CIVILIAN REQUIREMENTS IN WAR
17 January 1946.

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GENERAL ARMSTRONG:

Gentlemen, Dr. Elliott is professor in the Department of Government at Harvard University; however, he has certain desirable characteristics that I think will appeal to the members of this class, particularly to the Field Artillery men here, because he loves horses and loves the good old French 75's, and I think he would have preferred again to be in uniform in this war. However, he stayed in civilian clothes and his experience, I might say, adapted him particularly to the job he had. He served in Washington as a consultant to various government agencies, including the National Defense Advisory Committee and the Office of Production Management. He has been the Director of Stockpiling and Transportation of the War Production Board and was also the Vice-Chairman of Civilian Requirements of the War Production Board.

You see that he is particularly qualified to speak to us this morning on civilian requirements in war. Gentlemen, Dr. Elliott.

DR. ELLIOTT:

General Armstrong, gentlemen, I am sorry that the General revealed that I was an old battery commander in the days when artillery was still colorful, but it is now a little archaic and it may make you feel that my views this morning are somewhat archaic too.

I have been in great sympathy with the battleship admirals and it is hard for me to realize that the modern strategic value of those things is a little bit in dispute--at any rate--shall I put it that way?

The very kind and sincere introduction that your Commanding Officer has given I will supplement by only two remarks. In the first three and a half years, roughly speaking, that I spent here, from the first of June 1940, it was my duty, as I conceived it, to try to get the Army, the Navy and the Air Corps to move faster, along with the productive mechanism of our own whole economy. Time was of the essence of everything we were doing. One had to be brutal about cutting out unnecessary cargoes, even Army cargoes, and there were some of them coming back from the Philippines in those days, when we could not get transports to bring back manila fiber because they had to bring back, by Army regulations, wicker furniture for officers who were returning from the Philippines. I spent a great deal of time in the early days being, I hope, a little tougher than the Army itself could be under its regulations in trying to get the essential things in so as to cut down all the unnecessary import shipping. Will Clayton and I, with backing from the President, went through the list of imports and cut it just about 50 percent across the board when the Army and Navy needed some ships and had to get them, but were not getting them out of the War Shipping Administration. The War Shipping Administration, without a cut in the import program, could not have furnished them.

We established after that period a device for calculating the basic requirements of the country in terms of imports which, I think, was the predecessor of all requirements committee procedures. It had the same apparatus of claimant agencies. We made it stick, applying not only priorities to shipping but applying an allocations procedure and actually scheduling imports by type and tonnage which was exactly the thing we came to in the Controlled Materials Plan later on after about two years of experiment. This device was extremely useful because it gave us a hold on industry divisions. I could not tell them how much of a stock pile they had to bring in--without getting the backing of my chief, Donald Nelson, at that time--but I could tell them quite definitely that they would not bring in anything by public or private purchase unless they controlled the use of the material in this country and limited its use and got priority rating and assignment of shipping space for it.

I want to start out, if I may, with the observation that the War comes first at every stage of the game. When it is a matter of national survival there is no argument about it. In an age of atomic energy that survival is always present most of all in so-called times of peace. The second observation I would like to make is that my predecessors in the Office of Civilian Requirements and in the old OPAC's days, which Leon Henderson started off, which was combined with price and ration control, in the main shared that belief. In fact, it was the Office of Civilian Requirements which initiated nearly all limitation and conservation orders that were put into effect, though it met with the most bitter resistance on the part of the industry divisions throughout 1940, 1941 and 1942 in that effort. It was not until well along in the middle of 1942 that that opposition was broken down, a good six months after Pearl Harbor.

Those are two matters of record that I think are interesting to historians. In my seminar in the Littauer school, I have just been reviewing with some of the other participants, the staff work which we gradually developed in the war, getting information from people whom perhaps I should not name in the Office of War Mobilization and in the various parts of the Government--getting the "low-down" so far as I could, on the failings and the accomplishments of those offices. Donald Nelson and Bill Batt have just finished up there and it is against that background that I want to bring to you what I hope will be more than an academic contribution.

First of all, civilian requirements are relative to total requirements for war and no system can from here on out be divided up into compartments in which we simply lay down army requirements, military requirements, in the large sense, Army, Navy and Air Corps on the one side, and a clear-cut area of stuff that you are going to leave over for the civilian population on the other side. Our whole logistics problem is today one of instantaneous over-all mobilization for total war. That old divide-it-up approach to the problem is a very natural approach and it characterized a great deal of the M-day plans and much of our early thinking in the Defense Commission. It seems so simple to take that segment of the economy which is most readily suitable for wartime operations and simply convert it to war and to let the population live on its fat for awhile and take what is left over. On the whole that thinking embraced a good part of our war effort, in spite of provisions to the contrary. The

fat was very thick; it was almost blubber in spots. The productive capacities of this system turned out to be very much larger under terms of full operation and maximum production--full capacity operations on a three-shift basis--than anyone had thought. Mind you, in the following analysis I am talking history, the history of a kind of war we shall never be permitted to fight again and there was a long period for protected preparation which we have twice enjoyed. But the essential weakness, I think, in the analysis of just dividing the two parts of total productive capacities, under such conditions, into two compartments is this: it does not make allowance for the fact that a great many parts of the civilian requirements, so-called, are not direct military or indirect in that respect; that they are absolutely vital to war and to maximum production for war. Even the production of foreign materials falls into that category. If we do not have trade goods for natives, they are not interested in paper money or in something that chinks. They will not produce unless they are paid in goods--an experience that the Army has verified in every theater in which I have seen it operate; I have now seen it operate in all of them except China and Japan. The natives must be paid something that they can use. General Clay found that right along in Cherbourg. He had to pay his French workmen in shoes and food. They were not interested in francs, that would not buy anything. MacArthur's G-4 discovered it in the Philippines later in the war. If stevedores were to be obtained, they had to be paid something--rice, etc. If we wanted a collection of strategic materials all over the world we had to give something in return.

