

ORIENTATION TALK

by

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Director, A.I.C.
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Gentlemen:

First, thank you for the courtesy of rising when I entered the room but I say now that in informal conferences we do not rise here in the family. When officers of general rank or Admirals, distinguished civilians etc., come down to talk to us, we rise of course, but in the family we do not.

We are very glad to see you all and hope you are as glad to be here as we are to have you. The mere fact that you are here puts the stamp of approval on your efficiency and adaptability because your chief of branch is required by order to select only such officers as have an efficiency rating of at least Excellent. Furthermore, The Assistant Secretary has taken pains to satisfy himself of the fitness of every Army officer present before he accepted him as a student.

Manifestly, therefore, great things are expected of you and we of the faculty are here solely to help you accomplish them.

We are particularly glad to see so many officers of the Navy and Marine Corps. If and when we ever have another war we will have to fight it out together in a spirit of cooperation and it is therefore simple common sense for us to sit down here in time of peace and come to some common understanding of a common problem in order that we may prepare plans that will guarantee that cooperative execution in war without which success is doubtful if not impossible. So, an officer of the Navy or Marine Corps is just as much at home here as any officer of the Army.

Now, gentlemen, I am going to try to lay before you the mission of this school; to outline its course and methods of instruction and to explain the policies and requirements governing its operation. You are invited to ask me questions at any time during my talk and any that you wish when I have finished. In the first place, let us see where the College stands in the major organization of the War Department. Beginning with the Secretary of War and coming on down on the military side we have the Chief of Staff, the General Staff and the Army War College. On the other side, the procurement and industrial side, we have The Assistant Secretary of War, The Planning Branch (Industrial Staff) and the Army Industrial College. There is always, of course, a twilight zone where these parallel activities overlap, and incidentally, one of the purposes of this school is to find out where this overlap is and smooth out the rough places.

THE MISSION OF THE COLLEGE.

What is the mission of the Army Industrial College? You will find it in the General Order establishing it, General Orders No. 7, dated February 25, 1924, which gives as its mission:

* * * "The training of Army officers in the useful knowledge pertaining to the supervision of procurement of all military supplies in time of war and the assurance of adequate provision for the mobilization of materiel and industrial organizations essential to war-time needs."

You will observe that this is taken almost verbatim from the mission of The Assistant Secretary of War as set forth in the National Defense Act. You will also observe that there are two different lines along which officers are to be trained. The first is quite plain; that is,

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to train officers in the supervision of the procurement of all military supplies in time of war. In other words, to prepare plans for procuring specific finished items of military supply. Second, "the assurance of adequate provision for the mobilization of materiel and industrial organizations essential to war-time needs." That is not so plain.

What do we mean by assurance of adequate provision? We mean making plans in advance and testing them as well as we can under peace-time conditions. Plans for what? The mobilization of materiel and industrial organizations essential to war-time needs. Question: What are those materiel and industrial organizations essential to war-time needs? The answer is: all of them, directly or indirectly. For example: the steel industry is manifestly directly essential. The civilian clothing industry is of itself non-essential, but indirectly it is quite so because the raw materials it uses are essential to military items, not to mention secondary requirements such as power, labor, transportation, etc. So making plans for the mobilization of industry is a tremendous task and a most delicate one. We cannot confine our attention to those that are palpably essential to the military effort because the industrial structure of the country is so complex and all its innumerable parts so interwoven and interdependent that none can be suddenly upset for fear that the whole may collapse.

The second question: war-time needs of whom? The Army alone? The Navy? The Army, Navy and civilian population? Manifestly, the Assistant Secretary of War has not now nor will he ever have any control

over Navy plans. He has not now nor will he ever have any control over industry and yet, if we think a second we see at a glance that any man who tries to make a war plan for steel, for transportation, for labor, for price control, to mention only a few things, cannot even scratch the surface if he confines himself to the requirements of the Army alone. Every one of them is of such magnitude, they so ramify into every nook and cranny of our national structure and are so plainly national in scope that they can be approached only from the national viewpoint. But those plans have to be made and The Assistant Secretary of War is the only agency that has a legal mandate to make them.

