

COORDINATION OF PRODUCTION IN AN EMERGENCY

23 February 1954

1443

CONTENTS

	<u>Page</u>
INTRODUCTION--Colonel Donald B. Diehl, USAF, Chief, Production Branch, ICAF	1
SPEAKERS--Mr. Victor E. Cooley, Deputy Director of the Office of Defense Mobilization	1
Mr. William C. Truppner, Adviser to the Business and Defense Services Administration, Department of Commerce, on Industrial Mobilization Control	2
GENERAL DISCUSSION	17

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Mr. Victor E. Cooley, Deputy Director of the Office of Defense Mobilization, was nominated to the post by the President on 28 July 1953. The Senate confirmed the appointment three days later and he took up his official duties on 1 September 1953. Mr. Cooley started his business career in San Francisco in 1911 with the Pacific Telephone and Telegraph Company and, except for two years in the Navy during World War I, was continually associated with the Bell System until assigned his present duties. He served as traffic superintendent in Texas for Southwestern Bell Telephone Company from 1921 to 1926 when he transferred to the New York Telephone Company as division manager in Buffalo for one year and then as general Commercial manager in Albany for two years. For the next 16 years he was vice president in New York City. He rejoined the Southwestern Bell in 1945 as operating vice president in St. Louis; he became its president in 1947 and subsequently was elected chairman of the board. This is Mr. Cooley's first lecture at the Industrial College.

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COLONEL DIEHL: General Greeley and gentlemen: Undoubtedly one of the busiest agencies of the Government at the present time is the Office of Defense Mobilization. As you know, this office has the problem of planning and policymaking for wartime mobilization. To indicate how much the college values its activities, we have already had two people from this office speak to us. They have discussed the problems and the requirements of their office that will face this country in the event of an atomic attack.

Today we have the pleasure of listening to the Deputy Director of the Office of Defense Mobilization, who is going to discuss the overall planning that is deemed necessary to insure full military production in time of an attack. Mr. Victor E. Cooley, our speaker, was appointed by the President to his present job in July 1953. His experience in industry well qualifies him for this job; we certainly appreciate Mr. Cooley taking time out from his busy schedule to talk to us today.

In addition to Mr. Cooley, Mr. William C. Truppner, of the Business and Defense Services Administration, will also speak to us on the "Controlled Materials Plan" (CMP).

It now gives me great pleasure to welcome to this platform and to the Industrial College of the Armed Forces, Mr. Victor E. Cooley.

MR. COOLEY: General Greeley, Colonel Diehl, and members of the class: My subject is "Coordination of Production in an Emergency." I was asked to discuss the application of lessons learned through past emergencies to insure fullest coordination of planning for military production in the event of an all-out war; and as an added starter, how does the USSR's possession of the H-bomb modify this planning?

For lack of time I am afraid I will not be able to discuss the last aspect of the assigned subject. But I understand Mr. Enter was here earlier this month and gave some attention to the effect of the H-bomb on production.

I think we might begin with the broad subject of "controls." Of course, after the program and specifications have been decided upon, about the first essential in converting from civilian to military production is to set up new lines, with the proper tools. But, even with the lines in place and fully manned, maximum production cannot be reached without the smooth flow of the required materials. This is one of the most difficult problems of war production.

I understand from Colonel Diehl that controlling materials has not been discussed in your course. Because it is of such extreme importance, I asked Mr. William Truppner, of Business and Defense Services Administration, who is the Government's top expert in this field, if he would not be good enough to come here and share in this program with me. He will give us the fundamentals of controlled materials planning and indicate its importance to production in an emergency. Also will tell us of the very ingenious method he has recently developed to keep the value of the plan in a period of reduced war production activity, while lessening by about three-fourths the amount of paperwork involved to make it effective.

There is no one element more essential to the effective coordination of war production in volume than the handling of materials; and I am particularly delighted that Mr. Truppner made himself available to discuss this subject. It gives me the greatest pleasure to present him to you for whatever time he needs to give you an understanding of the importance and working of the CMP.

MR. TRUPPNER: Gentlemen, when I finish, Mr. Cooley will resume his talk.

Since I was here last, the President delivered his state of the Union address to Congress, and in it he said that a swift conversion from partial to full mobilization is imperative to national security. I think that is a widely shared view; and I think in recent years that the number of adherents to that point of view has increased enormously.