So the productive mechanism shades off from the most essential military to indirect military procurement to essential civilian production to keep the Nation healthy and occupied; I dare say also to support its morale--a very important factor which you fully recognize in troops but do not sometimes think about in terms of a wartime population. Great things can be done by leadership but you do not have civilians under military discipline. Even military discipline has its limits, as we discover today under conditions of the most appalling disintegration of morale for the lack of leadership, I think more than anything else and the lack of courage on the part of the country to say the war is not finished until we have done our job and, the boys are not coming home. I have a boy in the Army and I hope he stays there for sometime--he ought to.

My point is that there is a psychological problem of morale that has to be put into this picture; a lot of things that do not seem important to people have a considerable bearing on that morale problem in terms of total production, of assistance to its capacity in time of war. Take the struggle for survival such as England went through in 1940. People would take almost anything then in the way of privation. They will take it for a considerable period under the continuation of that stress, but the time comes when they must have some release from it. They will not go on indefinitely unless there is some lightening up of the burden. They become stale, war weary themselves.

People who are working sixty hours a week continuously all the time begin to take layoffs and absenteeism to go fishing. Housewives who do not have the things they are accustomed to having to run the American home in the way they are used to doing it cannot go into war work--it takes too much time for shopping. Take the amount of time it takes to do things in

Moscow; I watched people cuing up in black markets--unofficial but still black markets--they knew they could not get anything by regular ration points. It is really terrible--three, four, five or six hours a day spent just getting something on which to live. You see that is not very efficient.

The secret of the American productive mechanism and its efficiency is that we manage to balance out and maintain automobiles to go around to last out throughout the war to move this enormous population to war plants and everything else. Oh yes, we had to ration and we did not do as good a job on it as we might have done. There were lots of inequities. There were any amount of things on which I used to struggle with the Petroleum Administrator and with people in OPA to tighten up. But by and large the job was done as efficiently in war as it was because the civilian population could support the war and would support it and had an interest in supporting it other than just the patriotic urge to get the war over quickly; that is a curious combination of patriotism and other motives.

I am sometimes reminded of the Aesop's Fable brought up-to-date of the grasshopper and the ant. It gets around Washington very quickly and this is probably one that has made the rounds, but bear with me and I will try it out again. The ant is engaged in conversation with the grasshopper, a sprightly fellow, who says to him, "Of course, now, don't give me any of that stuff about working so hard and saving up for the winter. It's true I passed a miserable winter last winter and almost froze to death; had a very slim time, and you lived on your thrift, etc. But you know it's just against my nature to do that your way. Can't you find me some nice family that I can reside with who have an interest in the higher things of life like dancing and music and I will perform for them and it will be to our mutual benefit." The ant said he would give it some consideration but it was a difficult assignment, but the next day he would try it. The next day the ant said, "I think I have found something. It's a little out of my line, as you can recognize, but I feel that you, in your own way, are a necessary part of society so I am going to try to do the best I know for you. I think there are two or three houses I can recommend to you, somewhat wasteful in their habits, but probably they will fill your needs. But there is one thing which you will have to do in order to live comfortably. You must be able on short notice to go down a warm drain and embark on the kind of protected life that might be necessary. You will in short, have to turn yourself into a cockroach." "Well," said the grasshopper, "How would I do that?" "Oh," said the ant, "Look here, I have given you the principle of the thing. Don't ask me to give you all the details."

You may find my remarks about civilian requirements a little along those lines, but if I may focus them they are in general agreement that all the essential economy in wartime is a valid part of the wartime action; that the person who began to get tough in the early days of the war had it a good deal tougher himself in the early days than in the finish, because he went further than the other people wanted to do. Then I hope you will see that what I am going to say about the calculation of wartime requirements is not, I hope, rooted in a civilian superiority complex. After all, I have worn the uniform too and I have gone around in a pseudo uniform a lot in this war. I have not been altogether, therefore, on the

other side of the fence. What I am trying to do and the Army Industrial College is trying to do is to see how to balance these things--the mechanism is the first thing and then the policies.

We came down here in 1940 with the most inept instrument that was ever created to do the job--an Advisory Commission to the National Defense Council. It hung out on the limb of the 1916 statute--a body that never met, that is, the council itself--five or six members set up by a statute during World War I. The vehicle simply permitted the President to take seven worthy people, including another Elliott (Miss Harriet), who started protecting consumers, to join Knudsen for production, Stettinius for materials, Hillman for labor, Chester Davis for food, Ralph Budd for transportation, and Leon Henderson for price problems and things of that kind. Donald Nelson came in pretty shortly, for procurement, as a sort of eighth person in the group. They had no chairman; they had no organization, and they had no policy directives and no figures to shoot at, for naturally we did not get them from the Army. The Army did not have those things either. It was quite useless to scold and belabor the Army, as everyone did in those days and say why do you not revise these absurd figures, which in the summer of 1940 were from 100 to 200 percent too low to start with in most instances for just the Army, Navy and Air Corps share of the picture. The Navy had a somewhat better program because it was lined up on a program that had not the same necessity for expansion. The Navy after all had begun to come into the period of expansion earlier than the Army had.

