# AMERICAN EXPERIENCE WITH ECONOMIC MOBILIZATION: WORLD WARS I AND II

25 August 1954

## CONTENTS

Page

INTRODUCTION--Colonel L. R. Barlett, USAF, Chief, Mobilization Branch, ICAF ..... 1

SPEAKER--Dr. L. C. Hunter, Member of the Faculty, ICAF ... 1

NOTICE: This is a copy of material presented to the resident students at the Industrial College of the Armed Forces. It is furnished for official use only in connection with studies now being performed by the user. It is not for general publication. It may not be released to other persons, quoted or extracted for publication or otherwise copied or distributed without specific permission from the author and the Commandant, ICAF, in each case.

Publication No. L55-6

INDUSTRIAL COLLEGE OF THE ARMED FORCES

Washington, D. C.

# AMERICAN EXPERIENCE WITH ECONOMIC MOBILIZATION: WORLD WARS I AND II

25 August 1954

COLONEL BARTLETT: This is an appropriate moment to tell you that I think you have already had three very good lectures this morning, so, without further ado, we will begin.

DR. HUNTER: Admiral Hague, General Niblo: This morning, gentlemen, I have set up a kind of historical Cook's tour for you, reviewing rapidly for your presumed benefit American experience in economic mobilization. I have a lot of ground to cover. The treatment will necessarily be superficial, but the idea is to give you a kind of rapid bird's-eye view of the general subject. I have the topics in the outline indicated on the easel chart:

1. Long range trends in national wealth and the cost of war.
2. Industrial and technological foundations of modern war.
3. First experience in industrial mobilization: World War I.
4. Planning for industrial mobilization between wars.
5. Mobilization of the American economy: World War II.
6. Wartime achievements: stabilization and production.

We will start out with the first item: Long-Range Trends in National Wealth and the Cost of War.

As I emphasized yesterday, the war-making capacity of a nation depends upon the ability of its economic system to provide the forces, the equipment, and the supplies essential for the conduct of military operations. It depends above all on the ability of the nation's economic system to produce a surplus of materials and goods above the bed-rock requirements of the civilian population and of the war-supporting industries which produce the requirements of the military. The larger this surplus, the larger the armed forces and the greater the scale of military operations that can be supported.

I have here a chart which illustrates this close relationship between the size and wealth of this nation and its war-making capacity. I've called it: "The Rising Cost of Waging War." Several basic trends are shown on this chart, page 3. Let us take a look at them.

The population figures in column 1 pretty much explain themselves. They show an extraordinary rate of population increase, greater than that of any other comparable nation, over the last 175 years. You will see there was a 12-fold increase between the Revolutionary War and the Civil War if we take the United States as a whole; a threefold increase from 1865 to 1917, and then as you see the rate of population increase gradually slows down and the increase between the two world wars was only 30 percent.

The figures of national wealth in column 2 require a little explanation. By national wealth we mean the total value, in dollars, of all the durable property in the United States regardless of who owns it--private individuals, business organizations, or government. It consists mainly of such items as land, all buildings and structures such as highways, railroads, and mines on the land. It includes equipment of all kinds, as in factories and homes, and it includes inventories of all kinds of goods.

In column 3 I've reduced national wealth to per capita wealth to allow for the rapid increase in population.

Let me give you two warnings on these figures. In the first place, for much of the period covered, especially before 1900, they are only very rough estimates and are to be taken as suggestive only. In the second place, no adjustment has been made for price changes; they are in prices current in the years covered. The price level was continually fluctuating over this long period but with the long-range trend steadily upward, an increase in the price level of about 2-1/2 times, roughly, from 1790 to 1940.

One further point: national wealth--and that is what is indicated in columns 2 and 3--is not to be confused with national income, just as we don't confuse a corporation's capital investment with its income. National wealth is simply the capital equipment, the productive plant of the nation. This plant, operated by the labor force of the nation, workers and management alike, produces the national income, which, with the related term, gross national product, you will hear a great deal about during this course.

The Rising Cost of Waging War

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Wars | Size of Population | Total National Wealth (Millions dollars) | Per Capita Wealth (dollars) | Total Cost of War (Millions dollars) | Average Annual Cost of War (Millions dollars) | Annual Per Capita Cost of War (dollars) |
| Revolutionay War (7 years) | 2,500,000 | 750 | 300 | 125 | 17 | 7 |
| Civil War (North) (4 years) | 22,000,000 | 11,000 | 500 | 3,300 | 825 | 38 |
| World War I (2 years) | 100,000,000 | 250,000 | 2,500 | 35,000 | 17,500 | 175 |
| World War II (5 years) | 132,000,000 | 750,000 | 5,700 | 350,000 | 70,000 | 530 |

I hardly need to point out to you the significance of the figures in columns 1 to 3. They show a steady and enormous increase in the two most important resources for the raising and support of the armed forces--the nation's manpower and the nation's capital equipment.

Now, while population and national wealth are zooming up, let's see what's happening to the cost of war as shown in columns 4 to 6. To make our major wars roughly comparable on a time basis, I've reduced total cost to annual and per capita costs. The figures are in current, not constant dollars. Even if we leave out the Revolutionary War, we see that per capita costs of war go up faster than per capita wealth.

What conclusion do we draw from the figures in this table? Very clearly, the extraordinary increase in the scale and intensity with which our wars have been fought has been made possible only by an even greater increase in the productive resources, that is, the manpower and the wealth of the nation.

The Civil War offers an excellent example of the close relationship between economic resources and military strength. The North had half again as large a population and approximately twice the wealth of the South. The North contained the great bulk of the industrial life of the nation and with its merchant shipping dominated foreign trade. The South was particularly deficient in heavy industry and indeed in most branches of manufacturing industry, including even texitiles. She had long gotten most of her supplies of manufactures from the North or from England.

The North fought the war with very little disturbance to business as usual. There was almost nothing here of the central direction and control which marks the true war economy. There was neither industrial nor economic mobilization in the sense in which we use these terms today.

The Confederacy, on the other hand, moved from one supply crisis to another as serious shortages developed, not only in munitions but equally or even more in transportation equipment and service, salt and medicine, and foodstuffs and clothing. In a clumsy, unplanned way, the South actually moved toward a war economy, setting up a variety of government-owned and operated manufacturing plants and establishing controls of a very crude and imperfect kind over transportation, manpower, raw materials, foreign trade, and agricultural and industrial

production. For example, the raising of cotton was forbidden by a number of states after the first two years of the war. But these efforts were too little, too late, and too badly administered. The Confederacy lost the war, not so much on the battlefields as on the economic and administrative fronts.

This brings me to item 2: Industrial and Technological Foundations of Modern War. In the 50 years between the end of the Civil War and the outbreak of World War I, there were economic developments of great importance for the conduct of war, not only in this country but throughout the world. These developments can be summed up in a single word--industrialization. The old system of handicraft production in small shops with hand tools and muscle power was in steady retreat. Machine production, with steam power, advanced in one industry after another. Large-scale organization and mass production in factories came more and more widely into use. The revolution in transportation started earlier by railroad, steamboat and steamship was completed.

A new revolution got under way at the turn of the century with the introduction of the internal combustion engine and the automobile. The coming of electric power about the same time had equally important results. Many new industries of vital importance for warfare came into existence in this half century--steel, rubber, aluminum, petroleum, the electrical industries, including radio communications, important industrial chemicals, including new explosives. All these developments added up to the extraordinary increases in productive capacity and war potential which I have summed up in the statistics on the increase of national wealth and national income.

The most spectacular military result of industrialization was, of course, in the field of new weapons and new materiel--the breech-loading rifle and metallic cartridge; the machine gun and rapid fire field gun; the new types of explosives; and so on. Many of these new weapons had been invented and introduced many years before, but now for the first time, with the new production methods, they could be turned out in great quantities.

Similar advances were made in naval weapons and equipment. Especially important were: The shift from sail to steam and from wooden to armored vessels. The introduction of the submarine had major consequences for naval and economic warfare. In World War I, a beginning was made in air and tank warfare, made possible by the

development of the internal combustion engine. Rapid advances were made in the mechanization of field supply through the large-scale introduction of the automobile and truck.

