DEPARTMENT OF RESEARCH
PUBLICATION NO. L47-4

FOREIGN RESOURCES

10 September 1946

Contents

Page

SPEAKER -- Lt. Colonel Thomas R. Taylor, Department of Instruction, The Industrial College of The Armed Forces 1

FOREIGN RESOURCES

SEPTEMBER 10, 1946

Colonel Taylor:

I do not want to keep you very long this afternoon; only long enough to tell you what we mean by the term "Foreign Resources" as used in this course on Economic Mobilization. Most of you, seeing it on the schedule or program, probably thought that it referred to the procurement of raw materials or other supplies from foreign countries in order to supplement our own resources. That is true. It does cover that, but it is also much broader. Actually, it is a sort of a catch-all phrase designed to cover economic mobilization problems that lie outside the national boundaries of the United States; all of those things which impinge upon our own mobilization or affect in any way our own preparedness plans.

The complete presentation of the topic does not come until the March-April period. At that time, we will present a series of problems and lectures in four different fields. The first of these is on the economic war potential of nations; the second, the economic relations between countries during wartime; the third, the economics of military occupation; and the fourth, the industrial mobilization plans and practices of certain foreign countries.

Throughout the course, however, we will try to introduce problems or lectures - probably more problems than lectures - which relate to the foreign field. For instance, in this first division of the course, Committee No. 4 is studying technical intelligence and how we get it from foreign countries. Committee No. 5 is studying international control of atomic weapons, chemical warfare agents, and bacteriological agents. Subcommittee No. 12 is strugglimg with the question of how five foreign nations compute their requirements.

Therefore, the reason for including this lecture at this time is to give you a general picture of "Foreign Resources", and to forewarn you that the Industrial College has accepted in full the truism that the world is one world and that thinking must be on the international level. This is well illustrated by consideration of our first topic: the economic war potential of nations. There is little use in planning our economic mobilization in a vacuum of knowledge of what the rest of the world is doing.

Economic war potential is not total war potential, which can be defined as the sum total of all the elements of a nation which constitute its war-making capacity. War potential includes military factors, political factors, psychological factors, and enonomic factors. The Industrial College is concerned only with the economic factors. Now what are these: We make a four-fold division of them.

First, population. The size of the population, its characteristics, educational and technical training, age groups, the cohesion and the tesions within itself, and all other factors affecting the element of manpower. The size of the population, of course, is no determinate of the potential of a nation. We are familiar with the fact that China has a population of about 500 million people and that Germany, with a population of, say, 70 million people, has always been so far ahead of China in economic war potential that there has been very little comparison. Some individuals are inclined to believe that this provides the key to the population potential: that the characteristics of the population rather than its size determine its potential. The late lamented Hitler was one who believed in that theory. He believed that the Aryan was superior in every way to others and that, of course, the Germans were Aryans-- both of which points are subject to dispute.

The second group of economic factors involved are those of a geographical character, - the size of a country, its shape, topography, and its location in relation to other countries and to land masses, lines of communication, trade routes, and so forth. Climatic factors would also be included. In recent years we have heard a great deal of discussion concerning geopolitics. That is, the influence of geography upon the rise and fall of nations. Much of this discussion has been so confusing as to be entirely misleading, and some of it, especially that originating in Germany, is just so much sheer bunk. It will be very difficult for you, in studying the economic war potential of nations, as you will do in the spring, to make a true evaluation of geographic factors because there has been so much untruth written on the subject. For instance, the "Heartland" theory, espoused by Germany, which states that the nation controlling that part of Eurasia lying in Western Russia, Poland, and part of Germany, can control the continent or even the world. That may be true in the future, but we should look back over history and remember that so far every great nation in Europe has risen on the periphery of the continent rather than in the heartland - Greece, the Roman Empire, Spain, France, Great Britain, have all been situated on the continental edge rather than at the heart.

The third element of the economic potential is natural resources, and by that, of course, we mean minerals, forests, fisheries water resources, and agricultural wealth. Mankind for many thousands of years has been primarily dependent upon agricultural resources, and the strong nations of the past have been chiefly those that were agricultural in character. It is only in the very recent past, beginning with the industrial revolution, that minerals have played such an important part. In this recent history, the minerals of greatest value have been iron and those which have provided power:--first, coal, then, in the last 20 or 30 years, oil, and probably beginning shortly, uranium.

