

THE ARMY INDUSTRIAL COLLEGE
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PROCUREMENT PLANNING
FROM THE MANUFACTURER'S POINT OF VIEW
by
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The National Defense Act in the famous Section 5a makes the Assistant Secretary of War responsible for procurement planning. The Act makes no reference to the status of a former Assistant Secretary of War in this connection. In academic parlance, so far as this College goes, maybe I have the status of a dean emeritus! If this be correct terminology, the fact is nevertheless false. Before I became the Assistant Secretary, while I filled that high office, and since I relinquished it, my interest in the industrial preparedness cause has never been emeritus.

I can solve this dilemma of titles by a different approach. Whatever it may be as a former official, I am now a manufacturer so I can look at the procurement planning with a detached, objective view. Possibly what I shall have to say to you is unique in this respect, at least I have been in contact with procurement planning on both sides of the fence. Officially I served the Bridgeport Ordnance District during the war. Also officially I served under President Hoover as the Assistant Secretary of War. But before, during and after both these tours of duty, American industry was my profession. Therefore my viewpoint might be considered neutral as between the Army and industry. As a matter of fact it is decidedly partisan in favor of industrial preparedness however I look at it.

Let me first compliment your director, Colonel Miles. I have known him for many years, we have served together in procurement planning work. I know the thoroughness and also the broadmindedness which is characteristic of the man, and I envy any group of officers who are privileged as you are to be students at this College under his direction. Whether you become experts in procurement planning or in strategy and tactics - be you of the Army, the Navy or the Marine Corps - you are the better for your studies here. If you do not mind a pun I would say it is Miles better!

The real title of my brief remarks to you this morning was suggested by your Director: "What Can the Procurement Planning Officer in the Army do to Make the Task of Industry Easier in the Next Major Emergency?" It is in the form of a question. In arranging my answers I was tempted first to set down fourteen points - but after all I am known as a Republican. So with typical efficiency I have reduced the number to two. I will tell you what they are and then explain why they are. The first cardinal rule a procurement planning officer in the Army must follow to make the task of industry easier in the next major emergency is, as I see it, in the vernacular, know your subject. The second is make up your mind and keep it made up. All the rest, good, bad and indifferent, will follow from these two. Let me explain briefly what I mean by these simple rules.

Speaking from bitter experience of the World War, I think 99.9 per cent of our supply preparedness mistakes in that conflict can be laid to ignorance. So far as I have gone in historical research I think the same charge can be made concerning supply preparedness in every war in which our country has been engaged. Our procurement mistakes of the World War were not culpable; they were blameless. Government did not know its job and neither did industry. Both sides were willing to learn but experience proves that industry, being a going concern, learns much more quickly. I can cite the case of the Department I know best and in which I served to show what I mean. Prior to the World War the Ordnance Department was composed of 85 officers. Try to imagine this handful of men undertaking a production program to the value of four and one-half billion dollars. It was a physical impossibility to recruit men who knew the Government problem or who, knowing it, were sufficiently versed in industrial procedure to do the right kind of a job. Your studies here during the past year have undoubtedly brought to light hundreds of incidents where ignorance on one side or the other, or on both, was the prime cause of delay and waste. If you have not encountered ample evidence that what I say is true, then in the remaining days of this scholastic year take a look at the record!

Now the point is that officers trained as you are trained, who know the supply problem from A to Z, and who realize the limitations of the human equation, will have to put your knowledge into practice with as much precision and determination as a Line officer in command of troops. If you think I mean by that that industry must be regimented in any war task you misunderstand me. Industry will have to be led and you will have to help lead it. Therefore should your training ever place you in the position in after years of helping mobilize American industry for a major war effort it will be up to you, knowing the principles of industrial preparedness, to think in industry's terms and to give your orders in industry's language. And if you are equipped to do that and actually do it, you will be surprised at the results American industry will produce.

There is one major influence which may not be readily apparent in your studies here. I understand that speakers representing the professions and trades address you from time to time and thus acquaint you with the progress American industry is making year by year. This progress increases industrial power so that today the industrial power of the United States - and I merely state a well-known fact - is the greatest the world has ever known. None of your speakers is able to present a panoramic picture of that power. No adequate record of it exists from the standpoint of national defense because it has not had to be harnessed for war. Do not make the mistake of believing that the power of today is no greater than it was twenty years ago.

But if you have absorbed simply the problem of wartime procurement and if you have grasped the principles on which the solution to that problem is based, then as a procurement planning officer your background will be factual and in all your contacts with industry, in peace as well as war, you will keep uppermost in mind two or three cardinal principles. Industry has a big stake in this country, bigger than any one factor of our economic life. Therefore it will help defend the country even to the point of annihilation if that be necessary. Everything takes time, and industry, no matter how competent or how well equipped, cannot do the physically impossible. Time can be saved but it cannot be eliminated. Therefore be patient and humane and considerate. Industry does not demand exorbitant returns. All that it wants is to live and produce a reasonable return on its effort. Therefore do not penalize industry any more than every factor of the nation will have to be penalized in time of war.