This takes us down to item 3: Industrial Mobilization in World War I. By 1914, ground had been prepared for the conduct of warfare on a scale and with an intensity that were unprecedented. Huge conscript armies of millions of men were mobilized and put in the field. The early attempts of Germany to force a quick decision were followed by the long stalemate of trench warfare on fronts hundreds of miles long, interrupted from time to time by tremendous offensives mounted by one side or the other. The large numbers engaged, the long sustained actions, and the high rates of fire resulted in enormous expenditures not only of ammunition but other supplies as well.

The scale of the supply problem was far greater than anything anticipated by any of the belligerent powers. The struggle soon settled down into an endurance contest in which the outcome, it became clear, would depend largely upon the ability of the belligerents to meet the heavy drain upon their productive resources.

The main burden of the war of attrition fell upon the industries supplying the munitions requirements, but scarcities of raw materials, supporting industrial capacity, and manpower soon appeared. Supply crises in one form or another developed within all the belligerent powers and threatened the success of military operations.

Under the compulsion of these conditions, governments intervened directly in the conduct of industry, transportation, and agriculture. In the process, business men lost much of their freedom to run their own businesses--to buy, to sell, to manufacture what they pleased. Private property lost much of its privacy. For the first time, industry learned the meaning of the word controls--controls over raw materials, controls over foodstuffs, controls over prices, profits, and credit. All these government controls were found essential to divert materials, manpower, and industrial capacity to meet the urgent demands of military requirements. They changed radically the functioning of the private enterprise economies. In this manner, the war economy was born.

The United States on entering the war brought to its allies the greatest industrial capacity of any nation in the world, but this capacity was geared to the production of civilian goods to meet civilian needs. The

first and most critical problem was to convert this industrial power into military power--and do it fast--for the military position of the allies early in 1917 was critical.

Yet--and this is very important--with all our production skill and with a full awareness of the urgency of speed, it took from 12 to 20 months to get into production on the more critical munitions items, such as artillery, machine guns, planes.

Another major problem which appeared at an early stage was raw material scarcities in the basic metals, especially steel and copper; in fuels; in heavy chemicals; in lumber; and in foodstuffs. Production capacity could be increased only slowly. So priorities systems had to be devised and put into operation for channeling scarce materials where most needed in the war production program. To accomplish this proved to be a tremendously difficult job.

Another major mobilization problem developed early in the field of transportation. The stepping-up of production in all fields greatly increased domestic transport requirements. On top of this was added the huge job of transporting an army of two million men to Europe and keeping them supplied there, plus the heavy shipments of supplies to our allies. There was the further problem of the very heavy toll of shipping and supplies caused by submarine action. We had to expand our merchant marine tonnage on a tremendous scale, and we had to do it quickly. Under the strain of unprecedented conditions and requirements, rail transport threatened to break down so the Federal Government took over the railroads and ran them for the duration of the war.

These are only a few examples of the many problems with which the Federal Government had to deal back in 1917 and 1918. An elaborate system of war agencies was set up to handle problems in the many different fields. In fact, several score of these agencies were created.

The most important of the lot was the War Industries Board headed by Bernard Baruch. Under Baruch, this Board served as a kind of industrial general staff to direct and coordinate activities on the economic front of the war.

Baruch's main job was the conversion and expansion of industrial capacity to meet the enormous requirements of the military machine. But there were the closely related problems of developing and operating systems of priorities, establishing control over prices, and coordinating

the activities of a score or more major war agencies dealing with fuel, food, shipping, transportation, labor, communications, and so on.

Now, in carrying out this vast mobilization, we moved very slowly. This wasn't surprising, as we look back on it, in view of the size and the tremendous complexity of the job, and in view of our complete lack of experience and of planning in this field.

We had been at war nearly a year before our industrial mobilization began to make real headway. Not until 13 months after we entered the war, in April of 1917, was the War Industries Board given the priorities power essential to make its decisions stick.

There was strong public resistance and strong industry resistance to wartime economic controls. For example, the automobile industry succeeded in opposing all efforts to restrict automobile production until the spring of 1918. One could relate many similar tales.

Keep this in mind: The sheer size and complexity of the administrative job of setting up and running the industrial war machine made the process of mobilization a slow and fumbling one.

Of course, as you will recall, we did win the war, and the mobilization of our economy was in many respects a great achievement. With only a small headstart from allied orders, we built up a war production system of tremendous capacity. We supplied our allies with great quantities of food, raw materials, and manufactures. We recruited, trained, equipped, and transported to France an army of over 2 million men. We moved from an economy without controls to one which in many respects was managed and controlled by the Federal Government.

But against these accomplishments must be balanced serious shortcomings. Our slowness in establishing central direction and controls over war procurement and production caused great delays and great losses in manpower and materials. Another serious weakness was our failure to restrict sharply non-essential production in order to force industrial conversion to war production. There were mistakes and delays in determining military requirements and in setting production goals. Too large a share of labor, facilities, and materials was absorbed in tooling up for production. In fact, war production was just getting into high gear when the war came to an end. In major items of materiel--airplanes, shells, and artillery--the American Expeditionary Force was supplied chiefly by our allies.

This brings us down to item 4, Planning between Wars. Our experience in World War I drove home two very important lessons to the military and to the American people. One was the vital and fundamental role of mobilizing the productive resources of the nation in modern war. The second was the urgency of peacetime planning for the possibility of war, not only strategic planning but, of equal importance, planning for the logistical support of military operations, that is, for industrial, or as it has come to be increasingly called, economic mobilization.

Our not-too-happy experience in World War I led to the reorganization of the military establishment under the Defense Act of 1920. One clause in this elaborate act assigned to the Assistant Secretary of War responsibility for "the assurance of adequate provision of material and industrial organizations essential to wartime needs." This clause provided the basis for nearly 20 years of industrial mobilization planning, as it was then called, by the War Department--not only for the War Department but for the military establishment as a whole and for the Nation.

Within four years of the passage of the Defense Act of 1920 three agencies were set up to carry on economic planning activities under this act. In 1921, the Planning Branch was established in the Office of the Assistant Secretary of War. This branch carried the main planning load. It was never a large outfit, operating most of the time with 25 or 30 officers.

In 1922, the Army and Navy Munitions Board was set up to coordinate procurement planning between the services; but it was some years before the Army and Navy Munitions Board began to operate effectively.

In 1924, the Army Industrial College was established to train Army, Navy and Marine officers in problems of procurement planning and industrial mobilization.

Industrial mobilization planning as carried on during the 1920's and 1930's was handled under two broad categories. The first of these was procurement planning and was concerned with the specific responsibilities of the Armed Services for procuring all their equipment and supplies in an emergency. It covered such important matters as computation of requirements for principal items of equipment and supply; locating industrial sources of supply and making plant surveys; allocation of industrial facilities as between the supply services and bureaus in order to avoid competition for such facilities within the services.

The second category of industrial mobilization planning had to do with mobilizing the industrial and other economic resources of the Nation in support of large scale military procurement carried on within the military establishment. It was concerned with planning for the conversion and expansion of productive capacity throughout the nation, not only the manufacturing organizations supplying the Armed Forces directly but all of our production capacity at all levels of the logistical pyramid that I discussed yesterday. It was concerned with planning for setting up and operating the various kinds of economic controls--in other words, with all civilian aspects of mobilizing the economy for war.

It was this second category of planning which attracted the most public attention and interest. Its end products were a series of so-called Industrial Mobilization Plans, the first of which was made public during hearings before the War Policies Commission in 1930 and 1931. Three formal revisions of this Plan were issued as government documents in 1933, 1936, and again, for the last time, in the summer of 1939.

These Plans did two principal things:

1. They indicated and described the various types of economic controls believed essential for making industrial mobilization effective in supporting military procurement and supply operations.

2. They outlined the organizational arrangements to be provided for administering these controls and for performing various other functions required to carry out an effective mobilization of our productive resources.

To a very large extent the Plans in their principal features were based on the experience of World War I both as to policies proposed and as to organizational arrangements, with such modifications as this experience suggested as desirable.

So much for the brief review of our industrial mobilization planning in the 1920's and 1930's. We'll see shortly what happened to the products of this planning--the Industrial Mobilization Plans--when war came in 1939.

This brings us to item 5: Mobilization of the economy: World War II. Let us take a look at some of the high points of economic mobilization for this greatest of all wars.

There were important similarities to the experience of World War I. In both wars, we moved from peace into war by degrees, by a succession of small steps, and, as you will recall, with great reluctance. In both wars, our role for many months was to support the economic mobilization of our friends abroad by providing materials, munitions, and financial aid.

