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THE ARMY INDUSTRIAL COLLEGE  
Washington, D C.

Course 1938-1939

ORIENTATION TALK

by

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War procurement in the Army during the World War was carried on under General Staff supervision which had had no previous experience in that function. Congress, whether justly or unjustly, was dissatisfied with this system, and, soon after the war, began investigating and legislating along procurement lines with the result that it placed this supervision in the hands of a civilian, The Assistant Secretary of War. The theory on which this action was based was that matters to be handled concerned big business and therefore should be handled by a man prominent in the business world. The pertinent congressional legislation on this subject reads as follows.

Section 5a of the National Defense Act -

"Hereafter, in addition to such other duties as may be assigned him by the Secretary of War, the Assistant Secretary of War, under the direction of the Secretary of War, shall be charged with supervision of the procurement of all military supplies and other business of the War Department pertaining thereto and the assurance of adequate provision for the mobilization of materiel and industrial organizations essential to war-time needs."

Under this law The Assistant Secretary of War is assigned two distinct, but closely related, missions.

The first mission is plainly stated:

a "Supervision of the procurement of all military supplies" in peace and in war. It naturally follows that if he has supervision over procurement in war he has it over peace-time planning for that procurement. In other words, he supervises the supply arms and services in the preparation of their current plans for the procurement in war of all items of Army requirements.

b. The second mission is not so clearly stated, that is, "The assurance of adequate provision for the mobilization of materiel and industrial organizations essential to war-time needs."

Three questions immediately arise concerning this second mission:

(1) What is meant by "the assurance of adequate provision"? Making plans in advance and testing them as well as we can under peace-time conditions.

(2) What are those "materiel and industrial organizations essential to war-time needs"? The answer is. All industrial organizations directly or indirectly. It is even broader and should be

correctly stated as all elements in the economic sphere including service industries, agriculture, labor, financial institutions, and commercial institutions participating in domestic and international trade. Action in one part of the economic field produces reactions in all other parts. The operation of one industry requires the support of other industries, of labor, of finance, etc. The economic structure of the country must be considered as a closely knit, integrated whole.

(3) "War-time needs" of whom?

The Army alone?

The Navy?

The Army, Navy, other Governmental Departments, and the civilian population?

Of course, The Assistant Secretary of War has not the slightest control over Navy planning or over industry or over the civilian population, yet he is charged with an economic mobilization which will permit satisfying their needs.

Besides, back of the procurement of every finished item of supply or equipment there are many contributory requirements:

Raw materials

Semi-finished products

Power

Labor

Money

Transportation, and so on

Can The Assistant Secretary of War or any living man, however able, make a plan for labor, for example, and confine his effort to the labor required in the production of Army items alone? Manifestly such a plan would be worthless unless it were based upon and were a component of a national plan for labor. Therefore, somebody has to make that national plan and The Assistant Secretary of War is the only man or agency that has a legal mandate to make it. But it is a logical conclusion that no such plan would be acceptable to the President and the Congress unless it were acceptable to other Government departments, to industry and to labor, in other words, to the American people. Both the Army and Navy have come to realize this and, in consequence, while each is making its own specific procurement plans cooperating with each other, they must make their industrial mobilization plans in collaboration. The Industrial Mobilization Plan, Revised 1936, bearing the approval of the Secretaries of War and Navy is the present basic plan. We all realize that in order that these latter plans, national in scope as they are, shall be sound and that they can be put into effect when needed, the Army and Navy must get together and stay together. That is the fundamental reason why we are so glad to have the Navy and Marine Corps officers here with us.

The Assistant Secretary of War, then, is charged with supervising Army procurement and Army procurement planning and with economic mobilization planning. The Office of The Assistant Secretary of War, in addition to the Executive part of that office, is therefore divided as follows.

(1) A Current Procurement Branch supervising current Army procurement;

(2) A Planning Branch supervising procurement and industrial mobilization planning, the latter in cooperation with the Navy Department, and

(3) The Army Industrial College charged with training officer personnel for procurement and industrial mobilization functions

But war-time procurement must be based on war plans for military operations, therefore, we must have some knowledge of the whole war planning picture.

