusion of damage and unpredictable imbalances with different damage patterns. But as yet we have not even moved toward a lowest common denominator.

We can't leave conventional war entirely out of our calculations. As a matter of fact our committee has suggested dual goals, for a conventional and crippled economy respectively. The aggregate would include the highest figures in each. But the old goal is well understood--even if still lacking a rational base--and we need be agitated only by the new. The new stress is consonant with the more fundamental shift from mobilization base to a subsistence and recuperation base, for the flexible supply of populations in varying degree of distress of forces needed for a variety of wars.

For so diversified a mere standby-supply base the criterion must be utter bedrock. It would include only absolute essentials to hold the Nation together--those goods and services without which people could not survive and our military posture would be intolerably disastrous. This is negative, but it starts at the right end, zero, and gets a little above it. Minimum standards of food and shelter for the starving, injured, and homeless. Minimum military needs to fend off or lessen the effectiveness of enemy attacks and rebuild offensive power. The seed corn of industrial strength to rebuild a war-supporting economy on which to mount a military counterstroke in later months or years.

On civilian survival goods the FCDA has its own stockpile. Very unmilitary sounding investments, actual or potential, include tarpaulins, cots, drugs and medicines, water pipes, fire engines and hose, wallboard, tar paper, stoves, and blankets. Purchases to date are scattered around about 50 warehouses.

A very special interest of the committee is in critical long-lead-time equipment, and it has for some time been pressing for an enlargement of the scope of that program. Perhaps late funds should be requested wherewith to stockpile components and parts for end items that might be needed in great quantities after attack and will not be purchased in peacetime for railroad cars and engines, prefabricated houses, bridges, culverts, cranes, etc. Research on need for emergency capacity for such keystone items as valves and turbines is more or less continuous. The present question is whether highly critical types of specialized machinery with long-production cycles should be stockpiled. The proposal is aimed at highly specific crippling breakdowns. Studies by the Rand Corporation and others show that general industrial plant reconstruction (new plus cannibalizing) could be accomplished in a remarkably short cycle--3-10 months for a wide range of plants, including refabrication and installation of equipment--assuming storage of engineering designs and contractors' specifications. (Parenthetically, although they are being taken voluntarily by a growing number of firms, it may be desirable to force these simple, inexpensive steps.) But in many plants this short cycle would strike a snag because some key equipment requires a long design-and-building cycle which might hold up restoration for as long as 24-36 months.

Steps are therefore being taken, through the Secretaries of Commerce, Industry, and Agriculture, to lay proposals of this kind

before industry advisory groups which would set up special panels of plant engineers of equipment purchasing specialists. The production staff of ODM would analyze the findings and send them to the Vance Committee with recommendations on methods of financing. Ingenuity can keep down the cost. Utility models and moderately obsolescent equipment may serve. Lease-storage arrangements could be made for equipment not now in use. But probably a vital accessory to any plan would be the peacetime training of workers now engaged in other activities. Flatly, additional equipment or even many available machines could not be run to capacity on highly technical jobs because of a shortage of skilled attendants.

There is nothing sure-fire about this idea. Among the reasons for hesitation are obsolescence, cost, difficulty of identifying truly obstructive items, and need for close collaboration with an unwieldy number of industry groups, executives, and design engineers. But it does seem to me that the gap will be glaring unless something can be done.

The examples I have given I consider major. Actually, to fill in the needs of a realistic nonmilitary defense program would require a canvass of jurisdictions throughout the Government. The most personal items, of obvious appeal and undoubted urgency--FCDA-type categories of food, clothing, shelter, medicine--may still not be the most vital ones to keep an organic, 20th century society alive and purposeful and able to fulfill its purpose. The Director of ODM has recognized the need for wider inquiry and will probably assign an individual of high "generalist" qualification to assemble requirements through a canvass of Federal agencies and some private sources and give the project high status. The committee itself stresses that the master list must be held to as few items as possible and there must be provision for periodic review.