In the second World War, we faced many of the same basic problems of economic mobilization as in the first one, tremendous military requirements, insufficient industrial capacity, and critical shortages of essential raw materials. We faced the same problem of accelerating the conversion of industry to war production; the same problem of determining requirements and of adjusting requirements and capacity; the same problem of upward spiraling prices and of economic stabilization through price control and related measures.

There was the same problem of setting up and staffing the huge emergency agencies to handle the various mobilization functions. And all these things were carried out with pretty much the same confusion, blundering and public controversy that we had in Washington in 1917 and 1918.

But there were important differences in the two wars and these I wish particularly to stress:

1. The scale of the mobilization effort was vastly bigger in World War II than in the first one. We fought in theaters all over the world, instead of chiefly in Europe as in World War I. We were fully at war 44 months compared with only 18 in the first war. The difference in scale can be summed up in a statement of cost--the dollar cost of World War II was approximately 10 times that of World War I.

2. In the second place, the materiel requirements were for items that were not only much greater in number but far more complicated and far more difficult to produce than those of World War I. Compare, for example, World War I aircraft and tanks with those of the second war. Or take the whole new field of electronics which played so vital a role in the second World War in such areas as radar, fire control, and communications.

3. In the third place, because of the far greater load on our productive resources, we were faced in the second war with a far tighter situation with respect to materials, facilities, and manpower, and we

had to develop much more elaborate and much tighter controls over these resources in order to meet our goals.

4. Finally, economic stabilization presented a much more serious and difficult problem in the second world war. The extraordinary expansion of production, the rise in the labor force, and the sharp upturn in take-home pay placed an enormous purchasing power in the hands of the public. This was done at the same time that production of consumers goods was being cut down at many points. The result was the building up of tremendous inflationary pressures which threatened the stability of the economy and the efficiency of war production.

Let us now consider the actual mobilization of the economy as the war emergency developed from 1939 on. First, let us see what happened to the Industrial Mobilization Plan. Actually, the 1939 revision of the Plan was completed some weeks before war broke out in Europe early in September 1939. A War Resources Board--as it was called--of leading business men and industrialists was appointed early in August to review and evaluate the Plan. In the main, they expressed approval of its provisions, although their report was not released until after the war was over. From this point on, however, nothing happened according to plan, and for all effective purposes the Industrial Mobilization Plan was tossed overboard--ignored is perhaps a more accurate term.

Why was it that after all the years of planning effort, the main results of planning went into the discard? There is time here to suggest only a few of the reasons:

1. Keep in mind that the Industrial Mobilization Plan was a product of a small branch within the peacetime military establishment. As such, the Plan had no official status and carried no authority--even within the military establishment except in a limited way. Neither the President, the agencies of the Executive Branch, nor the Congress were obliged to pay any attention to it.

2. The gradual way in which we became involved in the war--over a period of two years--was unfavorable to the adoption of the Plan for the Plan was based on the assumption of a sudden, over-night transition from peace to war. It was designed to go into effect as a whole immediately following a declaration of war.

3. The Industrial Mobilization Plan failed to win friends--enough friends and in the right places--and influence enough people to

secure its adoption and implementation, either in the Administration, in the Congress, or among the general public. By too many people it was regarded with distrust, suspicion, or doubt. By still others including men high in the Administration, the Plan was regarded as unrealistic and of little value. For dealing with the actual conditions of the emergency as they developed, I think it is fair to say that outside of the military establishment the Industrial Mobilization Plan won little support except in some business and industrial circles. The Plan was, in fact, one of the first casualties of the European war.

So much for the Plan. Now let us see what actually happened following the outbreak of the war. The actual course of economic mobilization can be followed more easily if we break it down into two periods, and, as indicated, I will touch only the high spots within each period:

First, there was the defense period which technically comes to an end with Pearl Harbor; second, the period of full mobilization, say from the middle of 1942 to the end of 1944. There is also a third period, the period of demobilization--which I will have no time to go into here--which gets under way on the planning side as early as 1943.

Let us take the defense period first. The two major objectives of the Administration in this period were: (1) advancing the preparedness measures necessary to place this country in a state of defense; (2) assisting Britain and her allies to obtain the materials and the aid essential to prevent the Nazi conquest of Europe.

In pursuing these objectives the Administration was faced with many problems and difficulties, but I shall call your attention to only two of these difficulties:

In the first place, it is important to remember that during much of the so-called defense period we didn't know what we were preparing for. We were preparing to defend the country, yes; but defense against what and against whom, where, when, on what scale?

In the second place, the Administration, throughout the defense emergency, was faced with strong and widespread public sentiment opposed to any involvement in the European war, a sentiment which found active expression in a small but powerful isolationist group in Congress. The Administration believed, rightly or wrongly, that it must move slowly and cautiously both to give public opinion time to move around to the Administration view of the growing threat to United States security, and to provide the isolationist bloc in Congress with as few opportunities as possible for obstructing the Administration's defense program.

From the outbreak of the war to May 1940, a few minor steps were taken in the direction of military and industrial preparedness. However, the most important single accomplishment of this period was a political one--the repeal of certain key provisions of the neutrality legislation of 1935 and 1937. Public concern lest the United States be drawn into another European war had led to the prohibition in these laws of the export of munitions to nations at war.

Early in 1939 the President tried to get the repeal of the neutrality provisions which would seriously handicap, in the event of war, those nations already threatened by Nazi aggression. The first effort at repeal was defeated in the spring of 1939, but in a special session of Congress called specifically for the purpose in the fall of that year, the President got the modifications he wanted. This action cleared the way for Great Britain and her allies to place large orders for munitions on a cash and carry basis.

On the whole, however, during the first nine months of the war the general public and the Congress were very cold to the idea of building up our military strength. Let me cite just one example. In revising the military appropriation bill, the House, in January 1940, reduced the Administration's request for 496 new planes to 57 planes, and entirely eliminated a 12 million dollar item for an air base in Alaska.

All this was changed by the success of the Nazi Blitzkrieg in the late spring of 1940. The sweep through the Low Countries was followed by the capitualtion of the Belgian Army and by the disaster of Dunkirk. Almost overnight, the defense position of the United States became serious.

The Administration moved quickly to meet the new situation. On 25 May, the Office of Emergency Management was established to assist the President and to coordinate defense activities. This was done under the Reorganization Act of 1939. Three days later the President established the Advisory Commission to the old Council for National Defense--a statutory hang-over from World War I--the first in a series of key defense or war agencies.

The Advisory Commission had advisory duties only, although in time it was given certain operating duties. It was without a head--not having even a chairman. Each of the seven members had cognizance over a certain phase of the defense program--industrial materials, industrial production, price stabilization, farm products, transportation,

and so on--and each member reported individually to the President although they did collaborate to some extent.

Why did the President set up an organization as inadequate as this appears to be instead of, say, putting into effect the provisions of the Industrial Mobilization Plan?

The main reason was simply this: The Defense Act of 1916, still on the books, provided authority for reviving the old Advisory Commission. To have taken any stronger, more effective action would have required Congressional authority and would have given rise to prolonged debate and possible defeat.

Weak and ineffective as the Advisory Commission appears on paper, its accomplishments were far from negligible. Under such men as William Knudsen, Stettinius, Leon Henderson, and Ralph Budd, the first steps were taken to speed up and coordinate the defense program. These men operated as high level expediters and trouble-shooters, needling and prodding the various elements in the defense program--business and industry who were reluctant to convert to war production; the Armed Services who were slow to raise their sights and to break away from slow-moving peacetime procedures.

For all its weaknesses, the Advisory Commission's activities resulted in valuable experience and training for a growing body of officials and staff employees. Lack of authority didn't prevent them from coming to grips with many of the key problems of economic mobilization. They learned what these problems were and something, at least, of what needed to be known and done if these problems were to be solved.

In the year and a half between the fall of France and Pearl Harbor, there was a steady rise in the tempo of our economic mobilization, both to handle our own rearmament program and to provide increased aid to Britain and her allies.

In March 1941, the Lend-Lease bill was passed, action made necessary by the exhaustion of British funds for paying for munitions obtained from the United States. In effect, this act provided the basis for all-out aid, short of a declaration of war, to Britain. It made us in actual fact the arsenal of democracy. It also accelerated our transition to a war economy.

As the defense program took on larger and larger proportions, the problems of expediting and coordinating the whole program became

increasingly difficult, and the Advisory Commission became less and less adequate for the job. In January 1941, it was replaced as the central defense production agency by the Office of Production Management--OPM.