In short, the mission of the school is to train officers in the preparation of specific procurement plans and industrial mobilization plans. You see, they are not the same at all, although to put the one into effect the other must be sound and workable. The procurement plans are prepared by the Supply Arms and Services under the supervision of The Assistant Secretary. In time of war they will be executed by those same agencies. The industrial plans are prepared in the Planning Branch of the office of The Assistant Secretary but will be carried out by a great variety of authorities including the President, Government departments and specially appointed agencies.

I want to illustrate this point by the simplest example I can think of. Take the simple item, the campaign hat. I might take gas masks, 155 mm shells, or one of a hundred other things, but let us take the hat. It

is the first thing you see of a man coming down the road and the last thing you see of him going over the hill. The Quartermaster General makes a specific procurement plan for hats. The Assistant Secretary of War approves it. In war the Quartermaster General buys the hats under The Assistant Secretary's supervision. Here the hat problem would, on the surface, appear to be settled whereas its solution has scarcely begun. There the authority of the agencies that make these plans stops and we get into industrial problems of world-wide import.

The hat contains a number of raw materials, five of which are strategic. The basic constituent - fur - comes 100% from abroad, mostly Australia; silk from the Orient; leather from hides the bulk of which we get from Asia, South America and Australia; shellac from India; and mercury from Spain and Italy. No raw materials, no hats. Neither the Quartermaster General nor The Assistant Secretary can go into the world market and procure those raw materials and distribute them to the hat industry. Nevertheless The Assistant Secretary is responsible by law for plans for obtaining them. Right away we step into the big problem of war trade. In the last war it was handled by a superagency called the War Trade Board. Labor is required to make hats. Labor is a tremendous problem, handled in the last war by a Labor Board; power by the Power Commission; Transportation by the Railroad Administration and the Shipping Board - all superagencies set up by the President under the war powers reserved for him under the Constitution, or, inherent in sovereignty, or, granted by special acts of Congress.

The point I am trying to make is that these problems must be

solved; solutions must be studied now in time of peace. The Assistant Secretary is required by law to study them and make plans for them but he does not execute the plans. However, since they are of such tremendous magnitude and permeate the whole national structure he works in collaboration with or with the concurrence of other interested agencies. Whenever the plans overlap into man power, as indeed they practically all do, he consults the General Staff. As a matter of fact, the Chief of Staff is entitled to know the extent to which the procurement plans can meet the mobilization plans. Wherever the Navy is concerned, and it is concerned in most of them, joint action is secured through the Army and Navy Munitions Board; and where high military strategy is concerned, by the Joint Army & Navy Board itself.

Hence my opening remarks about being glad to see you were much more than courteous expressions of welcome. I feel strongly that we are doing most vital work and it is a splendid thing to have so many officers of the Navy and Marine Corps cooperate in the work. We can break athletic relations over football. It is a petty matter, as the national defense loses little or nothing thereby, but M-day will be no time to break relations on steel, raw materials, labor, price control or allocation of manufacturing facilities.

To sum up our mission, it is to train officers to make plans for adequate provision for all material requirements, both primary and secondary, essential to the nation at war. To put it another way, this is the only school on earth that devotes its whole time to devising

ways and means of developing the maximum utilization of resources in support of or supplementary to a maximum military effort. As a matter of fact there are some brilliant present-day writers who contend that the Napoleonic and Clausewitzian theory of successful warfare is not necessarily right, that is, to seek out the enemy's army in the field and destroy it, but rather to seek out the Achilles heel, whatever it may be, and make the attack there. And one such heel, common to all nations, is in the field of economics, especially in this closely-knit modern world.

Now I have put here on the board a list of practically all the problems in this year's course. It is tentative so far. As a matter of fact this is last year's course but I can assure you there will be no fundamental changes this year. I will, of necessity, have to go over them hurriedly, otherwise I would keep you here indefinitely. The course is not susceptible to being broken up into clean-cut divisions as is done in the other general service schools, because almost every problem is entwined with every other problem. However, in general, it may be said that there are four main divisions: orientation, procurement planning, industrial mobilization and a block of problems miscellaneous in nature but which pertain to both procurement and industrial plans.

Let us take that first block - orientation.

Branch Activities in Planning for War Procurement.