2. Plans.

There must be plans for dispensing stockpiles as well as acquiring them. The method and rate of release of supplies must conform to needs arising under alternative assumptions as to the kind of war. Other questions: How best to reinventory after supplies are splattered, preempt private stocks, pool aggregate supplies, allocate and move portable resources among areas.

For production and distribution control we have to dispense, at the outset at least, with the luxury of the vertically interlocked industrial structure of World War II, with prime contractors linked through a requirements-allotment chain with several layers of suppliers; organized under CMP. It is sound, but to get it into effect we would have to ask the enemy for time out (a truce) until we could get it working. The present DMS system concentrates hard on prime contractors and consumers, requires them to estimate their inputs of whatever is being measured for units of output, thereby permits the Government to rough out a program within known resources, and leaves the subs and sub-subs and suppliers free to self-rate purchases tied to the identified defense orders they receive. After an atomic explosion this simple constructor-set would also come apart but it would be elastic. In the beginning surviving manufacturers working on military and "survival" orders must be free to shift suppliers rapidly, to replace bombed-out with functional producers, and change their production schedules--all without the necessity for collecting new requirements data and channeling the information to Washington or anyone else. If one recommendation is adopted industry would be supplied in advance with lists of products in some order of relative urgency to which they would voluntarily turn their facilities until communications were restored and some kind of plan began to emerge.

You might say simply that DMS would be operating without a balance sheet until a rough one could be pulled out of the wreckage.

Military, civilian, and industrial crash programs would be incorporated, one by one. Other production would be allowed to go ahead if it could, within the limits of residual material and labor supplies.

For some reason some departments recently proposed a return to open self-rated priorities as an end in itself. For a dozen other reasons I would personally expect this proposal to be defeated. I am one of those who survived the paper blizzard of 1941, although I sat in its heart. I tried to develop a mechanical system for classifying and tabulating the paper, and only gave up and went over to DSRP when I discovered in the middle of the job that several tons of the stuff had been baled and stored in one of the Army warehouses. I can elaborate on its inapplicability to even crash programs if you wish but would prefer to use my time otherwise.

3. Criteria and Inducements for Peacetime Plant Expansion.

We would be led here principally into a discussion of accelerated Tax Amortization. As the purposes it served in the past are largely completed and as it is too weak an instrument to force the more heroic types of actions required by an atomic attack program, I will move on.

C. Policies, Actions, and Plans for Protection and Utilization of Industrial Facilities. (Action except where noted.)

1. Protection.

a. Dispersion--Which Might be Entitled "The Rise and Fall of an Ideal."

The theoretical case for forcing dispersion of industry is very strong. The cataclysmic effects of thermonuclear explosion need no description. And in the United States, approximately 50 percent of the population and about 75 percent of our manufacturing industry are located within the boundaries of the 171 largest metropolitan areas. Concentration in the U.S.S.R. is supposed to be about the same. Highly radioactive clouds, remaining charged for long periods of time, make survival doubtful or difficult for millions far removed from point zero. A cobalt casing might cover the entire United States with a highly charged radioactive atmosphere.

The first reaction was to force a general dispersion of industry, on the reasoning that if it could make most targets unattractive or otherwise greatly minimize the destruction the gains would be worth almost any cost. Upon later conviction that any possible degree of insulation might be moderate and the cost enormous the objectives were scaled down. A few of the many considerations are as follows:

New developments are constantly outmoding even the most expensive plans-weapons developments, delivery capabilities, balance of power between offense and defense.

Even a program limited to the dispersion of new growth would be very costly. For every dollar going into construction in new areas, several more dollars would be required to build

homes, roads, and municipal services, relocate manpower, build transport, communications, community facilities, and service industries and trades. It could not be done with greatly enlarged Government control over the economy.

New capacity is often not detachable from the old. A large part of it takes the form of replacement of obsolete portions of existing integrated plant and equipment, additions to existing plant which would not be self-sustaining, or mere facilities for the express purpose of improving an industrial complex.

There would be severe losses of wealth and income and much personal dislocations.