I remember a general whom I shall not name. He has made a most distinguished record since in the field. He found himself translated from a budget of something around a few hundred million dollars a year to handling ten billion dollars over night almost, or in a very brief time. He worked as many hours in a day as a man could, and he was a very intelligent person, but I would not blame him for not knowing what to do about the situation. No one told us that we ourselves were going to fight; that we were going to supply the part of the world that the Axis did not overrun--and probably no one could tell us. That is the difficulty about calculations for a democratic war. We do not have the situation laid out; we have to wait until people are ready and until the Congress appropriates the funds. The need is the thing that carries us along. Therefore, the military forces in a democracy are always, short of war and up to the time war breaks out, less than the dust. Then the man who the day before yesterday was just another uniform suddenly emerges as the grand savior of democracy and we expect him to do the impossible. That is a psychological factor which has a bearing on industrial mobilization and all the factors we are talking about.

That mechanism of the Advisory Defense Commission made little or no provision for calculating requirements of any kind. It did not have, until 1942, anything that would stand any kind of scrutiny in terms of bills of materials for a real program. At the end of 1941 it began to get to be something like in the SPAB days. It began to get going a little bit. The Office of Production Management had made a final effort but the Military had not the capacity for developing or had not the experience and practice of developing a real breakdown in terms of bills of material even for the limited objectives

for which they had set themselves. So the first requirements that were set up for war were also the basis on which all the civilian requirements had to be conditioned, after all, we had to find out what slice of the pie the Military had to have before we could get on with the civilian needs. And then of course the "experts" said "you can never need such amounts as we can produce in this country." The copper expert in our materials group, the fellow who has had some circulation since and learned a great deal, said there was no need whatever to concern ourselves about the American copper supply in any abnormal way. Above all, he said, not to raise the question about African copper which I was trying to get into the picture at the time. We could not know what to do with the copper we had. This magnificent mechanism of our American copper industry could just turn it out beyond all limits. A year and a half later this same fellow was saying there was not enough copper in the whole world just to meet the shell requirements, alone.

What had happened? In the first place the burned child dreads the fire, and all the people who made the mistake of under calculating because they had nothing to calculate against, as they had no directive or policy to tell them what to do, immediately got wise and shot the moon. We are talking here strictly off the record; Knudsen, the boss of the OPM, called me in in 1941--a great fellow, did a wonderful job on production--and said, "You have been bothering me about all these stock piles ever since I came to the OPM. I could not understand what you were talking about"--I may say parenthetically that I tried to learn to talk Danish but I never got that far. I learned how to write one page memoranda on things that certainly could not be explained in one page. But he taught me some things too, and he said, "You have been bothering me about this, now I am going to fix you. Authorize three-year stock piles right across the board for every strategic material that you can think of and do not bother with the Army and Navy Munitions Board. Let us just do it ourselves this time. List all strategic materials of which we may need a three years' supply; tell Jesse Jones to buy them." He stuck to that point. I said, "Well, if you will forgive me for saying so that does not make any sense whatever. We need a three years' supply of some of these things.

I would like very much to have certain grades of mica, that we might lose if India should be lost, up to that amount; and I certainly could do with certain grades of quartz crystals and maybe two or three things we may well be cut off from--I would like to do that. But it does not make any sense to try to shoot at a three-year supply of manganese when at the most we can barely keep a year and a half ahead by pressing it. So if you do not mind, I think we had better be reasonable. "No," he said, I am going to put the heat on the other fellow." Now, that was characteristic, and I do not blame him. Jesse Jones wrote back a letter refusing the heat politely and said, "Do you really mean that absurd directive which you have given us?" and we had to write back and say "Yes, to the degree, you can do it," which was in effect giving him permission to do what he could. Everyone was shooting the moon; everyone was adding a safety factor. That was how total requirements were built up in materials. It turned out, when we reached our war peak, that it was none too high to shoot, at that.

But we had to learn to be selective of first things first and really to concentrate on the programs, components and basic necessities that had

to be covered. By 1944 we were actually cutting back aluminum for war uses, because we had overshot any possible target. The extra facilities that we built might be thought of as insurance--both pot lines and extrusion plants. But they were waste as against rubber, high octane gas, escort vessels, landing craft and other top programs.

To my mind, any organization of our program calls for procurement that we did not have at that time and, indeed, hardly ever got, so far as I know--that is, an integration of the staff work of the military side of this program with that of the civilian production agencies. This integration I insist must be kept separate from Army control; but we can only do so if the War Production Board is kept going in skeleton form in peacetime. Otherwise we must turn the problem over to the gentlemen who run through the Army and Navy Munitions Board on short-term assignments. Then no matter how good they are, procurement is not handled properly. We need a peacetime staff in being, like the Committee of Imperial Defense, and we must have specialized permanent skills in the staffs of our fighting forces.

Germany started off with the best staff in that respect that anybody could have had. You know we had squelched that staff after World War I by terms of the Versailles Treaty. We, therefore, forced them over into industry. In a very large measure some of their best staff people in the Reichswehr became top-policy executives in the I. G. Farben; krupp; the Rheinmetalgesclsschaft; and so on. You see, they were the industries that really counted for the German army. They had people who knew the army stuff and also knew the industrial stuff. The army was actually running most of the production program in Germany. Production was not a success until they finally began to get a civilian in who untangled it.

The way the Army runs a production program is generally more difficult. It has to have an accountability of a different sort and a routine method. This may seem to you to be an impossible doctrine. But for the best results there must be a civilian agency which is in charge of production all the way through; one that insists on maintaining the control of production. But, of course, there is a gray zone, a twilight zone--where military control must grow as the need for secrecy and speed grows with atomic and other new weapons.

Now how about procurement? I took the view and I have been much criticized for taking it too, that the Army and Navy should have procurement and should be accountable only for keeping it within the limits of a drawing account. I do not think we have ever gotten a proper check on how that drawing account was to be established, or what the limit of accountability should be, although we got a pretty good chance toward the end of the war. Then it was beginning to look very much better. Part of the whole trouble was in the apparatus itself. If there is no checking account that is recognizable--and we did not have until the Controlled Materials Plan came along, the one Ferd Eberstadt set up--we have no apparatus that will really work. The Controlled Materials Plan was irreverently referred to as, "Christ, More Paper!" But actually it was something better than that. It was the first time we had something in the nature of a check system that could be cashed, and could be controlled as to overdrafts. You knew how much it would really take for some particular material.