In the War Department the General Staff is charged with the formulation of war plans for military operations and The Assistant Secretary of War with the supervision of war-time procurement plans. In the Navy Department the office of Naval Operations is charged with both of these functions. There are various joint agencies to effect coordination in the plans

Thus the Secretary of War has:

a. On the Command and Military Side

The War Department General Staff Officers are prepared for serving thereon by graduation from The Army War College where studies in strategy and tactics involving high command and staff are pursued.

b. On the Procurement and Industrial (Economic) Side

The Planning Branch, Office of The Assistant Secretary of War Officers are prepared for serving thereon by graduation from The Army Industrial College

The Secretary of the Navy has:

a. On the Command and Military Side

The War Plans Division, Office of Naval Operations Officers are prepared for serving thereon by graduation from The Naval War College which studies problems of strategy and tactics involving high command and staff

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b. On the Procurement and Industrial (Economic) Side

Fleet Maintenance Division, Office of Naval Operations Officers thereof charged with procurement planning may be prepared for such service by graduation from The Army Industrial College.

The Secretaries of War and Navy have for coordinating all Army and Navy action:

a. On the Command and Military Side

The Joint Board This Board consists of:

Army Representatives

Chief of Staff  
Deputy Chief of Staff  
Assistant Chief of Staff, W P D.

Navy Representatives

Chief of Naval Operations  
Assistant Chief of Naval Operations  
Director, War Plans Division,  
Office, Chief of Naval Operations

Under the Joint Board is the Joint Planning Committee composed of selected officers from the War Plans Division of the General Staff and from the War Plans Division, Office of Naval Operations In the Army, officer personnel of the War Plans Division are usually graduates of both the Army and Naval War Colleges In addition, in cases involving procurement and the allocation of industry, one officer of the O.A.S W and one officer of O N O become members of this committee.

b. On the Procurement and Industrial (Economic) Side

The Army and Navy Munitions Board consists of.

The Assistant Secretary of War  
The Assistant Secretary of the Navy

Under the Army and Navy Munitions Board is the Executive Committee consisting of.

Army Representatives

Executive to The Assistant  
Secretary of War  
Director, Planning Branch  
Representative from G-4 Division,  
W D General Staff

Navy Representatives

Director, Fleet Maintenance Div ,  
Office of Naval Operations  
Chief of Section, Material Procure-  
ment Planning, Fleet Maintenance  
Division, Office of Naval Opera-  
tions  
Representative from Bureau of  
Supplies and Accounts, Navy Dept.

These officers are usually graduates of The Army Industrial College.

To sum up:

The Army War College instructs in the "Strategy of Men and Materiel after the Materiel has been delivered to Army Control "

The Army Industrial College instructs in the "Strategy of Materiel through all its phases up to its delivery in suitable condition for use in the Army."

### Returning to the Army

As the Planning Branch, Office of The Assistant Secretary of War, on the industrial and economic side is parallel and analogous to the War Department General Staff on the military side, so is The Army Industrial College to The Army War College.

The Army Industrial College was established in 1924. Its mission set forth in the General Orders creating it is as follows:

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

The statement of the mission is almost an exact extract from the law setting forth the procurement and industrial functions of the Office of The Assistant Secretary of War, and hence the primary mission of the College is to train officers for service in the Office of The Assistant Secretary of War and other control echelons.

The College started in 1924 with nine student officers. Since then it has become a General Service School with a full-time faculty of eight officers,

6 Army  
1 Navy  
1 Marine Corps

and a student body this year of sixty-two officers carefully selected from the Army, Navy, and Marine Corps

## Now for the Course of Instruction -

On the blackboard are the titles of forty-six problems of the ensuing course in the order in which we intend to take them up. It must be distinctly understood that the course here outlined is tentative. Some of the problems may be changed, others may be eliminated or new ones added. The reason for this I think is apparent. We must keep abreast of current affairs, be ever watchful of the changing economic conditions. We know that the Government has taken many important steps in the national economic field, the nature and consequence of which we will have to take cognizance since, manifestly, they have a vital bearing on our own plans.

The course divides itself into three parts. Part I, Problems 1, 1-A, 1-B, and 2, gives the orientation in business method and parlance and in service procurement and planning method and parlance believed desirable to a proper start. Part II, Problems 3 to 17, inclusive, studies and evaluates procurement and procurement planning, and Part III, Problems 18 - 45, inclusive, studies and evaluates industrial mobilization. Problems 17 and 44 are problems in which the analysis and evaluation of their respective parts of the course are accomplished by each student individually and are of the greatest importance.