Extensive dispersal, and illogical forms of moderate dispersal, could so disrupt the economy that the natural growth of national output upon which we bank so heavily would be retarded.

New target areas would be built up, and in time to come the enemy might easily follow them.

Military programs themselves could suffer directly and indirectly. A slowdown in national growth and income would increase public and political resistance to appropriations, and a fraction of the expenditures on dispersion, if applied directly to appropriate forms of military strength, might achieve greater protection.

No obtrusive program could be sold to the public or Congress.

In short, a high-pressure dispersal program is becoming less and less important and more and more expensive as compared with other possible protective measures.

A corollary of this project--the development of satellite cities at appropriate distances from central cities--has not fared much better. The chain of production of modern products is long, complex, and diverse. The process of gathering together the multiple threads of all productive ingredients would be never ending. The most elaborate single-location industrial complexes now in the United States are far from self-contained. Even the antitrust laws would pose difficulties at which many businessmen would shy.

All of these arguments can be discounted in part. They cannot in my mind destroy a case for steady pressure, and in some cases the Government should dare to be firm. A do-nothing policy is still inexcusable. My own summary of the case to the director a few months ago was as follows:

(1) General dispersion is out. Impractical, desultory. The administration is without means to offer inducements and thereby bring about systematic removals or even selections of new sites weighted in favor of dispersion. Useful results under changing circumstances and policies very uncertain.

(2) Opportunism in the case of any important facility. Alertness to opportunities. Principal reliance on persuasion even then. At the present limp stage we have almost no incentives to offer anyway. Urge "other things equal" concepts to management, with the public interest merely tipping the scale.

(3) Steady pressure on a few critical weapons or industrial product systems.

The present status is fixed by Dr. Flemming's order of 11 January 1956 (DMO I-19). In it he called upon Federal agencies to encourage, and when appropriate, require that new facilities and major expansions of existing facilities important to national security be located so as to reduce the risk of damage; also to encourage, and when appropriate, require the incorporation of suitable protective construction features in new and existing facilities. He added that except under very unusual circumstances, the ODM will not grant rapid tax certified for the construction of facilities unless guidance is received and followed from the Department of Commerce.

I regret to add, by way of anticlimax, that a recent cooperative study with several hundred firms of criteria for new plant locations resulted in an elaborate manual containing scores of tests among which dispersion for defense purposes was not even mentioned.

b. Plant Protection in Peripheral Areas (which might be anywhere).

This is a function of the Department of Commerce, where John Haines has been directing it. Conferences have been held

with the top managements of more than 300 companies on the Critical Industrial Facilities List (Industrial Evaluation Board). The list of measures taken and planned lengthens every month and includes what you would expect it to include.

As good a method as any of conveying one informed judgment about the work is to paraphrase a few extracts from our committee report to Dr. Flemming.

(1) This is the only systematic and potentially effective program through which ODM can reach individual plants and firms to attain effective voluntary (and truly decentralized) planning for coping with attack disaster on a plant-by-plant and company-by-company basis. (The report added that these direct, confidential contacts with top managements, while effective, are necessarily slow, and should probably be supplemented by a few industrywide studies and plans.)

(2) It is important now to look ahead to a second round by leader companies. The program up to now has dealt with the easier steps: safe storage of records, safe placement of spare parts, continuity of the management heirarchy after severe human casualties, provision of an alternative headquarters or rallying point or rendezvous (different companies use different terms) for surviving management, a specific action plan for partial disaster (including non-war disasters) in each plant as a unit. For the future, companies ought to be led into more difficult and complex planning. Examples are the collection and safe storage of data on supplier chains and customer chains for major components and products, at least two procurement steps away from the plant or company (which a few companies have already undertaken); the provision and safe storage of complete and detailed building and equipment specifications; systematic retention for a reasonable period of obsolescent or discarded major equipment rather than immediate sale (for a fraction of utility value) or junking; begin training for the difficult task of damage assessments, postattack.

