Address by
C. E. WILSON
Acting President of General Motors Corporation
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The Pittsburgh Men's Clan
of the
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MR. CHAIRMAN, LADIES AND GENTLEMEN:

After I accepted your invitation to address the Carnegie Alumni tonight, the suggestion was made to me that rather than talk about the old days at Carnegie, about educational programs or alumni problems, that I take some subject of immediate national interest. Accordingly, I have chosen as my subject, "Some Unknown Factors in Our Defense Material Program."

It would have been much easier for me to talk about the General Motors Corporation and the automobile business, especially since there were no courses in public speaking or advanced English and composition when I attended Carnegie more than thirty years ago, and this business of writing and making speeches is a little out of my line.

There are, of course, many unknown factors in the country's defense material program, but I am only going to attempt to speak about a few of them that I think are the most important.

1. What is the size of the program and the desired rate for its completion?

2. A proper understanding of the production problems on the part of the public and all responsible parties.

3. What does this mean in terms of employment and working hours?

4. What will be the probable effect on what may be termed "normal business"?

5. Will the program cause an inflationary increase in wages, materials, and cost of living?
6. How will the cost of the program be financed, and can it be done without sowing the seeds of a future depression when the World War II is over and our defense program substantially completed?

7. What will be the effect of the program on the capital goods industries, and particularly the industrial cities like Pittsburgh, Cleveland, and Detroit?

1. WHAT IS THE SIZE OF THE PROGRAM AND THE DESIRED RATE FOR ITS COMPLETION?

I, of course, can not speak authoritatively on this subject, but can only outline to you what I have been told, what I have read in the newspapers, heard in speeches, and of what is my understanding of the size of the program.

In a talk to the Engineering Society of Detroit last Friday night, Mr. John D. Bigger, Executive Assistant to Mr. W. S. Knudsen of the National Defense Commission, stated that war defense orders aggregating twelve and one-half billion dollars will give employment directly and indirectly to five million eight hundred thousand additional men and women, and raise the American national income to a rate of one hundred and two billion dollars within the next eighteen months.

The problem of appraising the size of the program is somewhat complicated as appropriations are made on the fiscal year basis, and plans and appropriations for naval construction require a much longer period than do the expenditures for the air corps and the army.

My understanding is that we are going to build a two-ocean navy and have our naval construction program completed in about five years, and that we are going to train and equip about two million men with the necessary planes, guns, tanks, and so forth, and that this part of the program should be substantially completed by June of 1942.
The total amount to be spent is not definitely known, but apparently will be somewhere between fifteen and twenty billion dollars, not making allowance for the continuing expense of maintaining the army, navy and air corps after the defense program is substantially completed.

The necessary cantonments, trucks and equipment for the first men drafted are being constructed and manufactured as rapidly as possible. Most of the orders placed to date call for completion in the fiscal year ending June, 1942, except the orders for naval construction and some orders or contemplated orders for aircraft engines and planes.

The plans apparently call for a rate of production of at least ten billion dollars in the fiscal year July, 1941, to June, 1942.

II. A PROPER UNDERSTANDING OF THE PRODUCTION PROBLEMS ON THE PART OF THE PUBLIC AND ALL RESPONSIBLE PARTIES:

Some of us in industry feel that the public and even some in public office who have a responsibility for the program, have an over-appreciation of what industry can do, particularly the so-called mass production or progressive production industries.

To make the most rapid progress, the real problems must be understood. Defense materials, of course, cannot be produced by simply shutting off production of other items. Before defense materials can be produced it must be known exactly what materials are required and in what quantities. Facilities may have to be provided by the corporations undertaking the commitment, raw materials obtained, and only then can the men be employed in producing the defense materials. These steps must be taken in this order.
There has been much publicity in the papers over orders for large quantities of material, and the impression perhaps unintentionally given that these tanks, aeroplanes and ordnance materials are being produced, when as a matter of fact in many cases the plants, facilities and even the products themselves are still in the hands of the engineers. Thus it will be months before it will be physically possible to employ people in the actual production of many of those defense materials.

III. WHAT DOES THIS MEAN IN TERMS OF EMPLOYMENT AND WORKING HOURS?

Mr. Biggers stated that the program would give employment to five million eight hundred thousand additional men and women within the next eighteen months. Whether this number of people can be found, who are capable of doing reasonably efficient work in connection with the program, is rather doubtful. It is clear that if the desired progress on the program is to be made, every man and woman who is capable of working and wants to work will be able to find a job during this period. The great trouble, of course, is that many or most of the unemployed are unskilled and have little or no experience in the types of work required by the program.

There is also the problem of employing people in the communities where they now live, so we will not have a big extra load of added housing, schools and other facilities, to take care of temporary employees on defense material production in too many new locations.

Obviously the manufacture of various defense materials cannot be handled as W.P.A. projects. They require the best management, skilled workmanship, and efficiency of production that are available in our country.
I do not know how many hours a week we will be working in our factories during the next two years, but I am reasonably sure that unless the engineers, technicians, highly skilled mechanics and managers work more than forty hours a week, the program will never be completed on time.

My own experience is that it takes two to three times as much talent in the way of management, technical and administrative supervision to put a new product into production or start a new business as it does to continue the same dollar volume of business on an established product or in an old established business.

There is already considerable heat developing in consideration of this issue of working hours, and some evidence of lack of understanding of the fundamentals involved. The issue is simple. The job can only be accomplished by work. It cannot be accomplished by arguments about who won't do the work and how much he won't do. I am in hopes that as the situation develops, fair and practical means can be found to settle these controversies.