Organizationally, OPM represented a considerable advance over the Advisory Commission. It was set up as an operating, not simply an advisory agency. It was given certain priority and other powers which the Advisory Commission lacked. Where the Advisory Commission had no head, OPM was actually supplied with two heads: William Knudsen of General Motors was made Director General and Sidney Hillman, a prominent labor leader, was made Associate Director General. This much criticized action was politically a wise move, for labor's support as well as management's was essential for expediting the defense effort. Actually, this arrangement worked out fairly well.

Another important organizational advance came in April 1941 when the Office of Price Administration and Civilian Supply was established under the dynamic Leon Henderson.

In August 1941, a new agency was set up to ride herd on OPA and OPM, and to coordinate the entire defense production program. This was the Supply, Priorities and Allocations Board, SPAB, a top policy outfit without operating functions. Various other defense agencies were also established prior to Pearl Harbor.

This brings us up to Pearl Harbor. Let us see just where this country's mobilization effort stood at that date.

By the end of 1941, we had a total military establishment of more than two million men, and facilities for a greatly accelerated training program were well advanced. All major types of armament were in production by this time. Plane production in December was at the rate of 25,000 a year. Total munitions output had reached a rate of one billion dollars a month. The main organizational structure of the war agencies had been established. Despite the confusion, controversy, and conflict centering in these agencies, and despite the overlapping of functions, the lack of clear-cut authority, and the absence of effective coordination, these agencies were in being, were staffed--though still expanding--and they were actually operating.

Finally, the attack on Pearl Harbor brought about a unity of national purpose which did much to speed up economic mobilization in the months ahead.

Pearl Harbor marks the beginning of the period of all-out economic mobilization. Within the next three or four months, there was a general rounding out of the structure of war agencies. A number of defense agencies were reorganized on a more effective basis and with increased powers, or were supplanted by new and stronger agencies. A number of new war agencies were created to fill gaps in the existing mobilization structure.

Under the First War Powers Act of December 1941 and the Second War Powers Act of March 1942, there was a general beefing up of the authority of the war agencies.

Now, in dealing with the period of full economic mobilization after Pearl Harbor, I'm going to limit my attention to two central developments--those relating to production, and those relating to economic stabilization.

Let us take a look in a general way at the production problems which we faced in this country following Pearl Harbor. They were the problems, of course, associated with getting war production into high gear with the greatest possible speed. Pearl Harbor settled the basic issue of what we were mobilizing for. Very plainly, we were mobilizing for all-out war on a global scale. Although our over-all strategy in this global war was not clearly defined until 1943, it early became clear that military requirements would far exceed the highest estimates of the defense period. Moreover, these requirements would be far in excess of existing industrial capacity to meet.

The production goals of the Armed Forces were raised again and again as the implications of the global job to be done came to be more fully grasped. The major production programs increased rapidly, not only in size but in number. There were not only aircraft, ammunition, naval ship, and tank programs, but there were also huge military construction, merchant shipping, and electronic equipment programs. Before long, a landing craft program was added. These and many others were simply the top layer items.

Military end-items programs had to be supported by programs for the production of the materials, equipment, and facilities required in end-item production. For example, the expansion of production in critical materials such as, steel, aluminum, copper, rubber, chemicals, machine tools, industrial equipment of all kinds, and component parts--the B items. New programs were continually being brought into the

picture adding their demands to existing ones and throwing existing plans into confusion.

Now, it always takes production programs considerable time to get under way because of the extensive and time-consuming planning and preparatory work--in other words, lead time. The further along the various production programs got, the greater the pressure of their demands upon all supporting programs. Before long, major programs began to interfere seriously with each other by competing for scarce supplies of raw materials, components, facilities, or manpower. Military programs obstructed each other as well as essential supporting programs. Total requirements were apt to add up to double or more the total capacity to meet those requirements. Soon everybody was battling everybody else to get what they needed for their own programs.

Obviously somebody, some outfit had to step in and bring some kind of order out of this chaos. Some outfit had to ride herd over War Production as a whole. Somebody had to bring the many competing and conflicting production programs into some kind of order and balance. Somebody had to be responsible for increasing productive capacity where capacity was most essential, and somebody then had to undertake the difficult and painful job of dividing up available supplies among the many competing programs and their claimants.

The war agency that had these jobs thrown right into its lap, of course, was the War Production Board--the agency which succeeded and absorbed OPM and SPAB early in January 1942. Donald Nelson, as chairman of WPB, was charged with full power and authority over the entire war procurement and war production program. His authority, given him by Executive Order of the President, was far more sweeping than anything granted to Baruch and the War Industry Board in World War I. In a very real sense, Nelson was made the directing head of the American war economy. Only one major economic power was withheld from him--authority over prices.

The story of the War Production Board's hectic career, of course, can't be told here. For much of the duration of the war, it was the storm center--at any rate the major storm center--of the whole mobilization program, and Nelson and his policies were, and indeed continue to be among those interested in the field, controversial subjects.

Now let us have a quick look at the course of economic stabilization. The vital importance of economic stabilization, primarily through price

control, was recognized from the beginning. All who had studied the problem agreed on the necessity of early and effective action in this field. There was some, but not too much, disagreement on what had to be done to maintain price stability and through it economic stability. But to secure public support, to secure the acquiescence of the various special interest groups, and to obtain the necessary authority and backing of Congress was something else again. This area, as you may recall presented some of the most difficult problems of the mobilization effort. No war agency was so continuously and bitterly under attack as the price control agency--OPA.

Now just why was this the case? Why was it that a program generally agreed upon by informed men as indispensable to an effective mobilization had such continuously rough going? Why was OPA opposed so bitterly by industry groups, by trade associations, and even in Congress?

There are lots of minor reasons that could be cited, such as the reputedly high proportion of college professors on its staff. But the basic reason, I feel, is this: Prices--including the prices of labor, wages, rents, etc.--are the most sensitive point in the private enterprise economy. Touch prices and you touch the pocketbook, you interfere with profits, and you dampen the mainspring of the economic mechanism. About the only strong support and encouragement OPA got was from housewives and a few consumer groups.

The story of OPA's struggle to establish and hold the price line in the face of very great odds against it is a complex and controversial one. There was the more or less continuous struggle to get adequate authority from Congress to do the job, and there were critical occasions in which Congress withheld with one hand the appropriations necessary to make effective the authority which it gave with the other hand.

Although after a time OPA was moderately successful in holding the front door closed against price increases, price stabilization was hampered and set back through the side door of wage increases, both open and concealed, that is fringe benefits, upgrading, etc.; through the back door of parity prices for many agricultural products; as well as by widespread downgrading of quality and the elimination of so-called low end-items by manufacturers.

Economic stabilization wasn't accomplished by price control alone--that is by the regulation of the prices of commodities, services, and

rents. Wage control was, of course, a critical phase of the stabilization program, and this had a long and controversial career of its own during the war.

Another useful adjunct to price control was the premium price plan by which government subsidies were given to high-cost marginal producers, chiefly in the critical metal field. The subsidy method was later extended to oil and to certain foods.

Still other essential features of price stabilization were fiscal measures designed to reduce inflationary pressures through high taxation and savings bond programs to absorb excess consumer buying power. Also important were restrictions upon consumer credit and installment buying.

Here we are at item 6 in my outline: Wartime Achievements: Stabilization and Production. During the war years when the struggle to get production and to stabilize the economy were under way, it seemed much of the time as though these programs had nothing but setbacks. Actually, viewed in some perspective, after the dust had settled and the confusion had quieted down, the accomplishments in both areas were seen to be very substantial.

Take price stabilization. The consumer's price index was fairly steady during 1939 and 1940, at pretty close to 100. Then it rose gradually to a plateau at about 125, which it held from the middle of 1943 to early 1944. Thereafter, it mounted to about 130 in late 1945. This was a far better achievement than in World War I when the wholesale price level rose from 100 in July 1914 to 206 in November 1918--three-fifths of this increase taking place after our entrance into the war.

So much for price stabilization. Now, what did our controlled and directed war economy accomplish production-wise? Making allowance for the price increases which took place, this is what happened. Despite the fact that over 10 million were drawn into the Armed Forces, the following increases in output took place between 1939 and 1944:

| | |
|---|---|
| Raw materials as a group: | 60 percent |
| All manufactured products: | 150 percent |

Munitions production rose from a monthly rate of 1/3 billion dollars in late 1940 to a peak of over 5 billion dollars in early 1944.