Lastly, do not make the tragic mistake of believing that book knowledge is final. One of our greatest evils today is the footloose professor, who from the sheltered precincts of his laboratory thinks he is the world's best economist although he may never have had to meet a payroll. This injunction I give not to you especially but to all of us. Let us not be so foolish as to believe that because we know a thing or two we know it all.

For the second of my two points, I intend to practice what I preach. I say to you make up your mind and keep it made up. Procurement planning is no place for indecision. Indecision in war is equivalent to defeat. I have noted what H. Johnson, the Assistant Secretary of War, has said about not changing standards in time of war. That policy, if followed, would be a godsend. Do what you can to see that it is followed.

Now simply because you are to strive for definiteness do not think that I urge you to be hindebound. Every professional man has a greater right to stereotyped thinking than has the soldier. So your problem is to keep the principles of procurement planning before you and to hold to them fast, let the application fit the given situation.

May I use the words of a great soldier of today to express what I have in mind? Let me quote to you two paragraphs by that distinguished British soldier, Major General J. F. C. Fuller. He expresses what I have in mind better than I could ever attempt to do it. He says

"The fact, however, remains that we cannot put the clock back. Faraday harnessed electricity, Wilbur Wright invented the first practical aeroplane, Marconi vastly improved wireless transmission, and Haber discovered how to extract nitrogen from the air. These men were not soldiers, neither were they directly

employed by soldiers, yet their delvings into the mechanism of nature have changed the whole outlook of war. Why? Because peace and war are one and the same activity in two different forms, they are two conceptions of one and the same idea, for war is an isotrope of peace.

"The supreme danger in war is not that the scientist will cease to help the soldier, but that the soldier will cease to understand the scientist, and, bound as he generally is to the old methods of war, will be unable to evolve new and more economical methods out of the new and more economical devices science provides him with. Nothing is more depressing than to look back upon the last war and watch general after general, through misuse and opacity of mind, throw away one invention after the other, or attempt to apply new weapons like old ones, and consequently sacrifice tens and hundreds of thousands of lives unnecessarily. Even today, years after these events, the use tanks were put to by the British Higher Command is a picture so illogical that one is compelled to believe with Schiller that against stupidity the gods fight in vain. Millions of pounds worth of machines were hurled into the mud and thousands of lives sacrificed, and this 600 years after Bannockburn was fought -- a battle which clearly showed that armour will not float on water."

In conclusion accept my apologies if I have appeared to you to be academic. I have certainly not intended to be. I plead guilty that I have tried to present to you two very simple truths. And I am heartily sincere when I say that if you take kindly to them and will put them into action whenever occasion offers, you, as procurement planning officers, will have done much to make the task of industry easier in the next major emergency. Indeed in my humble opinion you will have crowned any American military effort with victory.

Discussion following lecture by
Hon. F. H. Payne,
Former Assistant Secretary of War

May 23, 1939

Q I would like to ask about the impression among industry now as to the personnel we hope to use in the control of the industry during a war. Is it supposed to be civilian or military?

A I think that they feel in a very much happier frame of mind because they feel that as far as the Army is concerned and the Navy, they are going to have a much clearer knowledge of what they want, and they realize that it will have to be a combination of both officers and civilians, and we hope that they will be able to pick ones that know the most out of the particular industry that they happen to be in. I think that was one of the tough jobs during the World War, some of the people that were sent to the various plants. It was nobody's fault; they didn't have enough of the right type to go around, they weren't well versed on what they should do. I think that you men here have the greatest opportunity of anyone in the Army to be able to educate and send for the right type of men, and that is one reason that when we started here a few years ago we said we would gradually have to get the age limit down. We are hoping that the man under forty-five will develop and beat the fellow over forty-five after a while, and so this age limit will come down and we feel that by the time M-day comes, if it does, we will have a corps of men that is so far superior to anything we had in the World War that they will be very competent with industry. I don't suppose you will have enough

men by that time.

Q The reason I asked that question is that a very great many of our readable columnists keep warning the country that the Army and the Navy plan to take military personnel and put them in charge of huge industries in this country, and naturally we don't feel that they can compete with a man who has spent a life learning the management of these industries, and I don't think we have any ambition.

A That was never the intent. I don't care how good a man is, he can't go into a new plant and supersede the regular management because it would take a long while to get it. All he can do is to assist and watch and see what is being done and see if he is getting what the Army or the Navy want. That day would never come where you would ever have anyone go in and take charge of a plant. By the time you got through it would be a good deal like the Government running the railroads. When they got through there were no railroads.