(3) Most crucial are the problems of (a) university of coverage, and (b) the potential necessity of some degree of compulsion, short of elaborate Federal enforcement mechanisms, where vital products are involved and the response is indifferent or delayed. As to (a), plants and companies under the "jurisdiction" of Interior, Agriculture, the Federal Power Commission, the ICC, port authorities, and some units of Federal and local Government, are not keeping pace.

2. Utilization (including damage assessment).

a. (Plans): Advance planning for identification of major breaks in production chains and for vertical reintegration (perhaps autonomous in early stages--locally and through industry committees--to be brought gradually under central direction).

(Action): This is one of the subjects that is dearest to my own heart. I have been impressed from the beginning by the supreme urgency of plunging through single-dimensional geographic and even plant appraisals of damage into product and interproduct detail, and awed by the immensity of the job. We have to account for vertical end product and weapons systems, embracing flows of materials, components, parts, subassemblies, and essential processing equipment. The aggregates are the two integral units of our trade. Our committee indeed has expressed concern over the danger of putting into circulation a set of raw figures on physical damage to facilities in specified industries. They would be susceptible to dangerous misinterpretation. What needs to be stressed is the threat of total suspension of production in many lines for many months. Two partial studies of the effects on end-item output (one military, the other civilian) show that production would be wholly stopped for six to twelve months because of the snipping of vertical chains at a number of points. We have been greatly interested in some vertical analyses made on a test basis by Bill Truppner of BDSA for a few important civilian end items such as a bulldozer, a crane, and a truck.

I am apologetic about talking so pontifically to you gentlemen on this subject. You are the pioneers in it and have not only done fine work in your own domain but have given indispensable help to civilian agencies. The Air Force continues to improve its coding of a computation procedure for the analysis of blast effects, without which everyone else is adrift, and at my last contact had assembled location coordinates for about 12,000 of the Nation's most important manufacturing establishments. Computer and UNIVAC facilities have been loaned to poverty-stricken civilian task forces and committees, and DOD representatives have sat on the committees themselves and given valuable counsel. Aerial reconnaissance, including photography of radar images, will permit determination, plant by plant, of the fate of the most important industrial facilities. It is contemplated that these would be followed up, when possible by on-the-spot surveys by experts and Census personnel. By borrowing time

on Army, Navy, and Air Force computers, and with the help of their staffs, ODM can run from a half dozen simulated attacks a year. This is barely enough to afford some insight into the problem. Wargaming of a larger number of attacks each year by the DOD, if possible, will be very helpful.

All sorts of work is being done and more contemplated in breaking into product detail and flow. The BDSA is impaneling industry teams to develop product output, capacity, and customer data by plants in important specifications. Their industry divisions are making comprehensive studies to determine where they require five, six, and seven digit product detail in SIC classification and where two and three summaries may suffice. A lot of advance factoring can be done--common components to metal fabrication, metal fabrication and components to basic materials, common components to end items, special equipment to major categories of use--as heavy turbines and generators to power production. My emphasis has been on products. Obviously there must be related resource information for manpower, materials, construction equipment, etc.--for power, transportation, communications, construction, petroleum, etc., as well as for production lines. Transportation is a special problem because you can't add up capacity for products that you can't ship. Seven hundred critical points or nerve centers have been selected by the AAR in consultation with ODM and DTA, and the summarizing method adopted to speed up analysis is the route-barrier classification--culverts, bridges, tunnels, etc.

b. Advance Cataloging of Products in Some Order of Urgency for Guidance to Surviving Plants in Resuming Production.

c. (Policy and Plans): Establishment of criteria for emergency determination of which structures are to be restored and which left lying dead, e. g., degree of importance for prerated purposes, modified by extent of damage and quantities of scarce resources and labor required. The underlying policy should be selectivity and speed in assuring ultimate rehabilitation faster than the enemy can recover.

d. Means of Financing Rehabilitation.

Examples: Government could take over the more badly damaged plants and either lease them back to management or allow them to be operated on a simple-management contract. Repair

costs could then be handled the same as military munitions outlays. That procedure would incidentally help stabilization. Or the old method of requiring applications to a Government financing body for either guarantees or direct advances could be supplied. Maybe the owners should automatically be reimbursed with cash to make sure that no such cross matter be allowed to interfere with construction. Reconstructing what? Only high urgency properties.