Europe's weakness was Russia's opportunity, and she moved in, as we know, with an aggressive program of territorial and political aggrandizement. There was no power or group of powers in Europe or Asia capable of checking her. The result, in effect, was the wrecking of the traditional balance of power system.

Here we have a great paradox--a global war fought to uphold and maintain the balance of power system which Hitler threatened actually ended with the virtual collapse of this system, and there remained no nation capable of stopping Russia except the United States. Now, prior to 1945, we had been all but outside the balance of power system. We were like a fire department of one city which responds to alarms in an adjoining city only when fires of disaster proportions threaten to overwhelm that city's fire-fighting resources. In both World War I and II we came to the rescue of the Allied Powers only when their defeat seemed imminent. But after World War II, ours was, so to speak, the only fire department capable of dealing with a major conflagration. We were faced with the grim alternatives: either we must take the lead or Russia would take over. We were compelled to abandon our traditional role of holding our forces in reserve and assume the lead role, or face the prospect of continued Russian advance with this country increasingly isolated and weakened.

Most Americans hoped, you will recall, at the end of the war that we might return to something like our traditional position of detachment from European affairs, but we soon learned that the good old days were gone forever. In place of the old balance of power system, we were faced with the harsh realities of a very different system--a bi-polar system, with one pole at Moscow and the other here in Washington.

These, then, were the postwar developments, all familiar to you, which compelled the United States drastically to revamp policies and organizations concerned with national security.

This brings me down to Point 2 in the outline--"organization for National Security Prior to World War II." I have tried to portray the situation before and after the Security Act of 1947 in a chart, Federal Agencies Concerned with National Security in Peacetime. Now, I have arranged the material in this chart under three headings: Policy, Planning, and Operations. Note, first, that there was no specific agency

charged with security policy and planning on the national level (as distinguished from the military service level) prior to World War II. This does not mean that there was neither policy nor planning in respect to security; but virtually no planning in any formal sense went on outside the military services. Security policy formulation rested almost entirely with the President, in consultation with such advisors among the cabinet officers as he might confide in.

Even within the armed services, military planning as carried on prior to World War II was of a very limited character. It hardly existed before 1917 except in a very rudimentary form. In the 1920's and 1930's war plans were prepared by the Army and the Navy, but largely independently of each other, until the outbreak of war in Europe in 1939 brought the planning together to some extent. A Joint Army and Navy Board, consisting of the CNO and the Chief of Staff, Army, coordinated war plans in those areas where agreement could be reached. Only in the field of industrial mobilization was their regular machinery for joint planning in the old Army and Navy Munitions Board.

The relations of the two armed services to each other before World War II have been described by a former member of the Army and Navy Staff College faculty as follows:

> ". . . it was all too clear that we had fought all of our wars with an army and with a navy. We generally have fought two wars, one on land and one on sea.
>
> Always we had fought with two separate forces; separate in organization, in tradition, and, worst of all, separate in sentiment. But they had this in common: Each was ignorant of the other."

Now, if the two armed services had little knowledge and understanding of each other, and operated in substantial isolation, this was even more true of the relations between the armed services and the State Department. It was the job of the State Department to formulate and administer the national policies of this country dealing with our relations with other countries. These policies inevitably involved risks and commitments by the United States. These risks and commitments, accepted in the pursuit of our foreign policy goals, might well, sooner or later, involve this country in war, or the threat of war. To pursue such policies, obviously, without recognizing and evaluating the possible military consequences and preparing for such consequences, was a foolhardly business.

Nothing is more essential, it is recognized today, for an effective national policy than the close coordination of foreign and military policy; and yet, during the 1920's and 1930's (to go back no further) there was very little of such coordination, either formally or informally. As I have indicated on the chart here, no machinery existed for the purpose. Military departments and the State Department operated independently and, to a very large degree, in ignorance of each other's policies and plans.

Between 1939 and 1945, a World War of global proportions was fought, and during these war years we learned the facts of national security the hard way. Through grim necessity, and with virtually no advance planning or preparation, we learned how to plan, organize, and conduct joint operations and combined operations in the field; we learned how vital was the close interlocking of foreign policy and military policy; we learned, again the hard way, that you don't fight a war simply to win it; you fight a war to attain national objectives. Still another lesson that we learned during the war was that lack of planning, lack of preparation, and ignorance added greatly to the material costs of the war and resulted in not only a heavy financial burden during and after the war, but in a serious depletion of our natural resources.

The result of all this experience was that, after the war was over--in fact, even before the end of the war, beginning as early as the spring of 1944--we got busy putting our house in order, security-wise. A number of studies and investigations were made, both within the military departments and by Congress, and there was long and, at times, rather heated public discussions of the major issues. The end result of all this investigation and discussion was the National Security Act of 1947, passed in the summer of that year; and this act provided the statutory base for the elaborate set of agencies listed for that year in the lower line on the chart. This Act of 1947 marks the great divide in the long evolution of our national security policy. And this brings me to Point 3 in my outline.

Many of you are already familiar with the Act of 1947 and its amendments, but I would urge all of you to read, or reread, these acts carefully. Two bound copies are available in each of your rooms. Before considering the more significant provisions of this act, let me point out certain fundamental concepts which give meaning and purpose to the entire system of security under the act. There are, as I see it, three such concepts, and I will list them briefly:

1. The central concept is that indicated in the title itself of the act: National Security. This concept of national security contrasts very sharply with the traditional and rather passive concept of national defense conceived almost solely in military terms. Defense, military defense, of course, plays a vital role, but this functions within the larger framework of national security.

2. The second basic concept running through the act is that of coordination--the coordination not only of the armed services in the planning and conduct of military operations, important as that is, but, at least of equal importance, the coordination of domestic, foreign, and military policies relating to national security. Both prewar and wartime experience had made very clear again and again the vital importance of having military and foreign policies that were not only consistent with each other but were mutually supporting.

3. The third concept that runs through the entire act of 1947 can be summed up in the phrase: "Security is everybody's business," and, equally important, it is everyone's responsibility. As we examine the various parts of the act, we will see that not only the military departments but all the major executive departments and agencies of the Government are again and again brought into the security picture.

Now let's turn to the act itself, and the first thing to note is the purpose of the law, described as:

> "An act to promote the national security by providing for a Secretary of Defense, for a National Military Establishment . . . [including Departments of the Army, Navy, and Air Force] and for the coordination of the activities of the National Military Establishment with other departments and agencies of the Government concerned with the national security."

This statement is so important that I am going to repeat it, familiar as it may be to you:

> "An act to promote the national security by providing for a Secretary of Defense, for a National Military Establishment . . . [including Departments of the Army, Navy, and Air Force and for the coordination of the

> activities of the National Military Establishment with other departments and agencies of the Government concerned with the national security."

In this phrasing we have, in effect, the basis for a revolution in national security policy. In brief, and as the remainder of the act makes clear, the armed forces are no longer the sole guardians of the nation's safety. "It is the intent of Congress," runs the introductory statement of policy, "to provide a comprehensive program for the future security of the United States; to provide for the establishment of integrated policies and procedures for the departments, agencies, and functions of the Government relating to the national security. . .," and so on.

It is worth noting that Title I, comprising about one-third of the entire act in length, is not concerned with the armed forces at all. It describes the organization and functions of three new non-military agencies outside the military establishment but with vital, top-level security responsibilities. These three are, or were; The National Security Council, NSC; the Central Intelligence Agency, CIA; the National Security Resources Board, NSRB. Note that Title I is headed Coordination for National Security.

Let's take a brief look at each of the three new agencies which are now added to the security structure of the nation. Of the NSC the act reads: "The function of the Council shall be to advise the President with respect to the integration of domestic, foreign, and military policies relating to the national security so as to enable the military services and the other departments and agencies of the Government to cooperate more effectively in matters involving the national security."

The membership of the Council itself is very illuminating. As named in the original act, the members appear in the following order:

> First the President; second, the Secretary of State; third, the Secretary of Defense, fourth, fifth and sixth, Secretaries of the Army, Navy, and Air Force; and seventh, the Chairman of the National Security Resources Board.

Finally, provision was made for adding other members from among the heads of the executive departments and agencies.

It shall be the duty of the Council, reads the act, "to assess and appraise the objectives, commitments, and risks of the United States in relation to our actual and potential military power, in the interest of national security, for the purpose of making recommendations to the President in connection therewith; . . ."