Dr. Thomas stated this morning that one pound of uranium is approximately equal to about three million pounds of coal. Some of you may have noticed an item in the newspapers last week about a Professor Pollard of the University of Tennessee who compared one of the uranium piles at Oak

RESTRICTED

Ridge with the power plant at the University of Tennessee. He said, as quoted in the paper, that this pile had been operating for three years on five pounds of uranium.. The pile is approximately equivalent in power or heat generation to the University of Tennessee power plant, which, if it had operated continually over the three year period, would have consumed about 25 million pounds of coal. That is a ratio of one to five million as compared with the ratio of one to three million which Dr. Thomas set up this morning. I do not pretend to be an expert on atomic power and both figures are of astronomical proportaions to me. It is evident, as Dr. Thomas indicated, that we must make entirely new estimates of the economic potential of nations, based on the distribution of uranium and thorium.

The fourth factor that we consider in the economic war potential is the idustrial capacity of the nations, - its power plants and grids, transportation lines, and factories, particularly those capable of producing war material. This, again, must be viewed in the light of new sources of power and the redistribution of industrial strength that may take place due to such power.

This year we will make intensive studies of the economic war potential of four countries: Russia, Turkey, Spain, and Belgium. I know that you wonder why we have chosen these four. At the conclusion of World War II there remained only four or five nations of any great economic strength. We can discount Italy and Japan, as well as Germany unless there is another war before Germany is entirely demilitarized. Last year's class studied the economic war potential of Russia, France, the British Empire, and China. This year we decided we would choose other countries, except for Russia. We chose Spain and Turkey which are potential trouble spots and which are very interesting to work with. Belgium is representative of the small western European powers, all of which must always be considered as important. At this time, I do not believe it is necessary to go into the method of approach, or how we evaluate the economic potential. I would like to say, however, that within the last year a great deal of time, attention, and thought has been given to the possibility of setting up a simple statistical system designed to provide a comparison between the different nations, basing the system upon broad economic indices such as steel production, national income, power consumption, and a few other indices that are so broad in character as to measure the whole economic strength or output of a country.

The second principal field of study is that of the economic relations between countries during wartime. This we have divided six ways: First, procurement in foreign countries; second, prevention of the movement of goods from foreign nations to the enemy; third, the restriction of activities of individuals or organizations in neutral countries known to be of a nature designed to aid the enemy the Blacklist of World War I and the Proclaimed List of World War II; fourth, the seizure of enemy

properties; fifth, coordination with allies in connection with lend-lease operations, control of raw materials, and all other economic operations; and, finally, the securing of economic intelligence. We will study the methods used in handling these problems by Russia, Germany, Japan and the United Kingdom, and compare their practices with ours, and thus we will be able to adequately cover the entire field. Perhaps some of you think that this field does not belong in a military course.. I need only remind you that General Maxwell was the first Administrator of the Export Control Act and that the armed services have a very vital interest in strategic raw materials, lend-lease operations. economic intelligence, and other matters I have mentioned.

The third group of problems and lectures will be on the economics of military occupation. This also is a very broad and complicated field involving occupational currency, occupational costs, control of labor, control of prices, distribution of civilian supplies, and any number of intricate and perplexing problems. We will center our attention on the phase of the economics of military occupation that is of vital interest to us: how we conduct ourselves in liberated or occupied countries in order to derive the maximum use of their resources to supplement our own economic or industrial mobilization. That alone is a pretty big job.

During the course of one of the student interviews last week, the student officer was highly critical of our operations in France and in other countries in which he had had experience. He said that as far as he could see there was no centralized planning or, if there was centralized planning, there was no efficient transmittal of the plans to the operational levels to enable the service troops to secure maximum use of French factories to product the things that we needed. Probably any member of the class who was close to that problem is similarly critical, and in large part the criticism is justified. In the case of France, there was, at the very top levels, a failure to reach an understanding with the new French Government. During the entire war there were gaps between G-4, the Civil Affairs Division, and the supply and service units here in Washington as well as out in the theaters. I do not think we did a very good job of it. It was a new field to us. We had not anticipated quite as many problems as developed and we had not worked out within the Army and Navy a properly integrated organization to do the job. That task is still ahead of us.