### Part I

#### Problem No. 1

#### FUNDAMENTALS OF BUSINESS

Problem No. 1, "The Fundamentals of Business", has for its purpose to acquaint you with the economic principles underlying the conduct of business operations. In this problem, which is an individual problem, you will look into how business is financed, how the business man regulates his operations through the use of statistics, and how methods of accounting are used by him for control purposes and for determination of cost. This problem will also provide you with a basic knowledge of productive industry, together with its important characteristics and its general problems of management.

#### Problem No 1-A

#### ORGANIZATION AND INDUSTRIAL MOBILIZATION PLAN

Problem No 1-A runs concurrently with the early part of Problem No. 1 and is designed to give a preliminary orientation in organization and the Industrial Mobilization Plan, and is the foundation upon which Parts II and III of the course are expanded. Hence the importance of Problem 1-A is very great. An individual

report giving an analysis and evaluation of the Industrial Mobilization Plan is to be submitted at the end of this problem

Problem No. 1-B  
BASIC INDUSTRIES

Problem No. 1-B runs concurrently with the latter part of Problem No. 1 and is designed to give you a general idea of the organization, operating methods, and managerial problems of an important cross-section of American industry. There are ten industries studied in this problem, which are

Aeronautical  
Non-ferrous metals  
Automotive  
Chemical  
Iron and Steel  
Construction  
Railroad Equipment  
Petroleum  
Shipbuilding  
Containers

In this problem the class will be divided into ten committees, and one industry will be assigned to each committee for study.

Problem No. 2  
HISTORICAL STUDY

Problem No. 2 consists of an individual study of the procurement and industrial mobilization in the United States during the World War

Part II

Problem No. 3  
WAR AND NAVY DEPARTMENT ORGANIZATION AND PROCUREMENT

Problem No. 3 is an exposition of the organization of the War and Navy Departments and their coordinating agencies, with particular attention to their methods of procurement. It is partly an individual study and partly a committee study

The remainder of Part II on procurement consists of the study of planning in time of peace for procurement in war, and the operation of the system in war as far as it pertains to the War and Navy Departments. This field is covered generally by the block of problems Nos. 4 to 15 and Problems 16, 16-A and 17.

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The Problems in this block are committee problems and consist of studies of:

4. War Plans and Joint Agencies
5. Procurement Districts and Corps Area Procurement
6. Standardization, Improvisation and Early Procurement
7. War Load and Industrial Allocations
8. Strategic and Critical Materials and Iron and Steel
9. Personnel for Procurement
10. War Powers of the President
11. Budgetary Procedure
12. War Contract Procedure
13. Construction in War
14. Ships and Shipping
15. Control of Production

As you see, committee problems 4 to 15 cover special studies in coordinate fields related to the general subject of war procurement. They do not by any means, however, cover the entire field of war procurement.

Problem No. 16

TEST OF WAR DEPARTMENT PROTECTIVE MOBILIZATION PLAN

Problem No. 16, "Test of War Department Protective Mobilization Plan", is an analysis of the War Department Protective Mobilization Plan, to determine how well stocks on hand and estimated production will meet procurement requirements of that plan. Most of the work on this problem will be by committees.

Problem No. 17

WAR PROCUREMENT

Problem No. 17, "War Procurement", is an individual problem in which each student makes a critical analysis and evaluation of the War Department and Navy Department agencies and procedure for War Procurement.

Problem No. 18

GOVERNMENT

Problem No 18, "Government", is designed to furnish background and knowledge of the functions, purposes, and organization of the National Government. This is an individual problem.

The first group of committee problems under Part III, Nos 19 to 30, inclusive, covers in part the field of planning for and executing war-time control of economic resources of the nation. These problems are committee problems and include

6 Economic Analyses of Foreign Powers  
The British Mobilization Effort  
Industrial Mobilization Plans  
Transition from Peace to War  
Analysis of Strategic Industrial Areas Nos. 1 and 2  
Trade Organizations and Regimentation

Problem No. 31  
INDUSTRIAL STAFF MEMORANDA

Problem No. 31, "Industrial Staff Memoranda" consists of the writing by individual students of brief reports, prepared as staff memoranda, on pertinent subjects selected by the faculty and assigned specifically to individual students. In order that the work load during the period assigned for the Industrial Staff Memoranda may be eased as much as practicable, any student desiring to do so may ask for the subject assigned to him for his staff memorandum any time after March 8, 1939. Having received his assignment, however, he must submit his completed memorandum within seven calendar days thereafter.