Note here particularly that two sides of the security situation are stressed--on the one side, national objectives, national commitments, national risks; on the other, national power, actual and potential. Obviously, the two must be kept reasonably well in balance.

Secondly, it shall be the duty of the Council "to consider policies on matters of common interest to the departments and agencies of the Government concerned with the national security and to make recommendations to the President in connection therewith."

Here in the National Security Council we have, at long last, a top-level policy agency, headed by the President, whose job is to take an overall view of the security position and policies of the United States and to advise the President concerning the same.

The second of the new civilian agencies established by the National Security Act of 1947 is the CIA. Briefly summarized, the function of the Central Intelligence Agency is, to ensure under the direction of the National Security Council, a sound and adequate intelligence base for the formulation and execution of national security policies. Very clearly, if our national security policies are to be sound and effective, they have to be based on accurate intelligence on all matters bearing upon national security. Thus the job of CIA is to correlate, evaluate, and disseminate intelligence relating to national security and to perform such other intelligence activities as can best be handled by a central agency. Obviously, this is a big job and an important agency. Most of you have some familiarity with CIA and I need not go into it further here.

This brings us to the National Security Resources Board, NSRB, in many ways the most important agency of the lot, from the viewpoint of our studies here at the Industrial College. As many of you know, NSRB no longer exists under this name, but the present Office of Defense Mobilization, ODM, is, with certain modifications of functions and form, a continuation of NSRB.

In my talk yesterday morning, I reviewed our experience in economic mobilization planning during the thirties and our failure to adopt the Industrial Mobilization Plan when war came.

Now, during World War II, to a much greater extent even than in World War I, we came to realize the predominant role of productive resources in our national military strength. Accordingly, economic mobilization came in for a great deal of attention in the thinking which lead to the National Security Act of 1947. The result was certain radical changes in the organizational arrangements for economic mobilization planning.

In the first place, except in respect to military functions related to procurement, economic mobilization planning was taken out of the military establishment, where it had been since 1920, and was given to a civilian agency, NSRB. In part this was done from a widely held, although possibly incorrect, view that the War Department had fallen down on the economic mobilization planning job during the 1920's and 1930's. But to a larger degree, I think, this reassignment of responsibility for planning from a military department to a civilian agency reflected the growing feeling that modern warfare demanded the fullest and most effective application of all the resources of the nation, civilian and military, and that planning for the mobilization of the economy, no less than the direction of the economy in wartime, was preeminently a civilian job and one which best could be done by those most competent to deal with problems involving the civilian economy--that is, civilians.

Secondly, the responsibility for economic mobilization planning was taken from a minor branch of one of the military departments, where it had enjoyed little prestige and no great influence, and placed in an independent executive agency responsible directly to the President. NSRB had no operating responsibilities or authority. Its role was advisory only, but it was a staff arm of the highest executive authority, the President. In the language of the statute: "It shall be the function of the Board to advise the President concerning the coordination of military, industrial, and civilian mobilization, . . ." and then the act enumerated most of the major areas to which your study will be directed during the next ten months: Manpower; Natural and Industrial Resources; Maintenance and Stabilization of the Civilian Economy; Coordination of Procurement, Production, and Related Activities of Federal Agencies and Departments, Military and Civilian; Requirements and Their Balancing with Available, Resources; Stockpiling and Conservation of Strategic and Critical Materials; Strategic Relocation of Industrial Facilities and Services.

A third point I should like to make about NSRB ties in with what I noted earlier about security being everybody's business. NSRB was established as a Board consisting of the heads of seven cabinet departments, including Defense, State, Commerce, Labor, Agriculture, Interior, and Treasury. Further, NSRB was directed by statute to use to a maximum extent the facilities and resources of the executive departments and agencies generally. Thus, national security planning on the resources side is conceived as a job requiring the participation of every major executive department and agency of the Federal Government.

Now, for the last ten or fifteen minutes, I have been talking about the new organization for national security and I have barely mentioned the armed services. Title II, comprising more than half of the National Security Act of 1947 by length covers this side of the security picture. It is headed The National Military Establishment. As later amended, this part of the act is the basic charter for the postwar military organization; and it really did give the armed services a new look. I don't propose to consider this part of the act in any detail. You are all more or less familiar with the results of Title II, if not with its language, I shall limit my attention to some general comments on certain features of this part of the act.

Let me remind you again of the reasons for this overhaul of the military establishment. The experience of the war had demonstrated very forcibly the hopeless inadequacy of certain features of the prewar military structure. The result was a hasty revamping of that structure, as you recall, once we got involved in the war, and this was a very costly, time-consuming, and very frustrating business. This was done by executive order, and most of the organizational changes would expire with the President's war powers following the war.

If we were to select any one major deficiency as outstanding in this military prewar structure, I'm sure it would be lack of coordination (and of any machinery for coordination) between the separate armed services. Even within a single service, there was not a great deal of coordination in some respects, and this had led to important intra-departmental changes during the war. This lack of coordination cut all the way across the board from planning through operations. It related not only to strategy, tactics, and doctrine, but to the whole broad field of logistics, extending all the way from production and procurement on down to field service and supply. The Joint Chiefs of Staff Committee on Reorganization in commenting on this aspect of our prewar military establishment declared: "Adequate mutual understanding which is so essential to unity was lacking to an alarming degree."

From the military point of view this lack of coordination was significant primarily for its effect upon combat operations in the field; in other words, in military effectiveness as measured in action against the enemy. But Congressmen, not being military experts, quite naturally tended to see lack of coordination between the military departments primarily in terms of cost in dollars. The committee hearings leading to the Act of 1947, if you have ever looked into them, are filled with expressions of this interest in costs, and innumerable examples were cited ir these hearings of horrible examples of excessive waste and excessive costs resulting from lack of coordination in procurement and supply matters.

A major objective of the reorganization of the military establishment was the elimination of waste and excessive costs resulting from duplication of services and faciilites and lack of standardization of supplies and equipment. This objective of economy was a major one because, despite the rapid demobilization following the war, we still had much the largest military establishment of peacetime in our history.

All right, then: How did the framers of the Act of 1947 propose to deal with the problems growing out of the lack of coordination? Organizationally they proposed to accomplish this in two principal ways. The first was by placing the three military departments, Army, Navy, and the Air Force (which received its basic charter under this act), within the framework of an overall organizaion, entitled, The National Military Establishment. At the head of this over-all organization was placed a Secretary of Defense, a civilian, defined by the act as "the principal assistant to the President in all matters relating to national security." His principal duties, in the language of the act, were "to establish general policies and programs for the National Military Establishment and constituent military departments, and to exercise general direction, authority, and control over these departments."

As you will recall, this overhead organization was a compromise between the desire of the Army and the Air Force for a strongly unified single department, and the Navy opposition to this concept. Actually, the national military establishment and the authority of the Secretary of Defense over the three departments proved to be weak and not very effective.

The second organizational device employed in the Act of 1947 to provide coordination within the military establishment was a group of

joint agencies dealing with important activities involving the three services. There were four principal ones, and I shall refer to each one of them briefly. They were: The War Council, the Joint Chiefs of Staff, the Munitions Board, and the Research and Development Board.

The War Council, consisting of the Secretary of Defense and the three military-department secretaries, and the military chiefs of staff, had the duty of advising the Secretary of Defense on matters of broad policy relating to the armed forces. This War Council was renamed the Armed Forces Policy Council in the amendments of 1949, with certain minor changes.

The Research and Development Board was given the job, under the Secretary of Defense, of coordinating research and development within the armed services and of performing certain other functions in relation to the vital role, almost newly discovered, during the war, of research and development in the military field.

The two remaining joint agencies, the Joint Chiefs of Staff and the Munitions Board are of much greater importance and of much greater interest in our studies here at this College--the Joint Chiefs of Staff, of course, because of their responsibility for preparing strategic plans and joint logistic plans, and the assignment of logistic responsibilities to the three services. Strategic planning provides the basis not only for joint logistic planning but also for the plans and programs for mobilizing the economic resources of the nation.

The Munitions Board, under a civilian chairman, was assigned broad responsibilities of planning for the military aspects of economic mobilization and of coordinating all matters within the three military departments relating to production, procurement, and other phases of logistics. The Munitions Board, was, in a sense, the military counterpart or opposite number of the NSRB, the National Security Resources Board, working, of course, within the framework of national policies as developed by NSRB.