IV. WHAT WILL BE THE PROBABLE EFFECT ON WHAT MAY BE TERMED "NORMAL BUSINESS"?

What we may call "normal business" is already at a rather high level, even though the defense material production, including the production for the British, may be only twenty per cent of what it is likely to be a year and a half from now. Regular business is obviously being stimulated by this increased activity. The automobile business, as an example, in October is close to breaking an all-time record, and is apparently continuing in November, and at a somewhat accelerated rate, making due allowance for
the normal seasonal trend of the business. It would appear that business is bound to be stimulated by the increased activity of the defense material program up to the point where increased taxes, higher costs and prices or actual shortages of basic raw materials will curtail it. As I understand the national program it is "business as usual" up to the point where it actually interferes with the defense material program. There is no indication as yet that this point has been reached, as the present limitations of the defense material program are organization, design of products, and new plant equipment.

It has been a problem to know what defense materials are required and specifically to define them with blue prints and orders so that qualified concerns can undertake the manufacture of these products.

The machine tool industry has been called upon to produce in one year what would normally be three to five years' production. Until these limitations are overcome, and production of defense material increases to a point where some of the other factors previously mentioned operate to reduce consumer demand, we can expect business to continue on a very high level.

V. WILL THE PROGRAM CAUSE AN INFLATIONARY INCREASE IN WAGES, MATERIALS, AND COST OF LIVING?

Some small increases in prices and wages have already taken place. Whether this trend will continue to the point of becoming very serious will, it seems to me, depend mainly on the labor policy of the National Government, and on the methods used to finance the cost of the defense material program.

Personally, I hope that means will be found to avoid serious inflation. Such means are known and can be worked out, but they will require some sacrifice on the part of all of us. The danger is that the politically
easy and temporarily popular way may be taken, rather than sound fundamental plans adopted (unless we actually get into the war).

VI. HOW WILL THE COST OF THE PROGRAM BE FINANCED, AND CAN IT BE DONE WITHOUT SOWING THE SEEDS OF A FUTURE DEPRESSION WHEN WORLD WAR II IS OVER AND OUR DEFENSE PROGRAM SUBSTANTIALLY COMPLETED?

Since the defense material program is essentially a waste of labor and national resources, it cannot, by any stretch of the imagination, be considered as fundamentally contributing to increasing the standard of living of the people of our country. Nearly all of us feel that we must have the necessary defense materials to protect our country against aggression from the world forces that exist today. However, one reason we have been able to establish such a high standard of living in this country is that on the average we have not been burdened with enormously expensive military programs as have been many of the other countries of the world. It is unfortunate that we now find ourselves forced into such a program. This program can only be successfully completed by improving the efficiency of all of our activities, and by sacrifice on the part of all elements in our country of either some of our material standard of living or of some of our leisure.

If the program is currently financed by increased taxes and the people of our country are willing to put forth a greatly increased effort, by working longer hours if necessary, and are willing to delay the purchase of certain goods for their own use while the defense material program is being completed, then we can probably get the job done without sowing the seeds of future depression when this emergency is over. But if individuals accumulate increased private debts based on their hope that present high rates of earning power will continue indefinitely, and if at the same time
we enormously increase our public debt, and if many of us insist on being
paid more for working less, and are unwilling to make the sacrifice re-
quired by saving part of our current income to be invested in the defense
material program, then we will face a very serious situation when the de-
fense material program and the emergency are over.

VII. WHAT WILL BE THE EFFECT OF THE PROGRAM ON THE CAPITAL GOODS INDUSTRIES, AND:
PARTICULARLY THE INDUSTRIAL CITIES LIKE PITTSBURGH, CLEVELAND, AND DETROIT?

The present durable goods industries and the corporations in such
industries, or new corporations and plants similar to those already exist-
ing, will have to carry the main part of the load of the defense material
production.

There are at present about four million persons employed in the
automobile, aircraft, electrical goods, iron and steel and similar durable
goods industries. These industries have been producing from eighteen to
twenty billion dollars worth of goods per year. The defense material pro-
gram, plus a reasonable stimulation of normal demand for other goods, appar-
ently requires about a fifty per cent increase in production and employment
in these industries by the end of the next eighteen months.

This will be a tremendous effort and will probably require some
lengthening of working hours as well as the addition of new employees on
second and third shifts, and a very large expansion of plants and facilities.

To get the job done in anything like the scheduled time, most of
it will have to be done in the existing manufacturing cities where managerial
talent, technicians and supervision are already available and can be expected
by extra effort to carry the additional load. It would seem to me to be a
sound program for any corporation in the capital goods industry to plan on taking defense material orders equivalent to twenty or twenty-five per cent of their normal annual business and make an effort to carry this part of the program. The rest of the increased load, such as airship building and aircraft manufacture, will have to be carried by new plants and corporations, because of the enormous increase in the requirements for these products.

If these assumptions are correct, it should mean a very high level of industrial and business activity in the larger industrial cities but the cities themselves should guard against an inflation in debt and expenditures which may have to be paid at a time of lower industrial and business activity.

Our country has tremendous resources of material and man-power and the world's best industrial equipment. There is, therefore, probably no physical reason why this defense program cannot be successfully completed. But these unsettled issues that I have discussed above must be clarified and the whole job understood by the public, by all responsible parties, and by those who have the job to do.

It must be understood by all elements of the population that some sacrifice is necessary on the part of each and every one of us. Prejudice, selfishness and misunderstanding must not be allowed to hamper or interfere with the efforts and energies of the men and the corporations both in industry and in Government, who are working so hard and patriotically to get the job done.