Q I would like to carry that thought just a little further and perhaps phrase it a little differently. It has seemed to me for sometime that the question on which the disagreement arises is, just where should the line of demarcation come between the military man trained in the Army and the industrialist trained in industry. Where should the one pick up and the other leave off?

A I think that the one that comes in from the Army should see every order that comes to that plant and if any orders not either directly or indirectly in the interests of winning the war come in they should not

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be filled. I mean that a man coming in from the Army or Navy would see and follow what is being produced and see that nothing else is run in. Take our own case - instrument cutting tools. They sent two officers there. I said, "Leave us alone, let us produce. You can see every order that comes in." We lost all of our commercial business. When we got through we had to begin over again. We didn't accept any orders except those that had been approved. That is more or less what an Army officer in procurement would do, follow it and see how it can be speeded up. But as for running a plant - never. They are not supposed to, and they certainly couldn't do it as well as those there now.

General Wesson: This is a very important thing that we are talking about. I am glad that it has come up because I would like to say a word about it. There is an impression getting abroad. Certain remarks that have been made about this College are being interpreted, of course, incorrectly, that the Army is training a lot of people down at this College and elsewhere to run industry. That makes a terrible impression out in the world, a terrible impression, gentlemen, I am telling you, and that ought to be combatted. I don't know what is the best way to do it. Of course actions speak louder than words. In my corps we are combatting it by our actions because we have many opportunities to be closely affiliated with industry.

It may be that somebody should undertake to answer some of these allegations which attempt to establish the fact that the Army and Navy are setting up an organization and training men to run industry. We are not doing anything of the kind. What we are doing is that we are trying to train men who will work out with industry plans to meet our requirements.

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In the Ordnance Department, and I am sure in the other corps, we never fail to point out that we have to depend upon industry to do this work. We are not trying to tell them how to do their job. We are trying to put our problems in front of them and work out with them a plan for doing it. Of course when war arrives there has to be some control of industry, and the control should be measured by the conditions that existed. We should let industrial freedom govern as long as it will. I think Mr. Frank Scott brought that out very forcefully. Of course there will have to be some superagency for the allocations of power, and that sort of thing, but in that the Army is side by side with the industry that is doing it and trying to get from this superagency a proper division.

So let us take every occasion to combat this insidious thing because it is insidious and it is making a very bad impression. I don't know whether I have said too much or not, but I feel very strongly about what I have said.

Mr. Payne: I think you are absolutely correct.

Colonel Miles: There is no question at all, gentlemen, but what you hit the nail on the head. In some way we should combat the insidious propaganda which has emanated from a few well-meaning people who just don't know what they are talking about.

General Wesson: I don't know whether they are well meaning or not.

Mr. Payne: In my various talks around the country where I am talking to industry and various mixed gatherings, I have been trying to impress upon them that industrial preparedness does not mean producing a lot of

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the articles themselves. All we want industry to know is to know everything it shall require, gages, tools, and fixtures, to produce. Take a typical case, that order you gave the other day to Winchester. That doesn't mean they are going to produce but get the equipment sufficient to produce and know how to produce so that on M-day that will have put them at least eighteen months ahead of the game. On many of the orders it is simply the "know-how", not to go to work and produce a lot of articles you don't require at the present moment.

Q In Colonel Scott's lecture to us earlier this year, speaking in the matter of when the superagency, like the War Resources Administration, should be set up, his thought was that the big men that would be required to fill the important jobs on that agency would not be available early in the war. He was referring back to the experience in the last war when he said it took several months before the real big men were willing to leave their business and come and take the dollar a year position. Yet we have heard recently the thought expressed several times that in a big emergency the War Resources Administration should be set up early.

A I think it would be much easier to set it up this time than last time. They all realize they should have come into the picture much earlier. I don't think you would have any trouble in the next emergency. That War Industries Board would not be filled by the same men because they would be a few years too old. I think they learned their lesson on that. I think it would be set up good and quick.

Colonel Miles: Certainly if they are not ready all the missionary work that has been done is to no avail.

Mr. Payne: In the next war we have to furnish our own material. I have told them we would have a different situation next time. In the last war England and France furnished the material and we furnished the men. Next time we will furnish our own material. The situation is entirely different. There is no comparison. These human beings that think they can draw a check and get something for it! They can't any more. It has to be made. We will have to depend on ourselves only. I don't believe we will get anything from anybody, the next time.

I was wondering if any of you appreciated what Germany got when she got Czechoslovakia by way of the amount of materiel that she received. It is perfectly appalling, what she acquired overnight. I don't know what the percentage is, but it is very high, a tremendous lot of the things that she needed.