At the present time we are spending in the neighborhood of 40 billion dollars a year for military programs. With the exception of a small portion of materiel being shipped to Indo-China, we are not using the results of that expenditure in conflict. Consequently, it does become fairly clear that that expenditure of 40 billion dollars could be viewed as an insurance premium. And, as you can see, a 40-billion-dollar-insurance premium is by no means a small figure, even for the United States in the year 1954.

The thing we are insuring against is international aggression. First we are spending our insurance premium to try to deter a potential aggressor. Second, in the event that fails, we are spending our insurance premium to put ourselves in position to repel that aggressor.

Now, experience in the past has made it abundantly clear that the survival of this Nation is dependent not alone on the military weapons in being on an M-day. That is not to say that there should not be military weapons in being on an M-day, but merely to say that in the long run it is likely that this Nation must depend on its industrial plant to turn out the munitions of war to win a war after it begins.

Secondly, we can observe from our past experience that, given the normal peacetime functioning of the Nation, if it was plunged into an M-day, a substantial period of time must pass before we as a nation could put ourselves in the position of converting our economy to produce the weapons of war in terms of national military objectives rather than producing the civilian products needed for peacetime living.

The President has asked us to convert swiftly. That raises the question of how to go about it. It is a most difficult problem in the United States, contrasted with many other countries in the world, because in the United States we have devoted ourselves to the operation of a free enterprise economic system. Therefore, given an M-day, the problem of getting into the position of producing the weapons of war becomes a problem of what we do before M-day, so as to avoid the mistakes we have made in the past.

The people who have spent time studying the subject have all reached one basic conclusion; that is, if it is necessary to convert this Nation rapidly in the event of an M-day, there is no substitute for having the conversion machinery in being when the M-day occurs.

In the present free enterprise setting of the Nation, the problem of keeping the machinery in being before an M-day gets to be a most difficult one. It is very clear that if we ran a control system such as CMP, to take an example with which most of you are fairly familiar, the price we would have to pay for keeping that machinery in being would be so enormous that the chances of that operation continuing for any length of time are very slim indeed.

Even assuming that that venture was established as national policy, there is a serious question in my mind, and in the minds of many other

people, as to whether it would be possible to maintain the kind of discipline that is required in American industry in the day-to-day purchasing, production, scheduling, and materials control engaged in by private plants in terms of their normal peacetime pursuits.

Thus, we are threading our way between Scylla and Charybdis, so to speak, bearing in mind that the thing we are trying to prepare for is essentially one of three conditions. Mr. Cooley has touched upon one. But, essentially, the thing that we are worried about, concerned about, and planning for, can take one of three basic forms.

First, we can have another Korea. By "another Korea" I mean that we can have a situation develop in which we require a stepped-up military program, where we will require certain forces to carry out that military program; but at the same time we are not engaged in an all-out conflict. We would not be devoting every resource of the Nation to the prosecution of the war; but, rather, fighting a small-scale war, if you please, and at the same time maintaining a high-level civilian operation in the country.

The second situation that we might face is an all-out war of the conventional type, if I may call it that, illustrating it simply by the 1941-1945 experience--an all-out war, fought with conventional weapons.

The third possibility is an atomic- or hydrogen-bomb war, in which substantial damage presumably would be sustained within the continental United States.

The kind of system that we are trying to provide must be able to fit any one of these three conditions, and the emphasis we are putting on this type of planning is worthy of note. In the past a great deal of the civilian mobilization planning and energy has been devoted to trying to visualize precisely what it was we wanted to create in the event of war. To use a homely illustration, we spent most of our time, in terms of these three situations, trying to figure out how much lumber we would need if it was a picture frame we had to build, if it was a piece of furniture we had to build, or if it was a house we had to build. Heavy emphasis in civilian planning today is placed on developing the tools, the saws, and so forth, which would be usable to build the picture frame or the piece of furniture or the house, depending on what the situation demanded when it occurred.

Considering the necessity of having a control system in being before an M-day if swift conversion is to be achieved, the direction in which our

planning is moving takes the following form. It seems clear that any operation which is to be continued under current conditions cannot require a great deal of what is popularly called "paper pushing" in American industry, irrespective of the preparedness value of such paperwork. Maintenance of a control system as a war preparedness measure in the absence of the drive that results from material shortages demands the utmost in simplicity of operation.