So much for the National Security Act of 1947. This brings me to Point 4 in the outline--Changes Introduced in 1949 and 1953.

As many of you will recall, the new military establishment as set up under the Act of 1947 operated with something less than the hoped for results. Judged by the controversy, the confusion, and the bitterness

of feeling which followed, the Act of 1947 resulted in very little either of unity or unification. There is no time and no need here for going into this unhappy period. You are all familiar with it. For our purpose, it is enough to say that Congress was not satisfied with many of the results of the reorganization for national security under the Act of 1947, and in two years came up with the National Security Amendments of 1949, which became law in August of 1949.

These amendments were nearly as long as the original act and, except for a brief section of the National Security Council, dealt entirely with the military establishment. The most important single result of these amendments was greatly to strengthen the position and authority of the Secretary of Defense over the Department of Defense ( as the national military establishment was renamed) as a whole and over the three military departments, specifically. The three military departments lost their status as full executive departments, becoming simply administrative departments under the new Department of Defense. It is important to note that under the Act of 1947 not only the Secretary of Defense but the three military departmental secretaries had places on the National Security Council, giving the military four out of seven places on that important body. Under the amendments of 1949 the three military department heads lost their places on the National Security Council, leaving the Secretary of Defense as the sole military representative in a council membership of five.

Under the original Act of 1947 the Secretary of Defense was simply assigned certain duties which included establishing "general policies and programs for the national military establishment and exercising general direction, authority, and control" over the same. The question came to be raised again and again: Just what are general policies and general direction? General authority in practice seemed, too many, to be very little authority.

The amendments state that under the direction of the President, the Secretary of Defense shall have "direction, authority, and control over the Department of Defense" and various detailed provisions of the act supported and bolstered this strengthened position of the Secretary. The old law had permitted the secretaries of the three military departments to have direct access to the President and the Bureau of the Budget, going over the head of the Secretary of Defense. This privilege was now withdrawn from them, though direct access to Congress was still permitted.

The Secretary of Defense was given a Deputy Secretary, with precedence over the three military department secretaries, and he was also given increased authority over the Munitions Board and the Research and Development Board. Through the Comptroller of the Department of Defense established by the act and other provisions he obtained increased control over budgetary matters.

Apart from the increased subordination of the three military departments to the Secretary of Defense, the most significant change in the military establishment was the provision of a chairman for the Joint Chiefs of Staff. He was to be a fourth member, without vote. His duties were to prepare agenda for and preside over meetings of the Joint Chiefs of Staff. He was to be, in effect, the sole channel of communication between the Joint Chiefs of Staff on one hand and the Secretary of Defense and the President on the other hand.

Since the passage of the National Security Act Amendments of 1949, one other important set of changes needs to be noticed. These are the changes resulting from the adoption of Reorganization Plan No. 6 of 1953 as authorized by the Reorganization Act of 1949. The announced chief purpose of this plan was further to strengthen the position and authority to the Secretary of Defense within the military establishment. President Eisenhower declared in submitting the plan to Congress: "No function in any part of the Department of Defense . . . should be performed independent of the direction, authority, and control of the Secretary of Defense. The Secretary is the accountable civilian head of the Department of Defense and, under the law, my principal assistant in all matters relating to the Department."

To this end, the Reorganization Plan proposed to provide the Secretary of Defense with a more efficient staff organization. Specifically, the plan abolished two of the boards established by the National Security Act of 1947, which I have discussed--the Munitions Board and the Research and Development Board--assigning their functions, with certain other functions, to six additional assistant Secretaries of Defense provided by the Plan to provide the Secretary of Defense with much needed assistance, each assistant secretary to head up a staff unit with an assigned field of responsibility.

This new organization of the Department of Defense as provided in Reorganization Plan No. 6 is shown on page 7 of the group of charts distributed to you. You will note that of the six additional assistant

secretaries provided for here, two in effect have taken over the functions of the abolished Munitions Board--the Assistant Secretary for Supply and Logistics, and the Assistant Secretary for Research and Development. Provision has since been made for three additional assistant secretaries of defense. Other changes were proposed and made in Reorganization Plan No. 6, which I will pass over here.

Now, in the past forty minutes, I have covered the organizational--I should say the reorganizational--water front, and you may well be wondering just what it all adds up to. The past six or seven years in which all these changes have taken place have been a very trying period, as you who have lived through them know. They have been a period of almost continuous change and adjustment, a period, too, of much confusion, controversy, and conflict. The Korean War brought a partial mobilization which both tested and strained the new organization for national security. A change of administration took place in 1952 and the new administration brought new men, new ideas, and new policies. Yet in spite of all the difficulties, in spite of all the turmoil, controversy, and confusion, I think there is no question that the security position of this country, from an organizational viewpoint, at least, represents a tremendous advance over the prewar situation.

Now, let me review briefly some of the developments I have stressed in this talk. The economic collapse of Western Europe, and especially of the United Kingdom, at the end of the war brought the breakdown of the old balance of power system. The Soviet Union moved quickly into the vacuum and this country was obliged to assume the leadership in organizing the free world forces to check Soviet expansion.

Our new international position and responsibilities in turn led to a reexamination of our whole security position. It became evident that not only our military establishment must be placed on a far higher peacetime level as regards both size and efficiency, but that national safety must be seen in much broader terms than military preparedness. The new concept of national security stressed the vital importance of the close coordination of both military and foreign policies and of these policies in turn with related domestic policies--especially economic policies. All these policies must, so far as possible, be made to support each other.

This new and far more comprehensive concept of national security not only stimulated a thorough-going overhauling and revamping of the

military establishment but it resulted in the creation of several important new civilian agencies charged with key responsibilities in relation to national security--the National Security Council, the Central Intelligence Agency, and the National Security Resources Board, later replaced by ODM. Within the military establishment the armed services were brought together in a Department of Defense and under a Secretary of Defense whose position was gradually strengthened, and a series of joint agencies were created for the purpose of coordinating policies and functions in a number of vital security areas--not only in military strategy and military policy, but in research and development and in procurement and production matters.

Time and experience, plus personalities and politics, led to the changes incorporated in the National Security Amendments of 1949 and Reorganization Plan No. 6 of 1953, and the situation, both organizationally and policy-wise is, of course, still fluid. The adaptation of our governmental structure and of our national security policies to the shift from isolation to leadership in world affairs is not something that can be accomplished in a few years.

This brings me to the last point on the agenda of my talk. In my discussion of the far reaching changes in our policies and organization for national security, I have placed particular emphasis upon two things:

First, the broadening of the traditional concept of national defense into the far more comprehensive concept of national security; and, secondly, upon the coordination of foreign, military, and related domestic, especially economic, policies, and the organization innovations adopted to facilitate this coordination.

In the few minutes which remain I want to call attention very briefly to two other aspects of the security problem. One relates to economy in the military establishment; the other relates to civil-military relations within the national security structure. Both questions, both problems (for they are such) grow out of the greatly expanded peacetime military establishment which has resulted from the postwar situation. Department of Defense military expenditures alone in recent peacetime years have exceeded annually forty-billions of dollars, constituting from half to three-fifths of our total federal budget, or about one-eight of our gross national product.

Military expenditures thus account for half or more of the heavy federal tax load borne by the American people. Here, of course, we

have the explanation for the tremendous pressure within Congress and from the public both for the reduction of the military budget in the face of continued international tension and for greater economy and within the military establishment. The impact upon the as a whole of the tremendous sums expended annually by the services is great and far reaching, and a subject of considerable n to those responsible for keeping the economy both stable and ding.

The second problem relates to the maintenance of civilian supremacy hin the national security structure. At first thought you may not like the sound of this. It may seem to suggest, by implication, at any rate, that the military are trying to take over; and you can rightly point to repeated statements in past years by military leaders stressing civilian supremacy as a basic military doctrine in this country. None the less, there is ample evidence of a growing concern since the war, both in and out of Government, over trends, or, at any rate, tendencies, toward a weakening of the civilian control that has been traditional in this count Now, whatever the justification for this concern, it clearly is somethir which the military should be aware of and give thought to.

I do not propose this morning to discuss this problem of civil-m tary relations, but simply to call attention to it, for it raises certa critical issues relating to national security organization and policy this postwar world of ours; issues which received much thought a attention in the discussion and debate leading to the Act of 1947 a the Amendments of 1949. In calling attention to it, I shall simp several evidences of the growing public concern about it.