D. Calculation of Preattack Requirements.

Extremely difficult and complicated problems of resource allocation will be raised that have never before been encountered. (I am speaking now of survival needs and surviving resources.)

What level and composition of military production and construction can be supported?

What share of resources could and should be assigned to rehabilitation and reconstruction? What criteria and priority sequence should Government support of competing claims?

What resources are required to meet rockbottom (survival) levels of civilian consumption? The concept I have discussed and illustrated.

What level of aid to allies can be sustained?

The experience of the Production Mobilization Committee during the 1955 Operation Alert demonstrated that no department or agency had given adequate consideration to problems associated to rehabilitation and reconstruction programs. Although the Department of Defense was prepared to present a curtailed "must" program, it cannot be considered intelligently in the absence of other claims against surviving resources. This observation is not particularly critical. It may not be good sense for agencies to submit substantive problems for these big public exercises that they cannot yet solve. Nor can many of them be solved, in my judgment without intensive internal research, the assistance of Executive Reservists from industry, and considerable table-gaming.

What uses shall be made of the results? More accurately, what policies depend upon the results, in terms of both identification of items required and quantities. They are numerous: stockpiling,

maintenance of a dual (conventional and atomic) mobilization base, industrial plant dispersal, production and allocation controls, pre-attack protective measures, postattack rehabilitation programs, and budget, credit and money requirements.

As a special case, little has been done about computing post-attack requirements for allies. The first objective in planning might be a systematic roundup of the possible hypothesis or assumed situations that would exist, both in the immediate postattack period and in the subsequent period of prostration and slow recovery. Political assumptions should range from "complete interdependence" to "go-it-alone." The controlling substantive assumption might be that all, or nearly all, ocean shipping was suspended, and that airlift was minimal, for a considerable period after attack--up to the most optimistic appraisal of intercountry trade channel availability. A sub-problem here would of course be special assumptions on the position of Canada, Mexico, and the nearby Caribbean countries.

Military policy in assisting allies after attack (upon the United States, upon them, or both) will have a direct and far-reaching effect upon our nonmilitary relationships. To be left in the "lurch" economically might in some countries destroy the value of all our military efforts to hold wobbling allies. The reverse might also be true.

Relations, obligations, our own needs, will differ widely with different countries and areas. And there are so many peculiar policy and substantive problems involved that even their identification would be time consuming.

E. Continuity of Government.

Voluminous documents have been written, circulated, debated, and partially tested in exercises, on the reevaluation of functions, their redistribution, establishment of chains of authority in crisis, and relocation, and I can add nothing to your present knowledge. This is one area at least that has received abundant attention--perhaps at undue expense to substantive problems, but I do not challenge its importance.

The same is almost true of the Executive Reserve, although I would like to make one or two personal observations. Recruitment and training should be pushed vigorously, but disillusionment will follow unless plenty of meat is provided, and quickly, for the Reservists to chew on. Exhortations and praise become thin soup after

awhile. These men must be drawn into the actual work of trying to solve some of the substantive problems I have cited, on the basis of various assumptions and prepared data. Study and table-gaming can provide a significant part of their training. But Government specialists must have tackled them beforehand, so that alternatives can be offered with something solid in the way of facts and reasoning behind them.

F. (Plans): How to Cope With Entirely New Problems of Stabilization.

Need for flexible price, fiscal and monetary policies for diverse situations. Graduated severity of direct controls in accordance with degree of emergency and interim state of supplies by areas and communities. Prepare ration books and currency. Work in the new dimension of maintaining solvency of firms and individuals for the satisfaction of unique needs and performance of unique functions. And don't overdo it by pumping in money without regard to available goods and services by communities.

G. (Largely Planning): Novel Policy Problems.

Legal relationships, degrees of liquidity and Government underwriting of insurance, flow of incomes, new functions of banks and provision of money supplies, release of both contractual and Government funds to correspond with supplies, rations, and reconstruction needs.