We are proposing to limit the pass through of quantitative allotments of controlled materials--the bookkeeping chore required by the Defense Materials System (DMS) Regulations--to the prime contractor and a few selected suppliers of heavy class A product components. With close material allotment controls limited to the relatively few plants consuming the bulk of the controlled materials needs to fill military contracts, the great majority of military subcontractors need only identify their material orders as being placed in connection with defense contracts. Through this means, the operation of the control system will be reduced to a simple procedure for most military contractors, including almost all small suppliers.

The maintenance of the material allotment control at the prime contractor level will insure that any expansion in military and AEC requirements will be handled in a quantitative fashion. Thus, the necessity for the passing down of specific tonnages of controlled materials from the Office of Defense Mobilization (ODM) to the Defense Department will automatically measure the size of the military requirement and, therefore, the residual which remains for civilian use. Should military production and related requirements rise to the point where serious disruption of defense related and essential civilian production is threatened, the existence of the allotment procedure will provide the necessary tool for establishing an effective control over the level of military production.

Perhaps a few illustrations of the degree of material control that can be achieved by an appropriate selection of the military contractors participating in a given production schedule will make these points clear.

In the J-57 engine, to use one example, the material consuming group would ordinarily consist of the prime contractor plus the suppliers of four major stainless steel forgings. It so happens that in the case of one J-57 contract, the prime contractor and the suppliers of these four major forgings account for over 85 percent of all the stainless steel in the engine.

There are close to 100 other stainless steel products in the J-57, but the total that they account for is less than 15 percent of the stainless steel in the engine.

A parallel example on the tank would be the prime contractor plus the suppliers of the hull, the turret, the gun barrel, and the track. In the case of alloy steel, using the tank example again, a very small handful of companies accounts for somewhere in the area of 95 percent of the alloy in a tank. In the case of a military plane, the companies requiring control of their materials would be, of course, the prime contractor plus the suppliers of the five major body sections of the plane. They normally would account for somewhere between 90 and 95 percent of the aluminum in the plane.

Now, soon, perhaps next month, we are going to amend the DMS Regulations. As you know, they currently represent our carrying forward the CMP rules which were in effect on 1 July 1953 insofar as defense programs are concerned. They confine those rules, with little or no change, to military and Atomic Energy Commission contractors and subcontractors.

What this revision will essentially consist of is to require that a prime contractor maintain controlled material allotment accounting for at least 85 percent of his total requirement. The 85 percent would be determined by adding his own requirements for controlled materials to those of a selected list of his more important A product suppliers. The examples I mentioned a few moments ago represent the normal way in which the selection would be made. All remaining procurement items consisting of the large number of small A components requiring relatively small quantities of controlled material, B products, and remaining production materials would require only a defense program identification on the purchase orders.

Thus, virtually all military subcontractors would receive purchase orders for defense material carrying a program identification and also authority to extend the identification and the purchase preference in ordering materials from his suppliers. This could hardly be termed a burdensome task for military subcontractors.

In the case of the prime contractor the "85 percent rule" will permit a substantial reduction in the bookkeeping chores required by DMS. Also, the responsibility for the maintenance of the required allotment system will be placed on the larger companies that are best equipped to do it. Needless to say, these are the producers of weapons and military equipment on which the Nation will substantially depend in the event of an M-day.

In a sense, this represents an extension of the principle which has been applied to inventory control by most industrial concerns for many decades. With emphasis on dollar value, of course, manufacturing concerns apply relatively costly control measures to those inventory items which represent a substantial investment. The reverse is normally true with respect to the inventory items of lesser cost. In this case, the Government's interest lies in materials rather than financial investment and the "85 percent rule" represents a very similar approach.

This, then, is the proposal that has been developed in an effort to meet the specifications laid down by the ODM. While we feel that the allotment framework as described can be converted to an effective control system as expanded military production made this necessary, we feel that it takes full cognizance of the need to strip the control operation to its barest essentials under a continuing cold war situation.

To conclude, then, perhaps a brief review of the way in which the shift in control systems relates to the three conditions to which I referred previously.