I assert that that is a part of a proper mechanism; unless the Army is set up in such a way as to gear its requirements and keep them under control by an over-all production agency that knows what the economy will stand, overdrafts seriously interfere with the war program itself. The regular tendency of the Army is to say, "What the hell?" to the civilian economy, "We don't care about all that," and just cash in on the Army's part by taking that part of it which is most easily procurable. It is no disgrace to you--if I were in a uniform, that would no doubt be my personal attitude. The Army tends to say, "If supply is a problem, let that be somebody else's problem. We have the first crack at it. We will get that much of it. We don't really care much about what is left for the other needs. They get too much anyhow." That, I think, is a perfectly logical and natural attitude, for fighting services, that are not after all deeply versed in economics or the politics of democracy.

The residual claimants under the Requirements Committee procedure always had troubles about supplying the Army. Sometimes the ODT would get some backing; for instance, if it was trucks or freight cars where they could put the trucks or cars right across the board, the Army could see that there was a limit. In this connection the Army is much less concerned--provided it could take its part and not be bothered with the effects on others. I assert that that is one of the things which makes it necessary to keep the center of production controls geared to a civilian agency.

In figuring out the total civilian requirements, the civilian economy has a problem the Army does not have. The Office of Civilian Requirements did not have procurement powers. In some respects some of the claimants did have procurement powers--one was the FEA. We had no power, from the procurement point of view, to stockpile raw materials or end goods for the civilian population. We had to depend upon the price mechanism. The War Foods Administration did have some procurement problems in so far as it procured for Lend-Lease and could help carry out the Army's procurement.

The problem of stating civilian requirements and then implementing them is an entirely different problem from that of the Army. For instance, we have to see that our industrial mechanism is geared to a supply mechanism that will work, even if it requires subsidies; even if it requires a very tight kind of price control. We must put into effect not only rationing of necessities in short supply and ordinary limitations of that sort, but we must also put in distribution orders that will prevent the limited supply, as it is bound to be in short items, from going out to the wrong people, in the whole range of basic commodities.

How can anyone figure out requirements under those circumstances? One way is to do just what we were forced to do, namely, take what is left over after all the direct war agencies have had the necessary part of it to carry on with the war, again in our capacity as a residual claimant. You all know what I mean by that, I am sure. I mean get what is left. That is all very simple, but it is not a real way to figure essential requirements; or can you figure out some minimum basis for the requirements of essentials and stick to it? Well, the effort to do the latter, I think, was one of the most pathetic things in this war, and yet it had to be done. We all made a whack at it, too. Leon Henderson started it off. The British also had to do it in England--they were actually down to something like

bedrock--when they concentrated their production, as they did all across the board, in a few factories, giving due allowance for the fact that some of them were vulnerable. If a factory making perambulators--the only one in England--was knocked out by a bomb, babies just did not have any prams for quite sometime, and incidentally perambulators happen to be necessary to mothers.

Another thing was diapers. They also seem to have a very great effect on the economy. As a father of five, I can fully understand why. Laundries are terribly important--things we would not think of ordinarily as being absolutely vital to the economy, but they all affect the health of the population. If food is not handled by people who have clean clothing, and things of that sort, there is an increasing degree of contagion. Enemy action in biological warfare is not necessary; the disease germ can really do the job. So, all of these things have to be figured out.

Bedrock requirements are almost impossible to figure in any system unless we take into account what the bedrock or the stock pile--if you should want to call it that--already in the hands of the civilians may be. That effort was systematically made in things like electrical washing machines, refrigerators, furnaces and so on. In case the amount thought adequate for the economy, plus the goods also in the pipeline and production cut off is to last for a time--as in World War II--it is necessary to convert completely whole industries to war production. Continue manufacturing the parts so that we can service equipment when necessary. If we do not, then there is a health situation that becomes serious. People depend on refrigerators and when they go bad they cannot keep their food--a very wasteful thing, too--for any length of time. In wastes one can get botulism and all that sort of thing.

Wire screen for windows may not seem important to many of you; just a little unnecessary nuisance of flies and mosquitoes. However, that means a big increase of malaria in parts of the country. The Surgeon General's Office was extremely concerned about that, sleeping sickness and other plagues when we had to get into a tangle with the Navy, I think it was, about using wire-screen cloth for tow-targets because, I judge, it was an easy thing for them to use. It meant something quite different to us.

There are many civilian requirements that stand ahead of the lowest military requirements, from the point of view of the health of the population. It had an effect on the economy. Let us take, for example, heavy-weight underwear. Loggers, farmers and outdoor workers must have it. Also the man working outside in our shipyards. Two suits for outdoor workers ought to rank ahead of the tenth suit, say, for quartermaster supplies, per man.

The price of heavy-weight underwear set by the OPA was cheerfully punctured by the Army and they got their procurement. By and large, General Al Browning established, and I think he was entirely right in doing it, a certain freedom from the restrictive price ceilings of the OPA on a large part of the things the Army was buying; it was a great deal more flexible.

The net result of that on the civilian population was heavy-weight underwear for civilians in certain mills was a loss item of, say, 10 percent in that mill and on the OPA's own figures it frequently was. We just could not get it manufactured, with that loss.

We did not do as good a job in the WPB as we should have in pressing for corrections in low-end goods prices that were hurting essential products. It usually took a man four or five months to get his appeal before the OPA. He would file his complaints and then he often finally quit. That condition happened much of the time. In other words, we were in the grip of a production system geared into markets, which demanded that we think in terms of what our mechanism would produce or had produced; how much was in the closet; how much we could count on coming out; the kind of distribution system we had; what kind of reliable figures were necessary to judge and control that distribution system, or how we could get them.