The second group of committee problems, under Part III, are Nos. 32 to 43, inclusive

- 32 Public Relations
- 33 Neutrality
- 34 Control of Iron and Steel
- 35 Licensing of Industry
- 36 War Labor
- 37 Power and Fuel
- 38 War Communications and Transportation
- 39 War Finance
- 40 Priorities
- 41 Price, Profit and Production Control
- 42 War Trade
- 43 Post-War Economic Readjustment and Demobilization Plans

These problems cover special studies in coordinate fields related to industrial and economic mobilization. All of these problems are preparatory to Problem No. 44, in which each student is given a final opportunity to present his personal views as to the method that should be adopted for the most effective use of the nation's economic resources in war.

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Problem No. 45  
WAR GAME

Problem No 45 is devoted to a War Game, designed to give the student officers an opportunity to test, practically, their knowledge of the latest plans for procurement and industrial mobilization.

LECTURES

Throughout the course lectures on subjects pertinent to the problems being studied or about to be studied are delivered before the students by the instructing staff of the College, and by experienced officers of the War and Navy Departments. Lectures are also delivered from time to time by prominent bankers, economists, educators, and industrialists. The College is assured of lectures from a selected group of distinguished men during the coming year.

INSPECTION TRIPS

Inspection trips to leading industrial plants will be made in the fall and spring of the year.

PROCUREMENT PLANS AND INDUSTRIAL MOBILIZATION PLANS

In the order establishing the College there were assigned two essential fields of training first, that for procurement, and, second, that for industrial mobilization "Procurement Plans" and "Industrial Mobilization Plans" are not the same at all, although the soundness and workability of the former are absolutely dependent upon the soundness and workability of the latter. It must be borne in mind that although these two problems are not the same, they are most intimately related.

Remember that the procurement plans are made by the supply arms and services under the supervision and approval of The Assistant Secretary of War. In war these same agencies carry out their own plans under the supervision of The Assistant Secretary of War.

In contradistinction, the industrial mobilization plans are prepared in the Planning Branch, Office of The Assistant Secretary of War, in collaboration with the Navy through the Army and Navy Munitions Board. In war these agencies do not carry out their own plans. It is contemplated that this will be done by civilian superagencies to be set up by the President.

under the war powers inherent in his office, or, granted him by the Constitution, or, pursuant to special acts of Congress. The plan used, of course, will depend on the personality of the President, the temper of Congress and the psychology of the people at the time. Meantime, it is the Army's and Navy's job to keep, as best they can, the plans up to date and ready to submit to the Congress and the President at any moment.

In our course we finally reach Problem No 44, which affords an opportunity for each student officer to submit individually a thesis on his work at the College, and to submit his plan and set-up of an organization for the control or regulation of economic resources in war.

"Procurement Planning" is relatively simple of understanding - that is, in its conception. The mechanics and the final carrying out of the plans are enormous tasks.

On the other hand, even the conception of "Planning for the Mobilization of Industry" is more in the nature of conjecture, less definite, especially in the beginning. Army Regulation 120-10 defines it as follows:

ARMY REGULATIONS)  
No. 120-10 )

War Department  
Washington, July 6, 1934

"3. Mobilization of industry and materiel resources for military purposes --

a Mobilization of industry for military purposes during a national emergency is the operation of adjusting peacetime energy and industry to meet the essential requirements of national life and the maximum requirements of military effort, with a minimum disturbance of normal conditions.

b It involves --

- (1) Readjusting and perfecting industrial organization
- (2) Stimulating production
- (3) Eliminating unessential activities, and
- (4) Diverting essential resources and activities from commercial to military purposes "

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Since our economic structure is, from its very nature, composed of innumerable interdependent elements, in planning this structure for industrial mobilization in war we seem, especially at first, to have entered a vast cave with endless radiating caverns. There seems no end to such planning, but there can be had a comprehensive understanding of it.

### PERSONAL CONSIDERATIONS

How the Navy makes its selections for detail to this College is not stated but judging by the general average of past years we expect some splendid results from the Navy and Marine officers in this class. I do know how Army officers are selected. Your efficiency ratings are excellent or superior or you wouldn't be here. You have requested the detail, which is an added reason for our knowing that you are interested in this work. Further, you have proved to your chief of arm or service and to the War Department your adaptability to this work, and that you have some imagination, a keen sense of individual responsibility and a desire to advance in your profession.