First, if we move into position one, that is, another Korea, the fact that we have in being the facilities that permit the military program to expand on a limited basis gives the Nation the maximum assurance possible that an expansion of controls over the civilian economy can be avoided. In the past, decision leading to an expansion or extension of controls over civilian production has not resulted solely from the increase in military requirements, but additionally in the very substantial difference between the amount of procurement of materials by military contractors and the amount they actually needed to fill their contracts. Without Government machinery to insure not only that military contractors get what they need, but that they don't get more than they need--without that, another Korea would make another CMP highly possible, because the pressures would build up to the point where the Government would find it difficult to stand them. The revised DMS is a device for minimizing those pressures, and thus helping avoid an extension of controls over civilian production.

Secondly, if we get into a full-scale war on the World War II model, this approach, obviously, would work very effectively. It would work fully as effectively as CMP did in World War II. And I think everybody will agree that, after the opening year of fumbling around, education, and training, CMP did do the job in World War II.

Thirdly, and equally important, in the event that we engage in a conflict in which there is bomb damage in the continental United States, you will observe that this approach eliminates somewhere in the neighborhood of 95 percent of the individual quantitative allotment transactions. This is significant because the prime contractor can deal with his procurement job in much the same way that he does during peacetime. He would operate on the basis of a delivery schedule for most of his parts without the necessity of passing any quantitative allotments to his vendors. In the event his supply chain is disturbed by bomb damage, the prime contractor is completely free to look for alternative suppliers and to accept delivery from new sources of supply, without the additional difficulties placed on him by the allotment rules required under CMP in World War II.

So, irrespective of which of the three conditions may occur, it appears to most people that this approach represents the development of a tool which can be used with effectiveness.

Thank you very much.

MR. COOLEY: Thank you, Mr. Truppner.

The CMP in the whole scheme of things is so important that I can't overemphasize it. As a matter of fact, I think that without an efficiently functioning materials plan, war production would be like walking without seeing. You just would not know where you were going.

My percentage was wrong. When I introduced Mr. Truppner I said that his new plan had avoided 75 percent of the paperwork. He says it is nearer 95 percent. I think you gentlemen all know that this is one of the things that is groused about most in war production--the paperwork that all the manufacturers have to undertake. I am glad to be corrected on the percentage saving of the new plan.

In the time remaining I expect to touch on some of the plans for the maintenance of a mobilization base, will sketch some of the transportation problems, and will conclude with a few remarks on coordination of stabilization and of manpower in an emergency.

Our current military and economic cold war program contemplates the maintenance of a constant state of mobilization readiness hand in hand with the free functioning of private industry and with no reduction in the level of our standard of living. But we have to plan for a more severe

situation than we are presently experiencing. Our planning needs to be elastic, for it must function not only in our present situation, but in a stepped-up mobilization, and, most important of all, in an all-out emergency.

In the Second World War and after the invasion of South Korea, our industrial capacity was not disturbed either by enemy attack or to any substantial degree by sabotage. But it took nearly two years to reach peak production after Pearl Harbor; a comparable delay occurred when we sent our forces to Korea. While the delay was painful, it was not fatal. But the next time, if it is all-out, we probably won't have a breather during which to get the machinery running. So, if there is one lesson we have learned, it is that we must devise plans which will to the degree possible, eliminate that delay.

When war production slowed to a walk or ceased altogether after World War II, production lines were dismantled. Government-owned tools were as a rule either sold as war surplus or sent more or less indiscriminately to arsenals or other central storage locations, where, incidentally, they were not always given the best of maintenance care.

The net result of this handling was, first, that the sale of the tools had a very unfortunate effect on the stability of the machine-tool industry. Second, with the start of hostilities in Korea it was extremely difficult to obtain the tools with which to assemble production lines. Third, many of the tools still owned by the Government and that were available had to have extensive repairs before they were usable.

The maintenance of our mobilization base does not mean or even imply keeping all production lines in operation. As stocks of most weapons and military equipment accumulate and the need for further deliveries from current output lessens rapidly, it is evident that hot lines are not the over-all solution to the readiness problem. Nor do standby lines, which can be retained at some Government-owned facilities, such as ammunition loading plants, have any wide application. The need is a system under which a plant--when closed down or converted to normal civilian output, the machine tools, and the production equipment needed to produce wartime items, and the skilled workers, the engineers, and the management also needed for production, can be kept available in such a way as to permit prompt reactivation or reconversion to the wartime function.