I was getting children's underwear produced at least at 135 percent of the prewar annual rate (my own figures). The Industry Division claimed 200 percent, but it was wrong--as usual. But the 135 percent figures allowed a correction of the 20 percent growth in numbers for the children's population in the bracket between the ages of one to four. The war did a great deal for us in that way. Really it looked pretty good. I mean to say previous underproduction of children's underwear was corrected. That was 135, or thereabouts, over prewar for this knit underwear for children, but it did not do a bit of good. Without rationing we could not control a woman's going in and cleaning out the shops. She would usually hit the shop when there was a period of scarcity. Then it was that she went in and did it. You could, of course, appeal to them. The shops were instructed to do voluntary rationing, and they did. We called in the retailers, and so on. They all tried it. There was one case where a woman walked into a shop and ordered 12 dozens of one particular item. Now an active woman could go around to a good many shops.

So that, you see, our requirements depend somewhat on what we think the traffic would bear.

I notice Chester Bowles, in this week's issue of "Collier's," said back in 1943 that we should have rationed clothing. That was before I took over this job. I did not have anything to do with it until 1944, so my fingers were not burned by 1943 errors. Personally, I could not get any enthusiasm for rationing of clothes out of WPB or out of OPA. It was simply a headache to both of them, and they did not want it. Probably this was wise, on the whole, because clothing rationing is a tremendously difficult and elaborate mechanism to set up. To begin with, it takes an appalling number of people. I dare say if the same number of people could have been put in the yarn-spinning factories, it would have been much better for the people of the whole country.

When you talk about minimum requirements on this irrational basis, the first question is usually, How do we figure it? Well, the way we tried to figure it, and I think it is the only sensible way to figure it, is to take a base period, prewar where civilians had gotten along reasonably comfortably, correct it downward somewhat on the assumption we could get by with less if necessary on items where the distribution did not create a problem; correct

it upwards on items where a distribution problem was evident and where they were extremely essential, for instance, like children's underwear, and things of that sort.

Of course, where there was rationing there was always a much simpler problem. There was then, a problem more like that of the Military, that could control procurement and distribution. But the problem there was to get the actual production once the requirements had been stated. What we were doing in this thing--try to look at it in this way--was to see how the economy could be balanced up and just how much it would stand. I am trying only to point out that if we blunder in our job and we try to put our hands on every element of trouble, we may do a great deal more harm than we would otherwise. I can truthfully say the best things I did were the things I did not do.. Some things can surely be upset--including talking too much. People get a lot of publicity, you know, and it is nice--if one should like to see his picture in the papers. Personally, I judge my own success in inverse ratio to the amount of times I appear in the papers. I think it is sound judgment because, generally speaking at any rate, if one is doing a staff job, or something of the sort, he usually wants to keep things moving along. A certain amount of publicity is essential, but always let other people plant it in the right place, where it will do some good. Get the retailers, call in industry, and so on.

Now if that is a correct estimate of the situation, the statement of requirements we were up against was something that had to be done--(a) against the Military's absolutely basic needs and (b) against foreign needs, which I might say were sometimes just as basic as the Military's. Lend-Lease was appropriately scrutinized. There could not be much argument about it; it paid good dividends. There, again, comes the matter of what the civilians could stand, having taken into account all the factors I am talking about--the method of distribution that had been opened; the price system and its effect on production; what we could count on being produced without guidance and directives, and so on; and, finally, what the authorities, if any, thought the length of the war was going to be. That had a very big influence on it. We would put in one kind of a control system if we thought the war was going to last into 1946. They could not think it would end in 1945. We were instructed not to speculate about the end of the war. I know I lost one bet. I bet the war in Europe would end (VE-day) the first of April. I lost my bet on that; but I also won an awful lot of other bets from people who thought it would end earlier. On VJ-day I handled my resignation date pretty well. I hit it all right, but that was fortuitous. It was partly helped by talking to MacArthur out in the Philippines, who was quite frank in saying to the Tydings Mission that if he was not through with this war by November or December he would eat his hat and he did not like to eat his hat. He admitted if something went seriously wrong he might wind up by the middle of 1947, and he had to plan that way. Now, of course, I would not have said that until after the war was over. I was not counting on Hiroshima or the atomic bomb. Really, one just has to take his life into his own hands to guess. But we do have to guess one way or the other.

Textile control--that would have been perfectly reasonable if the war and the Army procurement was going on into the next two years. It was not at all reasonable if it was going to come to an end at this time. In

other words, there must be rationing, in one case but not in another. I, personally, believe there should have been rationing of men's clothes so there would have been clothing available for the returning veterans. The retail percentages should have been earmarked the way the Canadians did. I could not get to first base with that idea. That was really one of the issues on which I parted company with them. Furthermore, we should have continued some controls in this economy longer than we were willing to do.

That was not a popular thing to say, but I could not go beyond Mr. Krug, or say anything else than he said and stay on as long as I did. I hoped to tell him so privately, as I did in so many memoranda he could not take time to look at them--and I do not blame him. It was my judgment we had to move more slowly for certain tight materials, including some types of steel. Certainly we wanted to keep the L-41 on, to protect low-cost housing, not just industrial priorities. That was actually one of the most bitter feelings I had. It turned out to be absolutely right; we were just a year too late in starting again.