Higher authorities in both War and Navy Departments, therefore, feel justified in looking for great things from this class, and we of the faculty are honored in helping such a body of men to accomplish them. Due to the spirit of cooperation and understanding which has been built up between the sister services, the time has passed when officers of the Army and Navy sitting around a conference table and discussing a question common to both and vital to the National Defense may doubt the understanding or the animus of those present. Similarly, we trust that in our approach to our problems this year we will forget that we belong to the Quartermaster Corps, to the Ordnance Department, or any other arm or service, or even to the Army or Navy. Let anything savoring of personal or professional advantage be disregarded and think primarily in terms of the National Defense, let our work be on a high plane.

From time immemorial military men have been planning military strategy and tactics, but this is the first college on earth to concentrate on planning the ways and means of making the materiel plans meet the military plans and supporting both with national economic plans. It is a privilege, therefore, to attend and assist in the development of the College.

In general, instruction here is self-instruction. You will do your own thinking and arrive at your own conclusions. When we are engaged upon some specific assignment in the service we all know that we must carry out loyally and cheerfully the policies of higher authority regardless of whether we agree with

those policies or not. But this is a college and a graduate college at that, and if any officer has something on his mind that he thinks is good for the National Defense, he can present it without fear. There are no restrictions on this whatever, except those manifest in any assemblage of gentlemen, viz. adherence to the subject and the facts relating thereto, courtesy, constructive intent, and, in our conferences, parliamentary decorum.

A word about rank. Of course there are certain customs and traditions of the service which we would not change if we could. All we have in this life is our rank which is attained by growing gray in years and years of hard lines in the service, but, in our academic work, you are all on the same footing exactly. To illustrate specifically -- the chairman of a student committee may be the junior officer in rank on the committee but, so far as his status there is concerned, he may as well be the senior.

In this College we make no company of the Navy and Marine Corps officers. We want you to feel absolutely at home. It is your school as much as ours.

Personally I shall be glad to talk over our work with any of you at any time. The Executive Officer is here to help you rather than to watch you. Any instructor on the problem in hand is more than glad to discuss it with you with perfect freedom, but, for obvious reasons, he will never tell you in advance what, in his opinion, the solution may be.

As to academic standing, we do attempt to arrange you in order of merit. We must have some way of differentiating between students. Obviously, the school has to make recommendations for assignment to duty of its graduates and some measure of ability, as demonstrated here, is the only fair way in which distinction may be made among you. Similarly, there are certain minimum standards which must be met by you before this College will graduate you and consider you eligible for the important duties for which it prepares. Since no one failure should put the stamp of failure upon a student, a comprehensive system is the only fair way to rate an individual, both as an individual and in comparison with his fellows. We shall hesitate, of course, to put the stamp of disapproval on any of you, but we can and will do so if the protection of the high standard which has been set here by former students is in jeopardy.

If two weeks after the completion of a problem you have not been informed that your work on that problem is unsatisfactory, you may assume that it was satisfactory. On Problems 1-A, 2, 17 and 32 a longer time for the decision may be taken.

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Only in rare cases will the faculty indicate its especial approval of a result, and its failure to do so should convey no sense of disapproval.

While we tell you that we do attempt to classify you, we very much desire that you don't engage in an academic contest with each other. In the first place, we consider many angles of your work here, so it is far better to maintain a broad approach to the course than to engage in competition. In the past those men who have kept the broad relationship of the factors of a problem in mind and who have not gotten lost in the minutiae of details of individual factors have done the best, and will continue to do so, I believe, in the future. My advice is to forget competition and hit the ball cooperatively.

You will find the demand upon your time enormous. Lectures and trips will come often at an inopportune time from the individual standpoint. Budget your time, keep the broad point of view, learn to choose between the essentials and the less essentials as they affect your use of time. Do not work nights -- certainly not as a regular thing. Learn to cut and boil down your reports. It is easier on you once you learn the art. It is easier on the instructors to work with a concise, cogent report than with a lengthy, verbose one.

Bulletin No. 1, covering certain minimum requirements both administrative and academic, has been issued to each of you. It will be appreciated if you will study that bulletin carefully and comply uniformly with its provisions.

In conclusion, let me reiterate: this is a graduate college, you are graduate students, possessing the confidence of your superiors, and we of the faculty are expecting work of great merit from the officers of this class.