In other words a way must be found by which our important installations can be put in gear fast enough to meet rapidly accelerating wartime

requirements. We are making a little progress in this direction. Where production lines used during Korea are broken up, the plan is that the tools, particularly Government-owned, will be packaged and, if at all possible, placed in a safe place from a dispersed, nontarget-area standpoint; but as near as possible to the location in which the line is to be reestablished. That is quite in contrast with the heterogeneous dispersal of tools that we had after the Second World War. And the tools should be maintained in a state of near operating readiness. If new weapons require new tools, a plan is under consideration whereby the required adjustments will currently be made in the tools contained in the package.

Considerable attention is also being directed toward the feasibility of increased use of all-purpose tools.

A further part of the plan is to maintain in a safe place duplicate records of engineering drawings and specifications that would be needed to reestablish or to again put plants on a war footing basis in areas that may come under enemy attack.

In the meantime criteria against which to measure the facilities that should be included in the mobilization base have been under extended and extensive study, with more perplexing than gratifying results. This problem of measuring has not hitherto been undertaken. I think you can appreciate its importance, its challenge, and its elusiveness.

And now a word about testing our planning--I am sure you are familiar with the feasibility test offered by the use of the gross national product. This is a method of testing which allows us to keep all aspects of our plan in at least relative balance with each other, thus giving some assurance that the overall mobilization effort may proceed at maximum efficiency throughout. It is a way that not only allows the planners to pretty well know at all stages whether the economy is capable of carrying out the plans they have developed, but it has inherent in it, even prior to the actual computation, at least some degree of feasibility.

Also, as I am sure you know, for the first time in the history of the Government, the Department of Defense has worked up its requirements for 1,000 end items needed to carry on a war. These data are now being made available. Only hard goods are included in the computation, but they comprise about 80 percent of the total Defense Department requirements for war. These requirements are being translated from dollar values into quantities of materials, so that we will know how much steel,

copper, aluminum, and so forth, to mention only a few materials, the military will need. It was a prodigious undertaking; but for the first time the mobilizers have a real basis from which to proceed.

Stabilization is an important element in coordinating production in an emergency. Plainly, our economic pattern at such a time is so stretched and distorted that the plan of ordinary economic law will not suffice to steer our economic ship. The only solution to the inevitable inflation that accompanies such a period that appears at all feasible is the rapid imposition of artificial controls.

As the stabilization area in ODM now views the situation, it would propose that the following steps be taken: First, that there be a presentation to the President for submission to Congress of a measure or bill providing for a 90-day freeze of prices, wages, and rents. This, of course, is in the event of all-out mobilization. Immediately following the passage of legislation, there should be issuance of an Executive order to freeze prices, wages, and rents for the period contained in the bill. There also should be adoption of a longer-range program suited to the needs of the situation then existing. The thought is that the 90-day period will give us an opportunity to size up the situation and then make a long-range plan to fit the need as it appears to be. And, lastly, there should be preparation of credit and tax measures for Presidential promulgation.

The central stabilization unit could be established under a deputy director of ODM or its successor agency. Or it could be established as an independent stabilization administration. Plainly all-out mobilization would require extensive controls and the granting to the President of extraordinary wartime power.

Now I want to say a few words about transportation, an industry which affords peculiar difficulties to the mobilization planner.

Transportation is, of course, an indispensable element in both military operations and the war-supporting economy. Without adequate transportation the potential of the industrial mobilization base cannot be attained, and the military forces in the theaters of operation cannot be sustained.

Domestic transportation today is a complicated business, embracing the railroads, an extensive bus and truck industry, important inland waterway operations, including those on the Great Lakes, coastwise and inter-coastal shipping, a vast and expanding network of crude and product pipelines, and an air transport system, which has now become the largest commercial carrier of first-class passenger traffic.

Add to this much private trucking and the private automobile, and we have the largest single segment of our economy--both an employer and a consumer of goods and services. In war we can expect this domestic transport system to consume more than 12 percent of our steel, and other materials in proportion.

The provision of reasonable transportation estimates in the mobilization base study is greatly complicated by the need to gear transportation to production.