The countries that we will study in the field of economics of military occupation will be Japan. Germany, and the United Kingdom. We will compare their mistakes with our mistakes and try to point the way to better organization for procurement in liberated and occupied areas.

The last subdivision of foreign resources is the industrial mobilization of foreign nations. Last year we studied the industrial mobilization of Japan without coming up with very much of anything. In other words, it was a rather fruitless study because their entire form of

government, their methods of organization, are in no way comparable to our form of government and methods of organization; therefore, we can derive very little benefit from a further detailed study of their practices and plans.

The United Kingdom was studied also and it was determined that their practices and plans are so closely associated with our own that it is well worth while to review and expand that study this year. This is also true of Russia and Germany.

The cycle of our impressions on the effectivenes of German industrial mobilization is a curious thing. During the early period of the war, the general impression was that we had a great deal to learn from Germany; that they had done a remarkable job of mobilizing their manpower, industrial facilities, and raw materials; in developing substitute materials; in using their technical knowledge to master their problems of research and development; and that we could learn a great deal from the study of what they had done. Since the war, various investigational parties have gone to Germany and the conclusion seems to be that Germany made quite a botch of its industrial mobilization; more than we did; more, perhaps, than the British did; and certainly more than we had anticipated. You have only to read the strategic bombing survey to have that point of view explained rather fully. A report issued only the other day showed the failure of German technical research to produce things that were useful to them during the war.

It seems to me though that there is some paradox in this. Here is a nation that is not too strong industrially--as compared to the United States, for example--yet it was on the verge of dominating the continent--perhaps dominating the world--and still did not find it necessary to establish a two-shift operation in its factories. Does that mean that we are underestimating the matter of economic potential or does it mean that we are not reaching true conclusions on the evidence that we have at hand? At any rate, that is something for you to delve into more deeply in order to discover the truth.

That is what we mean by the term "Foreign Resources". It includes four principal subdivisions and as many smaller problems as we can work in during the other divisions of the course. The field is extremely interesting and of greater importance now than ever before. It seems that the American people have finally arrived at the conclustion that the world is so small the pace of technical advance so accelerated, and the impact of war so tremendous, that we must look outward as well as inward. Certainly, in this fall of 1946 it would seem that the isolationist theory is almost entirely discredited. There is evidence of this in speeches by leaders of both political parties, in the tone of the public press, and in the vigor with which we are supporting the United Nations; and you will find it clearly expressed in Secretary Byrnes' speech the other day in Stuttgart. Every evidence points to the fact that we have turned away from isolationism and will take an increasingly active part in the economic world.

From a viewpoint of economic strength, the United States has emerged from World War II (with all due deference to our British colleagues) as incomparably the most important nation of the world. Many of the problems of the future will be economic in character and, being the strongest nation economically, we must carry heavy responsibilities. This means that we must possess the requisite knowledge to meet those responsibilities, and, as a nation, we do not possess that knowledge at the present time. Fortunately, the Armed Forces realized this fact very early in the game and revised their educational system in order to instruct its officers in international problems. The very fact that we give such emphasis to foreign resources in this course is clear evidence of that revision of the Army and Navy educational system.

I hope that we, on the foreign resources instructional staff and in the Foreign Economic Resources Group of the Department of Research, under the able direction of Mr. Halleck A. Butts, will be able to make the course so interesting that you will take full advantage of the opportunity offered to you by the Armed Forces.

(24 Sept 1946 - 200)L.

33

L 47-5

SHORTAGES OF RESOURCES AND THE NEED FOR CONTROLS DURING WORLD WAR II
11 Sept 1946

CONTENTS

Page

Speaker--Colonel B. L. Neis, Department of Instruction, The Industrial College of The Armed Forces..... 1

General Discussion.....11

Colonel Neis

Students