You know about that already and in a day or so you are going over to your respective arms and services and find out what they are doing.

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along these lines. The officers of the Line, the Navy and Marine Corps are distributed as logically as we can among the Supply Arms and Services.

Report Writing. That is the approach to business problems - writing reports. Analogous to General Staff memoranda.

The Problem of War Procurement. This is your first big problem - mostly historical, studying War Industries Board, etc.

Organization and Planning, Mechanism of Management. This is a study of the factors influencing organization and management - important because it refers to best commercial practice.

W. D. Organization and Plans for Industrial Mobilization -self-descriptive.

Integration and Horizontal Combination in Industry. - Factors underlying integration in industry - different systems etc.

Joint Army and Navy Board and Army & Navy Munitions Board - self-descriptive.

Relations of the O.A.S.W. to W.D. General Staff. Self-descriptive.

Now we come to a block of problems on procurement.

Specifications. If you are going to procure an article you have got to know just what it is.

Computation of Requirements. How much do you want and at what rate? Where are you going to get it and how are you going to get it? By surveying the facilities in the procurement district, allocating them accordingly and, if necessary and the items demand it, making a factory plan, or, if necessary, building new facilities. In the case of gas masks for example th

Chemical Warfare Service plans to build two new facilities. And finally, the problem of Specific Procurement Plans which involves all of these things.

Then we have a problem of several weeks duration on the Fundamentals of Business which is, in fact, an abbreviated course based on the Harvard Business School course. Manifestly, it is difficult to do that in so short a time but we can touch on the most important phases and start you thinking.

Then this block is the miscellaneous group - fundamental both as to procurement planning and industrial mobilization:

Personnel and Training - Self-descriptive.

Budgetary Control - Money.

Power of Eminent Domain in War - War Powers of the President.

War-time Contract Forms - there has been a board working on that for years.

Steel Industry - The Planning Branch is continually working on studies of this and other industries.

Foreign Industrial Control in War. What are the other nations doing about it?

Trade Associations. A study of prominent trade associations with a view to making the best use of them in war; as, for example, the Assn. of Civilian Clothing Manufacturers; the Iron and Steel Institute etc.

Procurement - Peace and War. That is self-descriptive.

Current Procurement of Supply Arms and Services. Now you know that in this school it is not our mission to study current procurement but if you have got to procure in war you must know what your particular Arm or Service is doing along that line in peace.

Progress Reports - Methods of submitting reports of progress.

Industrial War Load and its Distribution. - Additional war load on industry all over the country.

Foreign Strategical Areas - Year before last we studied Mexico. This past year we took Russia and we may continue with Russia this year.

Legal Aspects of Procurement - What are the legal restrictions that will have to be removed; proposed legislation, etc.

Purchase, Storage and Traffic Division - A historical study of the accomplishment of and reasons for that great organization regarded by some as a great bug-bear in the last war.

Machine Tool Industry - Same remark as Steel above.

Exports and Imports of Principal Countries. - Self-descriptive.

Industrial Importance of Strategic Areas. The Soo Locks, etc.

Foreign Current Planning for Industrial Mobilization - What is Great Britain doing, France, etc.

Transition, O.A.S.W., Peace to War. Most important problem.

Test of Mobilization Plan - Now here is a problem that is very important. We take a mobilization plan - last year we took the Genl. Mob. Plan of 1928 - and we select the most vital items of military supply for

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each Arm or Service. We divide the class up into committees and run these things down and see whether or not the production rate can meet the mobilization rate and if not, why not. It is a big problem and very important.

Now we step into problems of Industrial Mobilization. Each one of them was a big problem in the last war. Superagencies were set up to handle them. The Planning Branch has made up a plan and is improving it all the time. You probably remember reading about a Congressional Board investigating it - The War Policies Commission. They are working on the plan made up in the Planning Branch.

Priorities - how will this be exercised in war; those raw materials I was telling you about - to what use must they be put and in what order of priority shall they be allotted in order to be most effective in winning the war.

Power, Conservation, Food, - the Food Administration.

Control of Foreign Commerce in War - War trade.

Financial Control Agencies. How is the war going to be financed? Study how it was done in the last war - Capital Issues Committee, War Finance Corporation, etc.