H. (Action): Table-Gaming in Large Quantities.

I haven't scratched the surface of the substantive problems that will arise in a postatomic attack situation and that still await solution. Over time our committee has worked out a catalog of them which was originally called "the bed sheet" because it was started for observation purposes on a vast expanse of white paper. When finally reduced to respectable format the mere list ran to seven pages single spaced. Many of the questions had of course already been opined by the ODM or delegate agencies. Many are still original. Few of them are going to be answered by brilliant memoranda. Single minds can not be so omniscient. The several agencies must:

(1) Set up a small nuclear research staff capable of handling such problems and of giving undivided attention to them.

(2) Work out, on common sets of assumptions in series, the plans and proposals that seem most practicable. It would be a tough

and exacting staff assignment, requiring, we figured from three to five man-years within ODM and two to three man-years in each of the nonmilitary agencies having important defense functions.

(3) Bring them to a roundtable for interagency criticism. Force each "delegate area" to show its mettle before its equals. Bureaucratic instinct will provide a prompt check on czaristic raidings and gaps. They know more about each other than central planners will ever find out by themselves. The members of the Executive Reserve would participate in rotation and the show would eventually be taken on the road. Only through some such systematic procedure, I think, will we finally be oriented toward administering the resources of a damaged and disorganized economy.

The committee's recommendation to Dr. Flemming conveyed at least the general idea: What should be sought are five goals: (a) identification of major policy issues and operational problems; (b) a continuing intensive appraisal of imaginatively framed pros and cons of these issues and alternative courses of action which will confront postattack administrators; (c) winnowing out areas where specific research tasks need to be carried out to provide a base for policy decisions; (d) embodying conclusions--in constantly revised form--within actual ODM readiness plans on the substantive side; and (e) training the imaginative thinking of individuals who will actually have to grapple with these issues at top-working levels in the earliest postattack weeks, including to an increasing extent during the coming year, a number of Reservists and consultants.

To quote from another committee report: Any package must satisfy two conditions:

(1) Issues proposed for solution must be of a sort that a group can decide sitting around a table--or at least overnight. Planning and data analysis must be well prepared beforehand.

(2) Issues should be such as to limit sharply the range of alternatives open to decision makers and not so broad as to make each decision a wild gamble. Must concern matters of real importance.

When an exercise is ready to be taken on tour--and that will not be until after several roundtable run-throughs--we wouldn't assume that all policies are solidified, although by that time we would have workable ideas with which to back up the debate we would instigate.

We would prefer to see the issues mixed up. Give out a group of settled plans, so that the neophytes would have a footing, and solicit advice on other matters still officially open. We have in fact prepared an experimental list of more obvious table-gaming problems with which to start the show.

We also proposed a young men's mobilization study group in industry, and more recently a series of conferences under the auspices of leading universities, which we have reason to believe, would be glad.

We think that such a program would stand up on theory, but it so happens that we don't have to rest on theory. The committee itself conducted a table-game some time ago with 11 Government agencies participating. I would be embarrassed to tell you how many mistakes we made, and how differently matters developed than we had planned. But by common consent of the participants, the root concept stood up.

Conclusion

It is obvious that we are backing into many of these problems. The effort being devoted to them now is relatively small. What I have called preattacked measures are merely the product of trying to anticipate the most obvious realities of a postattack Armageddon. Really to fend against them in advance is nearly preposterous, but unless we intend to give up that is what we will try to do. If we intend to live as a Nation and insure custody for our ideals we can make the task more nearly possible. Physically we can dig shelters now, estimate and store many survival requirements such as vital foods, medical and surgical supplies, plan the production and distribution of money, print ration books, set up tables of value for postattack production, accelerate the restoration of vertical chains of production--or if you wish, product systems in the sense of weapons systems and they will overlap heavily. If communities are mangled and stricken beyond endurance, does the life of our Nation and principles hang upon someone's ability to restore morale and turn shock into cold determination in the first six months? Then plan a use of resources to play it that way. And plan relations with allies whose moral and perhaps physical problems will also be terrible, on the basis of a number of contingencies.