A schedule of the distribution of steel tonnage, obviously, cannot be determined until it is known what tonnage will be required to support the transportation industry itself. But, conversely, since steel is the controlled material which is most broadly used, and since a schedule of steel distribution thus determines in great measure the production of industry, it is impossible to know accurately what freight transportation will be required until the distribution of steel has been determined.

The gross national product framework affords a method of cutting into this somewhat vicious circle, although the first go-around can hardly produce results of satisfactory accuracy.

The preliminary distribution, includes allowances for transportation founded upon previous experience, but subject to later adjustment to conform the transportation demands of the level of the economy to be supported. Although over the years there is a demonstrable relation between the GNP in dollars and freight traffic in ton-miles, every year a downward trend is obvious, of a few ton-miles per billion dollars of GNP.

Another less easily predictable change in the relationship is a decline in ton-miles of production per billion dollars of GNP as the country moves into a full mobilization. The precise effect on the relationship between transportation and the GNP will depend upon the composition of the military product and the composition of the corresponding civilian curtailment.

To take an example of each--the increased output of military aircraft will create a large dollar component in the GNP without generating a corresponding demand for commercial transportation since this product has first, a very high value per unit of weight, and also since in great part the final product flies away under its own power. On the other hand, the curtailment of roadbuilding, with its enormous heavy tonnage movement of sand, gravel, and cement, will reduce the transportation burden considerably without substantially affecting the GNP dollar total.

The effect of varying the proportion of the total military take to the GNP, and of varying the composition of that military take, must be studied statistically, so that appropriate weight can be given to them in a freight traffic forecast. The primary responsibility for making forecasts of traffic has been delegated to the Defense Transport Administration, which is under the ICC--the end product of whose work will also include a set of revised estimates of how many and what types of freight cars we will need, how much motive power, how much additional inland waterway equipment, and so forth.

To get to that sort of conclusion it is necessary to estimate how many tons of carrying capacity each type of transport will contribute under war conditions. And this is not a matter of extrapolating the normal trend of each type in peacetime competition. In war the relative shares are influenced by noncompetitive factors, over some of which we have limited control.

How the transportation will be performed--whether by rail, truck, or water, makes a big difference in requirements for materials, for fuel, and the level of manpower. We know, first, that the total demand for transportation will increase greatly; second, that the average haul will lengthen; third, that coastwise and intercoastal vessel tonnage, including tankers, will have to be withdrawn in considerable tonnage for operation outside on the overseas routes; and, fourth, that rationing of petroleum will have a deep impact upon the use of private automobiles and perhaps on the volume of intercity truck and bus transportation.

The several kinds of transportation will not share ratably in the wartime increase in traffic. The railroads and pipelines will have to take most of the increase; and the extent to which prior preparations are necessary to make that possible must be determined as a part of our mobilization planning.

When finally the volume of traffic likely to be moved by each form of transportation has been estimated, the traffic levels shown must be converted into requirements for operating supplies, maintenance materials, and replacement freight carrying equipment and motive power. This is not a simple operation.

In the case of the railroads, for instance, the conditions encountered under full mobilization will alter the rate of utilization of cars and locomotives. As industry moves into around-the-clock operation, cars will

also tend to be loaded and unloaded on the same basis, that is, on an around-the-clock basis, instead of only eight hours a day, five days a week. The average freight car will do much more work. As the average haul lengthens, the car will spend a greater portion of its time under load and in movement. Many other factors affect utilization, and they must all be estimated when traffic in ton-miles is converted into the number of cars required to handle it.

An even greater difficulty in making full mobilization estimates is presented by the locomotives, for the full potentiality of the diesel engine has never been tested under abnormal wartime rail traffic.

Thus, as you can see, this matter of transportation affords a good example of some of the problems and difficulties that assail full mobilization planning. But, again, the transportation situation planning has to be based, as Mr. Truppner's CMP is based, on a system that is elastic. It has to be able to be applied to our present situation, to a stepped-up mobilization, and also to an all-out mobilization. And I think that the use of the GNP as a guideline is the basic thing in this.

Now a few words about manpower. --manpower is the probable ultimate limiting resource in a wartime economy. It must follow, then, that one of the key problems in the coordination of production in an emergency is the management of our manpower resources.