Yet, let me now pay my respects to the Army and tell you what, if I had anything in the world to do with it, I would insist on next time. I have had some experience with some of them earlier in the game in connection with getting some stuff back from the Philippines. There came a period when it became obvious someone was going to run the whole show. Well, Clay was put in charge at home while Byrnes went to Yalta. That was really the end. From that period on all I could do was to intercede and plead. It did no good to come over and point out to him certain obvious things, that 15 million sleeping bags by the end of 1945 hardly made sense in terms of any system of distribution; but 15 million sleeping bags were the figures put down until well after VE-day; some 7 or 8 million before 1945 and the rest for 1945. Eight million sleeping bag covers were also to be supplied. I might say these figures dwindled down later on. That fantastic requirement shows why we do not have things to wear at this time, because they converted the combed yarns that should have made shirts, etc. into other goods. I thought it was unreasonable.

In connection with this proposed unity of command, if it is going to be a unity of command based on over-all tables of organization like that, and pipelines like that, and shoved down the throat of the theater G-4--everywhere I talked with them they said, "Once you get the pipeline coming, don't crowd us with this stuff. We don't know where to put it." You see, they did not want it; nobody wanted it. The fellows back home were playing for the utmost safety and so they were too inflexible and rigid. So have some sympathy for the poor little fellow standing up for the civilian economy just as a part of carrying out the war. That was what I was trying to do and was thinking about.

Another example--I did not like the way the Army figured leather for a long time and thought it was a wasteful thing. The combat boot was a poor showing for the huge investment of leather; but that was that. It engendered a certain amount of heat. Sure! And I'm the kind of fellow who believes in holding up my end of the heat if I can--but I could not. I was squelched. I could not make my point with Byrnes, or Clay in Byrnes' office. I was not successful in getting Bowles to lift low-end prices to cover production until after I left the WPB.

It may be against that background--that's all right; I am giving it to you--that I would want to make this recommendation and then I am through. I think next time the Canadian plan should be adopted. That is, having a sort of War Prices and Trades Board to control prices, distribution, rationing, programming (which was what I was doing in setting up requirements, and so on); and the production in things like textiles, pulp and paper and construction equipment; also things essentially civilian in their demands, such as plumbing and heating, and durable goods. That is what the Canadians do. That is also what OPACs did for a time.

Now Leon Henderson, in his wisdom, broke that up and he did it under Don Nelson's pressure. He may have been right. There was a certain difficulty about having one industry reporting to one outfit and another to some other. I do not think that difficulty is insuperable if the WPB maintained its Requirements Committee control over everything and its ability to issue orders to any division in OPACs or anywhere else to do the job. But the reason I think that is so important is simply this: Unless we can put together those things and get real responsibility under one shop, we cannot settle production problems by telling what the price of textiles ought to be. Arguing back and forth about heavy-weight underwear certainly never got me anywhere. There was a little man down the line over in the Office of Economic Stabilization that settled that issue, and he settled it, in my judgment, very badly. But that is another matter. I am telling you the things I was licked on, not the things I got by with.

The Office of Civilian Requirements at least did give somebody an awareness in time. People do not often try to do that--to say what is going to happen six months or a year ahead. One can often miss a guess; that is true. My suggestion is we need to follow a little more the Army's strategic principle of staff planning, as far ahead as possible; there is also a civilian logistics problem.

If I could throw in a final suggestion, I think we lost, in the WPB, our hold on the situation when we began to split up; when we let manpower get out; when we let rubber get out--all of which had to be reintegrated in the Office of War Mobilization, which never succeeded in integrating either the staff or administrative responsibilities.

I believe in real unity of command. I believe in the staff principle. I am also convinced the thing you are trying to do here in the College is the right way to go about it--to get the civilians and the military people in together so that we can understand each other. After all, most of the military people in this country are not far off from civilians even when they have been through West Point. I think your procedure here is an exceedingly useful one. I sincerely hope I have done a little better than the ant in giving you the principle of the thing. I hope I have not asked you to turn into cockroaches.

GENERAL ARMSTRONG:

Thank you, Dr. Elliott.

I think you will be interested to know that Dr. Elliott started out at Vanderbilt University; he was a Rhodes scholar at Oxford; he went on to the Sorbonne, in Paris. So he has had enough variety to make him one of the best speakers we will have the pleasure of listening to in the College.

I think that Dr. Elliott has given us a degree of objectivity in his talk this morning which is of particular interest to the College, because we have decided that objectivity is the characteristic that we shall emphasize at all times here in our thinking and in our investigation. There is certainly nothing to be gained by being defensive or trying to rationalize errors or by trying to find excuses.

However, I would like to say several things about this requirements business, not because I happened to be engaged on requirements myself in the old days in the office of the Assistant Secretary of War, but I think that it is evident from what Dr. Elliott has said that he is not, as most civilians are naturally not, under the old concept of our operations in the College and in the Army and Navy Munitions Board, sufficiently aware of what went on and of what the Army and Navy thinking was.

Now, in the first place, we made plenty of errors. Let there be no mistake about that. We are not trying to hide them. But remember this also: that the maximum-sized army for which we were planning was a four-million-man army. We had no awareness of the fact that the time would come when, in addition to creating, equipping and maintaining our own army and navy, we would be the arsenal for the whole world. There is, therefore, some excuse for the failure, it seems to me, on the part of the Army to anticipate twelve or thirteen million men in the Armed Forces.

I think that Dr. Elliott would be very much interested if he had seen what was done not only in the office of the Assistant Secretary of War, but in each one of the Technical Services of the Army--and, I am quite certain, in the Navy, and, more particularly in the Ordnance, which I happen to know about--in translating the requirements of finished items for what turned out to be a ridiculously small four-million-man army compared with what we actually had. But those were translated into raw materials which we considered critical or strategic, and into power and labor and transportation and other secondary elements of requirements. In other words, the Army did give some thought to requirements, but the planning was inadequate and very much underestimated. But we, here in this College, simply must make our assumptions much broader and do more clear thinking about requirements than we did in the pre-World War II days.