First, it is interesting to note that in 1952 the Social Sci search Council established as one of its major operating co Committee on Civil-Military Relations Research. The Soc Research Council, as you may know, is the national organ senting the six leading scientific societies in the importa social sciences.

This new committee of the Social Science Researc early report, called attention to the fact that for the f history the United States was compelled to maintain mobilization and a large military establishment, in situation, the Committee declared, would pose gra licy. And why? I quote: . . . "if only because tary influence inevitably would play a gre

of policy-making than ever before in a country that traditional
been inclined to fear military encroachments into the policy sph

Secondly, let me cite the example of the House Committee on Government Operations in its adverse report on those parts of Reorganization Plan No. 6 of 1953 giving certain functions to the newly created Chairman of the Joint Chiefs of Staff. In denying authority to perform these seemingly modest management functions of appointment of the members of the Staff, and so on, to the Chairman of the Joint Chiefs of Staff, the Committee expressed its deep concern and the concern of those leading public figures testifying before it lest in the greatly enlarged military establishment the long cherished principle of civilian supremacy be weakened. "If any single man could control the military establishment," their report declared, "he would have the potential of the United States."

y, let me cite President Eisenhower's message to Congress eorganization Plan No. 6 of 1953. In reviewing the objectives ization of the defense establishment, he placed foremost of civilian responsibility. I quote:

be a clear and unchallenged civilian e Defense Establishment. This is naintain democratic institutions ntegrity of the military profession."

hen, was a primary objective of the s amendments, and of the Reorgan-

ry.
g

ili-
in
in
nd
nd to
ly cite

ence Re-
nmittees a
ial Science
ization repre-
t field of

h Council, in an
irst time in its
a state of high
peacetime. This
ve problems of public
military considerations
eater part in all aspects

MR. NIKLASON: In view of the fact that we had no question period yesterday morning, I suggest that you direct your questions particularly to these last two lectures--although if you want to go back to the first lecture, that's all right.

DR. HUNTER: I confess that I'm a little afraid about their getting me tangled up in this reorganization picture.

QUESTION: This may not be important, Dr. Hunter, but it seems to me that the drafters of the National Security Act did not quite grasp the whole picture either. I note that the purpose of the act, in stating the purpose, that they mentioned practically exclusively the National Military Establishment. Then again, in stating the duties of the Secretary of Defense, they said that he is the principal adviser to the President on all matters of national security.

DR. HUNTER: If I may remind you, the first third of the act deals with agencies which are outside the military establishment. The National security Council, for example, the Central Intelligence Agency, and the National Security Resources Board, were all outside the military establishment. The Act of 1947 does designate the Secretary of Defense as the principal adviser of the President in matters relating to national security.

QUESTION: I would like to direct my question at this Reorganization Plan No. 6, which relates to this particular question. It seems to me that in the position of the Chairman of the Joint Chiefs of Staff, that reorganization eliminates the military from giving military advice to the President. I wonder if you could discuss the position and responsibilities of the Chairman under that reorganization plan.

DR. HUNTER: I am sure there are men here who can discuss that with more confidence than I can, men who have been connected with it, who have taken part in its operation. I have just "read the book." But the background of that change in the National Security Act which added to the three Chiefs of Staff a chairman is that on a number of vital security issues the members of the Joint Chiefs could not reach agreement. There was considerable controversy within the JCS, news of which spread outside of the Joint Chiefs and outside the military establishment. The Chairman, the fourth member, was added, however, without vote; and here again, we have a compromise, resulting from the fear in Congress of having a single military man heading up the military establishment. There is a very wide spread and genuine fear of the man on horseback, who might conceivably, in the manner of dictators, take over the government.

QUESTION: The chart you prepared would indicate categorically that neither the Army nor the Navy, prior to 1939, engaged in any strategic planning. Is this indeed true, or should that be qualified?

DR. HUNTER: I did not say they did not engage in strategic planning. If you will go down to the Classified Section of the National War College on the floor below, you will find a whole set of color plans, so called, that were worked upon in the Army. There was comparable planning within the Navy Department and a very limited amount of coordination of planning between the two services by the old Joint Army and Navy Board, which consisted of the CNO and the Chief of Staff, Army.

QUESTION: Doctor, I understand that when Mr. Forrestal took over as the Secretary of Defense in the early planning stages, he envisioned 39 assistants as a staff of the Secretary of Defense. As we all know, that has grown to be three thousand, and we have either nine or thirteen assistant secretaries of defense and a deputy. My question may sound a little unfriendly, but it is this: Will this system work when the chips are down, or will we have to scrap it and adopt some other system that allows a great deal more freedom of action on the part of the services?

DR. HUNTER: I haven't the least idea, Commander. We can only hope it won't work out too badly. We know that under the Reorganization Plan No. 6 changes were made, and certain changes have been added since. There has been a determined effort under the present administration to make the military establishment really effective as a working organization, not merely from the point of view of military operations, but even more from the point of view of a supply organization in coping with the problems of spending tens of billions of dollars wisely and of bringing down cost and introducing a greater measure of efficiency in the military establishment.

QUESTION: In view of the avowed intention to organize and to be more efficient, do you think we are making any progress in the cited reorganizations which compound the super structure to the extent you have indicated?

DR. HUNTER: I think I will dodge this question for my knowledge of the situation is to fragmentary to enable me to give an answer that would be significant. All I have attempted this morning is to outline the evolution of the security structure during the post-war years. But be assured that throughout the course of this year many speakers who will

deal with every phase of the Department of Defense activities, research and development, procurement, production, and so on. You will have ample opportunity to put these questions which simply bound back from me before men who are really in there working and know the actual situation.

QUESTION: This is a loaded question. Do the studies of the National War College or of the ICAF, or both of them have any significant impact, or were they used in the drafting of this Security Act of 1947, or the 1949 and 1953 amendments?

DR. HUNTER: It is rather difficult to say what influence such studies may have had. Our student committee reports are circulated among the various interested government agencies, expecially within the National Military Establishment and the three military departments. If I remember correctly, the committee report on the final problem in June 1947 included proposals which closely proximated some of the principal provisions of the Act of 1947.

MR. NIKLASON: This will be the last question.

QUESTION: Dr. Hunter, have you had occasion to study the origin of this feeling on the part of Congress and other leaders in the civilian status which seems to reflect a fear or distrust of the military, with a view toward determining why they feel that way?

DR. HUNTER: Well, historically, of course, it goes back very far. It goes back to English experience. In the English experience there was fear of a standing army which at different times in the past had enabled English kings to do things which many people regarded as corollary to the public interest. The result was that Parliament eventually adopted the rule that military appropriations would be made for only a single year (or possibly two years) to make it necessary for the military to come back for money at regular and frequent intervals--a device to keep them dependent on the civilian authority.

Then in our own experience we had a taste as colonies of the oppressiveness of English military authority. This was one of the causes leading to the Revolution. We came out of the Revolution with an acute--perhaps an exaggerated--fear of the political threat represented by a powerful military establishment and officer class. Again and again throughout American political history the old fear of the military crops up.

MR. NIKLASON: Colonel Baird has a word to say to you.

COLONEL BAIRD: I just want to take a moment to tell you that we do not try to dodge any of your questions. It is our opinion and we feel that the points you ask about will be covered later. We don't go into the details of the answer. We like to give the speaker the opportunity to develop his point.

I have noted very clearly your point in regard to the Chairman of the Joint Chiefs of Staff and the operations of the Assistant Secretaries of Defense, and I can say on that that their line is clear on it. Just recently they have published what I would call the Terms of Reference for the Assistant Secretaries, stating exactly where they stand, their status, and what they do, and they are available for reading.

I am sure you will get into the general picture of things as this course develops. Don't get the idea that because sometimes we don't give you an answer beyond what is intended in this lecture that we are trying to dodge an issue. If we don't know, we will say so. We think this is good, and we will assure you that it is. I don't want you to get the feeling that this is a mutual-admiration society, either.

I am going to do something today which is very unusual in the procedure of our Industrial College. I will do it once, now, and it will apply to all our people in the Industrial College, in the service or not; and that is to thank our own faculty for talks from this platform. I will follow this up, then, and congratulate Louie. Having been a student here, and knowing the hard work Louie puts into his talk, I think I would be remiss if I did not at once thank him for what he has given us, for going into a very dry subject to bring out points, as you boys know, to assist you through the course.

Thank you very much, Louie. The class is dismissed.



A26026