To meet the military manpower needs in the event of an increase in the size of the Armed Forces, certain changes will be required in the Universal Military Training Act and in the Selective Service Regulations and certain other laws and procedures.

From the viewpoint of civilian manpower, an expansion of the armed services would require that we prepare to deal particularly with allocation of workers with key skills between military and essential civilian activities; and limitation of the employment of workers with critical skills in the less essential activities.

A major means of coordinating the manpower production program lies in the proper distribution of defense contracts. Prompt and wise distribution of defense contracts and subcontracts is of great value in building a broader production base and in promoting the efficient use of manpower. Emphasis upon the distribution of contracts to labor surplus areas can reduce unemployment, prevent the disruption of community facilities, and contribute to better in-plant manpower use.

The coordination of manpower programs with production programs depends very heavily upon an effective system for the determination of production urgencies. The experience of World War II and the Korean War shows wide variation in the urgencies of essential items at any given time. To permit the most efficient shifting of manpower to meet these changing needs, urgency ratings for key end items and components must be continuously projected as far into the future as possible.

It is our feeling that if we are successful in devising wise and effective programs for coordinating manpower resources with production requirements, management and labor will support those programs voluntarily. Primary interest in our mobilization planning has therefore been given to developing the measures which are efficient, equitable, and provide us with the greatest possible measure of national security with the expectation that the American people will not only accept such measures but will assume an active part in carrying them out in the event of a national emergency.

In examining the coordination of manpower and production programs, it is necessary to give consideration to the quality and quantity of manpower that would be available to meet any future emergency within this decade. This is the subject of a report entitled "Manpower Resources for National Security," submitted to the President by the Director of the Office of Defense Mobilization on 6 January 1954.

It may be worth while here to note some of the major planning conclusions. Between 1940 and 1953 the total population of the United States increased by over 27 million. However, the greatest increase was among the young and the very old. In the age groups 10 to 19, from which new entrants into the population of military and working age must be drawn in the current decade, there has been an actual decline of more than a million since 1940.

I think that is a rather unexpected figure. The total number of men and women available for full mobilization during the fifties will not be significantly greater than it was at the close of World War II. The number of 18-year-old men also declined steadily from 1940 to 1952 from 1.25 million to a million. Although there was a slight upturn in 1953, there were still 150,000 fewer 18-year-old men in 1953 than there were 13 years earlier.

The number of men attaining age 18 each year will increase gradually, but will not exceed the 1940 level until 1959. The number of men aged 18 to 25, which represents our prime military manpower resource, will have actually declined by 100,000 in the two decades 1940 to 1960. Therefore, if in the next few years it is necessary to raise military forces comparable to those in World War II, much greater reliance will have to be placed on men over 37 and on women.

But despite this population trend, it is believed that a labor force of about 75 million could be achieved. With efficient use of manpower by both military and civilian activities; with a realistic adjustment of the age, physical, and mental standards; and an increased utilization of women, it is estimated that armed forces as large as those in World War II could be raised, and provided with effective logistical support.

This does not mean, however, that armed forces of this size would necessarily provide the greatest military strength. In any case the ratio of the Armed Forces personnel to supporting research and production personnel will have to be continuously reviewed and adjusted to keep pace with the radical changes in military and industrial technology, and to take into account our vulnerability to attack.

That about concludes the remarks that I planned on making this morning. This has necessarily been an inadequate treatment of the assigned subject. There are many aspects of production planning that have not been discussed. Certainly we still have many questions to resolve before we can feel content, if we ever can, with the plans for coordinating production in an emergency, or with the status of our mobilization base.

But of this I am sure: We know much more about the subject and are much further along than we have ever been before in a period of either uneasy peace or war. In this there is satisfaction sufficient to spur us to greater effort, while there is still time to perfect our plans for national security.

I feel greatly honored that I was invited to come and speak to you gentlemen. As Colonel Diehl said, I have not been in Washington very long. But I am beginning to see the picture a little bit, and I think that we are really making progress in this field. But, again, the job will never be done.

Thank you very much.

COLONEL DIEHL: Gentlemen, Mr. Cooley and Mr. Truppner are both available for your questions.