Commodity Committees. Mr. Baruch says they were the backbone of War Industries Board.

Transportation - Railroad Administration, Shipping Board.

Price Control - History shows that no nation on earth has ever settled that problem in war. Read what Barney Baruch and Eugene Meyer have to say about it. What are you going to do about it?

Strategic Raw Materials - A study of the factors to be considered in assuring the adequate supply of these during war.

Industrial Readjustment after the War. That is not exactly in our mission but you will remember that after the last war all those prominent civilians left and went back home. Things were badly upset and we haven't gotten over it yet. It is a pretty good idea to look ahead.

Now, gentlemen, I want to call your attention to this problem - The Control of Industry in War. Here each officer sets up an organization for the control of industry in war to suit himself. The last class had a complaint to make. They said that the importance of the problem was not stressed sufficiently in the beginning of the course. It was, but they did not get it. Each one of the other problems is a link in that chain - priorities, power, labor, etc. The whole thing ties in together. Each of these are committee problems but this one is an individual problem. When you are on a committee, say on priorities, there may be six or eight other committees running concurrently and your mastery of these subjects depends upon what you get from the presentations of these other committees. So this problem must be continuously in your mind. Take notes as you go along.

Inspection of Industrial Plants - We make a trip to Pittsburgh and go through the steel factories, inspect the plants where gas masks are made, etc. By courtesy of the Navy we go to Indian Head and the Navy Yard; we also visit the Bureau of Standards.

Aeronautical Industry - At the close of the school year we have another week in which you go back to your arm or service and take up the loose ends. The Procurement activities of the Air Corps are in Dayton so we give the Air Corps officers a separate problem on this industry.

We wind up the course with a Procurement War Game where we make certain assumptions, divide the class up into groups and study the organizations and functions of the O.A.S.W. and control agencies as visualized under the Planning Branch plans.

METHODS OF INSTRUCTION.

It is nearly all self-instruction. The only problems wherein the instructors really instruct are the ones on the Fundamentals of Business. In the others you have to dig things out for yourselves. There are no text books and one man's opinion may be as good as another's. You are ^{not} going to get any solution out of the instructor but he is willing to advise you in general ways that are helpful. You have to do your own thinking and not be afraid to put the result on paper. Last year an instructor brought to me a problem and he said, "I do not agree with any of this man's conclusions and recommendations yet his statement of facts is correct, his deductions are logical and his recommendations are in accordance with his conclusions. While I cannot agree with him, he is sound and I am going to give him a superior mark", and he did. Don't be afraid to say what you think.

As to our organization, we have four permanent full-time instructors, one of whom is also Executive Officer - all carefully selected on the basis of their educational background plus special fitness for the job. The individual officers of the Planning Branch are, in addition to their regular duties in that Branch, ex-officio members of our instructing staff as and when it is necessary to call upon them.

In general, however, the permanent instructor conducts the problem, but, if its scope includes matter that is within the purview of a regular section of the Planning Branch the chief of that section collaborates with the instructor throughout the course of the problem, finally sitting in conference with us when the problem is presented and expressing such opinions as he may think necessary, especially from the authoritative viewpoint of The Assistant Secretary of War himself.

The Planning Branch is located right up the hall; we are all in the same family working toward the same end. From time to time we ask officers of the Branch to give lectures to the school on subjects in which they have specialized. The situation on the industrial side is, as I indicated at the beginning, analogous to that of the War College and the General Staff. We are more fortunate however, in that the Planning Branch is right next door.

Gentlemen, this is not just a school; it is a graduate school. Men who come here are of mature judgment and have demonstrated a sense of responsibility and a capacity for thinking about big things in a big way and then presenting their conclusions in a big way: concisely, courteously, constructively and absolutely without fear. In every way our conference room is an open forum to gentlemen of high mind and high intent. When anything is being discussed and you have an idea on it, stand up and give the class the benefit of it. The only restrictions are: strict parliamentary procedure; be courteous in language and demeanor and constructive in purpose. Outside of that there is no limit.