General Wesson: I have seen the number of airplanes. Germany has the best equipped army in Europe.

Q I was going to ask about profits in war. Do you feel that profits should be limited to 10 percent or so, or should they be left alone?

A I think it is all darned nonsense. They are going to take it away from you anyway. They way they run the profits tax I don't think it makes any difference. They are just talking about something they know very little about, apparently.

Q There was a point expressed from this platform about the fluidity of money in hand. Once an unscrupulous man gets it in hand it is hard to

get it back and it flows out into various places, but the honest man who keeps a fine set of books gets hit by the tax directly and allows the man who is unscrupulous an excess profit.

A The type of industry that would be available on M-day I think you will find honest. It is only the small unit that might be a little difficult, but not the large ones. I don't think you would have any difficulty there, and with the audits that are made and the checking by the income tax people that are made today, I don't think there would be any loophole there at all. If they don't get you the first year, they do the next.

Q We have had lots of lectures from the platform with reference to industry toward war profit, taxes and all that. Would you care to express your opinion as to what you think about the present type of contract forms that are used, or what type of contract forms are going to be of most interest to industry, and just how industry feels toward the method of contract?

A I think it all depends on what you have to buy. It is very easy to get a price on anything that is standard. These educational orders that are going to be placed will give them a little line on what they will be able to produce, and the quantity, and they can easily give a price after getting into production. During the late war certain articles we were buying were gradually reduced as we got into production and found out what they could be made for after they got the "bugs" out. After they get their drawings and gages, tools, jigs and fixtures, so they can produce in quantity, then the price automatically comes down.

General Wesson: Don't you think that in general industry prefers a fixed price contract?

Mr. Payne: Absolutely, as soon as they are able to get one. They can start off on a watchful waiting until they find out what the cost is, and the quantity will reduce it. Everyone will say they want a fixed price where it can be obtained and as soon as it can be obtained.

Q I would like to get some further ideas of yours on this question of standardization. I don't think there is anything more important. You must not change standards in war time. Of course that is opposed some to the idea of progress. I think what you meant, of course, is that you would not change your standards on a particular contract, standards adopted on M-day, ^{and} as you progress have a new model. You will set that standard up, start a new contract and swing in on that one?

A Yes, the only trouble is whether or not you would have to start from scratch, whether you would have time to do that. We should not shift during war. You should get your ideas now and get your machinery, tools, jigs and fixtures, and then sit tight. There is no question but that during war something will come along which will be an improvement. Any changes that will be made will simply be to make production easier, that is all.

Q You are familiar with our system of allocations. The point has been raised in some of the hypothetical situation studies here at the College wherein a company would complain because they had not received orders after being allocated for production. Now, the thought has occurred also in that connection that in line with what you said a moment ago wherein you were virtually estopped from producing for commercial consumption during the war and lost a lot of your business. There might be

argument on the other side that a firm allocated might be glad not to be called upon to produce and thereby build up a position over his competitor who is engaged on war work.

A Of course the answer to that is what we have to make. Everything that we make would be absolutely what was needed in time of war, and it is easier for the Government to go to the larger manufacturers, which does give the small units a chance to develop commercially. They did during the last war. They can't spend time going around to these small plants that have twenty-five people and get any production. You have to go the road of least resistance and get your supplies from the larger producers in any line. I think that is true and it does give, in every line, the small manufacturer who is getting under way an opportunity to get somewhere, but he has a difficult time getting his raw materials. For instance, steel - I imagine those manufacturers who haven't Government orders have to wait some time for steel.

General Wesson: Yes, sir, and a correction for the situation he brings up is being attempted by not taking all of a man's capacity. We are only taking a certain fraction of their capacity in these war allocation orders.

Mr. Payne: The next time will be much better. The last time they took everything we had, and more too.

Colonel Miles: We do want to thank General Wesson for his remarks. I think that we need to engage a little more accurately in combatting some of this propaganda directed against the College. The gentleman who spoke

to us the other day, Mr. Chernie, was very emphatic about that point, and I think that some definite steps must be taken. Of course, many steps are being taken indirectly, as Colonel Payne pointed out. Wherever we have a preparedness minded individual, he knows the answer. He knows that we are not trying to regiment industry, but that we are trying to cooperate with industry. Perhaps it is just as well to let some of these people have their innings - let them get out on a limb and keep it up, and they will come down with a great thud.

We certainly want to thank Colonel Payne for coming here this morning. I have never been with him yet that I haven't gone away from him with some very hard common sense point of view which contact with him has brought out. I am sure everyone of us will go away with an increasing respect for him and for that same good hard common sense which has made him the man he is, and, gentlemen, he's a real man.