QUESTION: Mr. Cooley, you made a statement, and I am not sure that I interpret it properly. I understood that you said that under the GNP approach you had received from the Department of Defense the full requirements of 1,000 end items to support a war effort. It is my understanding that those figures that were given by the Army, Navy, and Air Force to the Assistant Secretary of Defense for Supply and Logistics and by him given to ODM were not requirements to support a Joint Chiefs of Staff plan, but, rather, were some figures which they had gotten together under some rather arbitrary ceiling which it would be feasible to sustain under the gross national product approach. Is it your understanding, Mr. Cooley, that you now have the full requirements to support a war plan?

MR. COOLEY: I don't think that I can answer that question categorically.

Of course, assumptions had to be made on the 1,000 end items. As I understand it, the Joint Chiefs of Staff got these figures up to give us the amount of material they need for the first, second, and third years of an all-out war. I can't say to you whether or not they were actually associated with a specific strategic plan.

I presume that they were gotten up in relation to the GNP. But, again, I can't say whether these 1,000 end items cover exactly the present Joint Chiefs of Staff strategic plan or not. But they do give us for the first time specific amounts of material to deal with.

I don't know whether I have answered your question or not.

COMMENT: You have answered my question, but I just want to follow it up, because I think it is very important.

The Department of Defense is very concerned with, and I have some business with, that particular problem at this time. The people over in the Office of the Secretary of Defense were very concerned about giving those figures to ODM for fear that they would be interpreted as the full wartime requirements to support a Joint Chiefs plan, which they were not. They should have a decided relationship to the war planning, of course; and they were based on the Joint Chiefs plans. But they were not end items in such quantity as would be needed to honestly carry out the plans as set forth by the Joint Chiefs.

MR. COOLEY: I had no definite information about that.

COMMENT: My point is that if your planning is being done on the basis of those figures, with your conception that they will support a full-scale Joint Chiefs plan, there is some decided misunderstanding between the two agencies.

MR. COOLEY: Of course, requirements have to be changed and adjusted as situations develop. I believe this 1,000 end-item study was well under way before the announcement that the Soviets had the hydrogen bomb. With any change in plans, even the 1,000 end items have to be changed. But I think that is one thing about the type of planning that is going on today--the endeavor is made to have it elastic, so that as changes come, whether it is in the CMP, in the mobilization base, transportation, or what not, the endeavor is to have plans, formulas at least, that are sufficiently elastic so they can adjust themselves to different proportions within the total plan or to different volumes.

QUESTION: Mr. Truppner, you mentioned that the United States will not be dependent alone on the force in being when hit by an enemy, but that when the time comes, it will depend on its industrial plant capacity to turn out the weapons needed after the war starts. I just wondered if that assumption was provided you by an agency like the National Security Council.

MR. TRUPPNER: The conclusion that I drew is based on my assumption of what would happen if we had a military conflict. It certainly is not an assumption that was given to me by an agency.

QUESTION: A good many of our prime contractors whom we would use in wartime are not now in production. For example, taking Mr. Truppner's example of the tanks, that base is being cut back, as we understand it, to one producer of the medium tank. Mr. Truppner mentioned our dependence on family groups of plants. I understood that to mean a prime contractor who would do the materials planning. What is being done, or what can be done, about the prime contractors not now producing, to get them to do the materials planning which is required?

MR. TRUPPNER: What we are proposing--and, incidentally, that is a very excellent question--is to carry on a parallel job in the civilian area very similar to the operating job which would take place in the military contractors presently in production. The difference is that in case of the tank manufacturer, planning, in the terms in which we are using the word, would essentially be accomplished by the day-to-day operations in connection with his military contract.

In the civilian area, we are proposing to do a strictly planning job, which essentially would be wrapped around the actions that the Government proposes to take after an M-day has signalized an all-out conflict. Planning would consist of the preparations made for putting controls into effect in the event of an M-day. Since the large producers of civilian metal goods are obviously the people who would operate in the military field in the event of an M-day, the planning work on civilian production controls would serve to lay the groundwork for industrial operations on military contracts after M-day.

COLONEL DIEHL: Gentlemen, I am sorry that time does not permit a continuation of this discussion.

Mr. Cooley and Mr. Truppner, I thank you on behalf of the Industrial College for an excellent discussion of our planning for mobilization in an emergency. Thank you very much.

(28 Apr 1954--250)S/gw