Now, gentlemen, are there any questions you want to ask?

A STUDENT:

I think we pretty well agree that stockpiling is most important, and we realize that before World War II our stockpiling was pretty much like that of the Japs--the stockpiling of gold and silver. We did not stockpile any copper, which turned out to be second probably to steel in the short items during the war. But in our western states we could have stockpiled copper by putting our unemployed people into the mines. It

would not have been hard to stock pile it during the depression and had it ready for this war. What approach can we take to getting that, so that in another period of unemployment we can stock pile some of our critical products and thus save labor, which later became so critical in our copper and other mines? What is the approach to that?

DR. ELLIOTT:

I am tremendously grateful to you for that question, because stock piling happens to be an obsession of mine and was for many years before World War II. I will give you just a little of the background.

There were three major things. The first is lack of objectives, allowing for the fact that the estimates of the Army and Navy Munitions Board, were very, very inadequate. They were bound to be. I hope I make this clear. I am not putting any blame for this situation on the Board, because it was inevitable, particularly with the lack of political directives.

Pressures, (1) the domestic miners were unwilling to have imports from abroad in adequate amounts, because they were afraid that they would restrict the utilization of marginal domestic properties; (2) the people who were commercially interested in the market were afraid of stocks overhanging the markets; and (3) the President and his business advisers--after the war in Europe had begun, but before it had become serious,--could not be persuaded to advocate spending five hundred million dollars of our gold reserve for bringing in strategic materials. The President told them that his own experts, instead of a pseudo expert--and he clearly meant me!--had determined that 38 million dollars would be entirely adequate to do the job; that he was going to double that amount to be on the safe side; that he could not understand why responsible groups of business men would want to waste the sinews of war, meaning Henry Morgenthau's gold reserve, on so doubtful a venture as this. He was a very unforgiving fellow when he got the idea that someone was trying to force something on him.

We did not get a stock piling bill, (Public No. 117) as you know, until the war in Europe was on. Then we got a very inadequate one. It was not until (Public No. 664) was passed that we got a real stock piling bill. So it was only a matter of months before the President had us back. We nearly broke our necks trying to get in enough of the stuff that he thought we had.

Now, the Colmer Committee, the Postwar Economic Policy and Planning Committee of the House, put out a report in which it graciously permitted me to make some observations about stock piling. I left a copy with General Armstrong, including one that is not yet out, that is confidential.

There is only one way that I know of in addition to increasing the gratuitous expenditures, allowing other nations to have ships that the merchant shipping people do not want any more for an increase in invisible imports, in the commercial account items, in our imports. Of course we must have that; let us face it. But in addition to that why should we not

build up our mineral reserves in this country? Look at Pehrson's article in the July Foreign Affairs (1945), that gives a picture of the situation. I have watched it and it is not a pleasant picture.

If we ever have a stock pile, I do not care about a two-year stock pile for war. I am talking about a basic reserve for the future, where we will not send our ships all over the world under the most dangerous conditions to do the kind of things that we could have done before. We had to send them to Madagascar under the Vichy regime to get a six months' supply of mica, without which our Navy's planes would not have flown, on your specifications.

That kind of thing happened all the time. We lost 35 percent of our strategic asbestos. The Germans had a tip-off on asbestos shipments, I believe. On uranium and tantalum it was the same way. We had to fly them in from Africa, Brazil and elsewhere. The problem is to get over two of those factors that are still in the picture.

To be quite frank, the Army and Navy said, "We are running it. We don't want your stock piling bill," after a jointly sponsored bill had been agreed upon. That is where it jammed up for a long time. I tried to get them to bring it out. Listen, I just do not think you are fit to run it, to be quite truthful, entirely from the Army and the Navy, because members of the Army and Navy Munitions Board will come and go, changing posts every four years. If Patterson, the Secretary of War, will change his staff and get some professional staff experts and let those men go back to troops only once in a while, then I might think differently. But until you get some more professionalized knowledge in those people who make up your staff you had better let some civilians have something to say about it in the long run. There ought to be a top civilian control, too, of stock piling policy.

A STUDENT:

There were some industries that were allowed to run almost continuously during the war. I have in mind horse racing, for example, which means a large number of people and a large number of trucks and the tying up of transportation. Was that industry considered essential for civilian morale in spite of the fact that only a small percentage of the population indulged in horse races?

DR. ELLIOTT:

I asked that question of General Clay and Admiral Robinson a number of times, whether they would like me to take a rap at that one. They thought it better not to do so until they contacted Byrnes. ODT, of course, was not willing for them to have it. They were quite firm about controlling that kind of transportation. Mr. Eastman said he would not accept the priorities of the War Production Board, that he was the sole judge of the adequacy of transportation. I could not lift that particular setup.

But I would say this about it: We have to go across the board if we do that kind of thing. We have to go into a lot of other things. Horse racing, after all, may strike us as being a little less essential. Coming from the Tennessee bluegrass region, I am a little more sympathetic to it. I might argue with you that baseball was not essential and so on. To your mind my position might not seem right and vice versa. That is the difficulty. If we decide to do it, we have to go across the board, all the way across. We have to include the night clubs. The Army and Navy raised more hell about hitting the night clubs than anybody.

I will tell you a story. I tried to get beer classed among those commodities on which I was stopping crosshauling. I got cement, because the ODT thought, I imagine, that the cement people were paying very poor rates. The land grant rates on the railroads actually were just making ten, twenty or thirty percent on the job. On beer they just did not like me to move in. So I said, "If you are going to hit cement, why not hit beer?" "Oh, we can't do that."

"Well", I said, "We have to be equitable. If you do it to one, you have to go across the board."