We can set up scales of values, alternatives, when we can't decide in advance. We can lie dead for months while rebuilding economic strength, arrange for limited immediate retaliation and positive action, maybe find the strength for something more at the expense of some survival values. The choices will be cosmic, as letting 3,000,000 more people die or exist in anguish from a first bombing to save 15,000,000 from a subsequent one. We can't be sure now what we would do. But each course would require different arrangements, and some of the differences can be foreseen. The JCS and top-defense planning staffs plan for alternatives as a matter of routine. The scale for effective backup, without which they couldn't go very far or for very long, has to be much vaster. The definition of the problem is anticipate as much as possible. Some things never can be changed. But I'd rather try than sit.

Thank you very much.

COLONEL WALSH: Mr. George will answer a number of your questions.

QUESTION: On the business of dispersal you mentioned some alternatives. I suppose one would be protective construction. You also indicated that there was some problem about convincing people in the Government, as well as people in industry, that this was a good idea. You were mainly, perhaps, referring to Congress?

MR. GEORGE: Opinion was divided, was the way I put it.

STUDENT: It occurs to me that nothing will be done along that line until the Government takes an active part; that is, in dispersing Government installations. I am thinking, among others, of the extensive military installations that are now being constructed. I am wondering if anything is being done along that line.

MR. GEORGE: From the general impressions I have, which is all I can speak from, I think there has. As a matter of fact, I could have said that the only people who really have approached this problem with determination have been some of the defense departments. Of course it is easier for them. They have a closer grip on the industries through the placing of defense contracts and things of that sort. I don't know what the scale of division in the Government is. All I can know is that, as far as the many people I have talked with are concerned, some have said yes and some have said no. You mentioned some of the difficulties. I bypassed them in my discussion.

One would be that it would actually slow down the rate of progress, which I promoted in the early part of my remarks to a high place among the deterrents to attack. It is no simple matter just to pick up a plant and move it. I imagine there are a lot of industrialists here. They are all of them tied tightly into the organization in many cases of their expansions or their improvements. They depend on the same source of power. There are dozens of reasons. Yet, over time, new plants that are self-contained will be built and, where they have a relationship to defense, I think there ought to be some stronger tools given to the Government to force their dispersal.

STUDENT: That is not what I had in mind. What I had in mind was the Government construction itself; that is, buildings erected now for Government use. I am wondering if anything is being done to put those into dispersed areas or to make them safe.

MR. GEORGE: All I can say is that I have heard they have it very much in mind. It is one of the principal criteria in location of plants that are closely related to defense. The real answer has to come from somebody who has responsibility for it.

COLONEL WALSH: I'm afraid we have time for only one more question.

QUESTION: You said you learned yesterday that we are very close to a decision on compulsory labor. Does that mean that the National Labor-Management Committee has changed its position, or does it mean that Dr. Flemming has decided to bypass the Labor Management Committee?

MR. GEORGE: I am sorry, I can't answer. What happened was that, after the DMB meeting yesterday, I stopped John Hilliard, who is one of the ablest people I know, who has been working on this devotedly for years. I checked with him what I intended to say here about the fact that we are still far from decisions on these vital matters. He said, "I wish you would qualify that in one respect." He said, "There has been a break on some important points, and we are closer to decision than we have been yet." Then the crowd surged around us and that was the end; perhaps fortunately. I see John Grady here. You can ask John about it and he can supply the content of what John Hilliard had in mind.

COLONEL WALSH: We will have some people from ODM back here in our final seminar and we can take that up then. The clock has run out on us, Mr. George.

MR. GEORGE: I do want you to know that the length of my remarks, totally unplanned, was not a clever scheme to avoid questions.

COLONEL WALSH: Mr. George, I would like to thank you. The attention of the audience indicated that they really thank you for taking time from your busy schedule to come down here from New York to talk to us. Thank you very much.

MR. GEORGE: Thank you.

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