The Assistant Secretary of War has two vacancies annually at the Army War College which he fills from graduates of the Army Industrial College. Recently by courtesy of the Navy, the Army quota at the Naval War College was increased by one, that one to be a graduate of the Army Industrial College selected by The Assistant Secretary of War. This is encouraging to such officers as desire those details and who are otherwise available under the regulations.

You are naturally interested in knowing how you are graded and rated. On every problem on which you work you get a grade that falls in one of four blocks - superior, excellent, satisfactory or unsatisfactory. A, B, C, D. We absolutely frown upon what is known as tenth-boning. In fact we do not use units and tenths in our grading of problems. We stay away as far as humanly possible from competitive marking. We try not to compare the quality of your work with that of any other student but rather to compare it with a standard.

Now you may naturally wonder how we reconcile selecting students for the Army War College and Naval War College from among the outstanding students of each class without basing those selections on relative class standing. Well, you can easily conceive of a man who might have an average academic rating of superior and be in other respects not the type that you should send to a college which trains men for high command and staff duties. On the other hand, you would never select a man from the student body of one graduate school where he can make an average of satisfactory only, and then send him to another one as a representative of your Chief. We have to strive for a just balance somewhere but since our observation of you is, from the very nature of the situation,

manifestly on what you can accomplish as a student more than ^{or} as anything else, it naturally follows that academic rating is doubtless the most potent factor governing our recommendations.

Another strong point on which we have good opportunity to pass judgment is your ability to cooperate. It is a most important thing in our opinion and no man is fit to hold any key position - duty on the General Staff or in the office of The Assistant Secretary of War, for instance, unless he can cooperate cheerfully with others and get others to cooperate cheerfully with him. You can go out all alone and trim a rose bush or saddle a horse but you can never do a really big job without not only working yourself but getting others to work with you wholeheartedly. Now don't misunderstand me. We don't want any yes-yes men - quite the contrary. I mean you must be tolerant and considerate of other people's opinions ^{and} ~~but~~ don't squabble over little things that make no difference. If in any problem there is a big point involved and you do not agree, don't hesitate to state your beliefs and if necessary, put in a minority report and be prepared to stand up and defend it.

Anyhow, you start in here with a clean board on which you may write your own academic and efficiency ratings. We will do our best to evaluate them justly and forward them to higher authority as prescribed by regulations.

It might be well to go back and take up a few little things - little in themselves but in the aggregate they amount to something because they make for smoothness, harmony and efficiency. In the first

place, the Munitions Building is no place for this school but we are here and there is nothing we can do about it. We have not sufficient space and we fought for seven months to get what we have. We have to make the best of it. We don't like to put three or four of you in a room for in a class like this we have all sorts of temperaments. Some men can work in a boiler factory - others don't work well in noise. So remember to be considerate of your neighbor. The acoustics here are terrible and if you raise your voice you annoy someone who wants to work.

Just before you graduate you are asked to turn in a paper giving us some constructive comments on the course. We are not like the War College or Leavenworth which have been going a long time and have been somewhat stabilized. We are still groping around somewhat and you can help future classes in this respect.

I think I said there is no such thing as an approved solution. Who on earth is able to give you an approved solution of the price control problem, for example? Nobody - it can't be done.

As to rank - now a colonel in the Army and a captain in the Navy is a colonel and a captain and as such are entitled to those little amenities that go with such rank but in this school everybody is on the same footing regarding rank. This is a gentlemen's assemblage and a lieutenant who is a Committee Chairman pulls just as much weight as if he were the senior officer in the school.

Office Hours. They are fixed, gentlemen. We do not ring a bell at nine or at four-thirty - we put it up to you. If you have some shopping to do, for instance, and want to get off a little earlier, go ahead,

but don't make a practice of it.

You will find an attendance sheet back there on the wall. Initial it every day. Don't forget it, because it inconveniences the Executive Office. It is a little thing but it saves time and annoyance.

As I say, you can go to the Planning Branch and Library and get records and books to your heart's content. They have work to do, however, so return the data to their proper places. Don't leave them strewn around.

Tomorrow, gentlemen, if you so desire you may invite your families to be present at the Opening Exercises which will be held in the Auditorium. Please be in your seats at five minutes before eleven.

The Chief of the Planning Branch is not here but the Acting Director has just gotten back from leave this morning and if he would like to say a few words I am sure we will all be happy to hear him.