General MacIntyre did more to help me throughout the war with these things than anybody else. But on one occasion he said, "We will have to be careful about beer in the Army canteens. We are just a little touchy on that subject. The boys like their beer. It is going to be a little hard to stand up for you on this."

A STUDENT:

May I ask Dr. Elliott to say something about the combat boot?

DR. ELLIOTT:

I cannot tell you much. I do not have any pride of authorship involved in that question. Fellows with big ankle bones had a lot of trouble with lacing them and putting in two pairs of stockings. In France last year I think a good many people claimed that it strangled the circulation. The boot did not work quite so well as it was hoped.

It took the leather for four ordinary shoes to make a combat boot. From the leather that they have in the fittings on that we could get one jack boot of either the British or German or Russian type, which is a darn good boot. I think for the purpose which the boot served we could have had a much simpler type of boot without putting all those gadgets on it, which just ate up leather like nobody's business. I think the design was wasteful--that is my point--and I do not think it was a very satisfactory boot from the point of view of the men who wore it until they moved the strap and had buckles set back. Then it was a better boot. But we had a Maine woods boot for lumber jacks that was hard to beat, not complicated, and not wasteful.

A STUDENT:

Dr. Elliott, in the early days of the WPB I saw it grow like hot cakes. It was my personal observation that a lot of good men came in and a lot of bad men, like they did in the Army.

DR. ELLIOTT:

There is no doubt about that.

A STUDENT:

It was my impression that those men who were not good in industry--a lot of them got down in the lower echelons. You did not get the best men out of industry at the beginning. What plan does the WPB have to avoid that the next time? What plan does the WPB have to keep some of these key men going along with us from now until the next war?

DR. ELLIOTT:

I tried awfully hard to get a nuclear corps set up in WPB to carry on in peacetime--with a few first-class men. But WPB is dead as a doornail. CPA has taken it over. CPA has a little group of people just hanging on until they are liquidated.

We never do any planning for these things as a nation. It seems to me that there are some obvious lessons to be learned from the Committee of Imperial Defense in England, which are set out in Forrestal's report--that at least that much is worth study by anybody. It requires the setting up of foreign policies, production policies, and of the objectives of military policy, all in peacetime. Preparation for war now must take only hours, not years. We cannot know how many rifles we are going to need unless we have some idea of the limitations of our strategy on the grand scale and what we are shooting at. But you know that atomic defense must be capable of turning on by pressing a button.

That is a matter of bringing in your top directives right on top and having them laid out--ready! Then your production capacity determines what you choose to put in your picture. A skeleton organization, in peacetime, is certainly indicated; and a different method of recruitment, if possible, is indicated too.

We need very badly in our Government in the high-up positions people to stay permanently in the government service and have careers there. But now a man cannot raise a family on a government salary and send his children to college and so on. They are worse off than the professors.

A STUDENT:

Can you suggest something that we could use as ready reference on this plan that you mentioned in your talk?

DR. ELLIOTT:

Unfortunately, like so many things that came out of the war, documents are not ready as yet. I had a study on Canada done and mimeographed, and I expect you could get from Cliff Hill at least enough copies to be of some use. You might have it mimeographed here. Cliff Hill is still with CPA. He was our deputy at the end of the war, with the title of Vice-Chairman of Civilian Requirements. That I think is probably the most succinct and complete picture.

There is not very much in print about this thing that tells you what you want to know about it and how to operate it, what the setup was, and so on. There is a chapter by Henry Bruening in the book "The British Commonwealth at War," that I edited with H. Duncan Hall, that tells something about British and German problems. There is a very interesting chapter in that book on the British war administration.

Bruening is, of course, the former chancellor of Germany (pre Hitler). You may have a look at that; it is an exceedingly good comparison. The British brushed it aside and said, "Oh, no. It is full of errors. But who leaked?"

Nobody leaked. We worked it out of public documents, out of contacts, and so on. It was perfectly above board. It put together for the first time that picture. It was a very interesting job. I am glad you brought that question up.

The book is called "The British Commonwealth at War." The editors were myself and H. Duncan Hall. It would be worth your while reading.

GENERAL ARMSTRONG:

Dr. Elliott, I wish to express the gratitude of the class to you for this very illuminating talk that you have given us.

I want to say one final word in conclusion about this nuclear form of WPB.

We in the Army Industrial College, outside of a few die-hards in the old days, who were pretty effectually silenced, have always believed in a civilian control of the war economy. But in an atomic age the concept of establishing a civilian control when M-day comes is perfect nonsense unless we want to go down to defeat. Therefore what we in the Industrial College are fighting for--and I hope that with the help that Dr. Elliott speaks of we shall get it--is the belief that a civilian control should appeal to the people of this country so that we can establish and have that civilian control ready and available for war.

Now, I am reading a book by Professor Randall on the life of Lincoln during his war years as President. The thing that I see there is what I have seen in the Second World War when we got into a period of national peril; that, in order to be sure that there is no overt act to which the enemy can call attention and say that we are starting the war, we lean over backward and we take no action.

We had a magnificent army of thirteen thousand men when the South fired on Sumter. At that crucial moment in our history we could not do a thing, because if Lincoln had moved a company, the South would have said he was committing an overt act, and that is war. He could not move.

We cannot in the time of peril set up our WPB, first of all because it will not work unless the Army, the Navy and the civilian group know one another and know their plans and thinking long before M-day comes.

Therefore I say, Dr. Elliott, in conclusion that I am delighted to hear you say that you believe in the idea that the WPB should exist in nuclear form, because we are all in favor of it. We believe it is one of the most essential steps that we can possibly think of in a sound preparation of this Nation against war.

Doctor, I want to thank you, sir, for your contribution to our work here. It has been one of the most effective talks that we have had.

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(8 March 1946--200)