Colonel Stayton:

Colonel McCain, gentlemen: In the absence of Colonel Voris and on behalf of the Planning Branch I desire to welcome the Class of 1932 of the Army Industrial College into the family. As Colonel McCain has said, we are all in one family. You will find during your course that your work and that of the Planning Branch are closely related. In going over the work you will find many things you do not agree with. I say many - perhaps not. I hope not. I would like to call your attention to one fact - that the plans as they now exist in the Branch are the result of the thought of many men who have preceded us on our work. However, that does not keep you folks from criticising them and we urge you to criticise them because we get not only the benefit of

our own thought but that of forty or fifty others. However, we urge that your criticism be constructive criticism. It is easy to say: "This is all wrong." Give us something constructive. The officers of the Planning Branch will appear on the platform from time to time. Ask them any questions you like and they will be glad to help you. We are in our offices the same hours you are here in school and we welcome you at any time and trust you will take full advantage of that fact.

Colonel McCain: Colonel Stayton is perfectly right. When you get up there say anything you like as long as it is constructive. Say what you have to say in a polite, constructive way and to the point.

There is something I forgot to mention. Whenever a paper has an original idea that is worth something we put that paper where it will do the most good, and it does sometimes. As an instance, the Army and Navy Munitions Board has recently been reorganized and I understand that it is in part traceable directly to the spirit of academic freedom we have down here. The Navy has recently reorganized their planning and from its own viewpoint is paralleling what the Planning Branch is doing for the Army. The head of that section is Captain Pence of the Navy. He is our liaison officer over there and any time an Army student officer wants some contact in the Navy he should, through Commander Ring, get in touch with Captain Pence and he will help you. He is a key man on the A & N Munitions Board and has been of material assistance to us over here. - -

Captain Pence:

I always feel rather humble when I come over to the Army Industrial College and realize what a tremendous problem the Army and Navy have in connection with procurement plans and industrial mobilization. The War Department has recognized that problem in the establishment of this college. In my short tour of shore duty of possibly two years, I have had numerous contacts with the Industrial College and I think it is a wonderful institution. The War Department is to be congratulated not only on the school and the material support given to it, but also on the excellent staff with which it is staffed. As a Navy representative, I think it is appropriate to voice the appreciation of the Navy Department in having eleven officers from the other side of the building attend the school this year. In a way, I think it is almost an imposition to take 20% of the class and give it to the seagoing forces. It can only be justified by the spirit of cooperation of the Army and a realization of the necessity of preparedness. The Navy appreciates this courteous act on the part of the Army and we hope before long to come up to its standard in material matters by knowing what we want and where we can get it.

If you give me a dollar and I give you a dollar, there is no change in our financial status, but if you give me an idea and I give you one, we have two ideas. That is cooperation. We cannot afford not to cooperate. National defense is too big a question to be subject to changing types of personalities either of yesterday, today or tomorrow.

We have been welcome over here in the offices, ~~and~~ files and assembly rooms of the Army Industrial College and, as I said before, we appreciate it deeply. We do not feel we are strangers; we feel we are one big

family and that that spirit is going to continue. I want to say for the Planning Section of the Navy Department that all of you are welcome at any time to come over to our offices in the Navy Department. We will do our best to give you what you want. We have no big organization like the Assistant Secretary of War. We have no legal mandate to do that sort of work. Our plan is different from yours, but we aim to get the same results in a different way.

In closing, I wish to pledge you on behalf of the Planning Section of the Navy Department continued support, cooperation and encouragement.

Colonel McCain: Thank you very much, Captain.

Now about previous solutions. You can get anything you want in the files and all the previous solutions to problems are at your disposal, but you are cautioned against revamping them and putting them in as your own. You would get caught at that before the year is over. Do your own thinking. If you can contribute something original we will know we are getting somewhere.

About smoking. Up to and including last year we had smoking in our conference room. I am an inveterate smoker myself and I liked it but sometimes it was so bad I could hardly see the rear of the room. Last year's comments of the class recommended cutting it out. So, no smoking hereafter in conference.

The Planning Branch officers are all here and I am going to ask them to line up so that each of you may be presented to each of them.