

THE ARMY INDUSTRIAL COLLEGE  
WASHINGTON, D. C.

*Addresses -*  
*A. I. C*  
*2*

OPENING EXERCISES

OFFICE OF THE ASSISTANT  
SECRETARY OF WAR  
SEP 17 1931  
PLANNING BRANCH  
PROCUREMENT DIVISION

Addresses by

Honorable F. H. Payne,  
The Assistant Secretary of War.

Major General Robert U. Patterson,  
The Surgeon General.

Lt. Colonel W. A. McCain, Q.M.C.  
Director, Army Industrial College.

*S*

September 2, 1931.

OPENING EXERCISES

3

Colonel McCain:

Mr. Secretary, in the absence of the Chief of Chaplains of the Army from the city, his office has designated Lt. Colonel Stephen R. Wood, Chaplain, to offer the invocation.

Chaplain Wood:

Almighty God our Heavenly Father, we invoke Thy blessing upon this occasion. We pray that Thou wilt bless every instructor and every student in the coming year. That each one may make each day one of discovery and of achievement, help each to remember that the things learned are not for the individual student alone but for all the Services of our country. Keep each member of this class, we beseech Thee, during all the days. Help us to remember that Thou art the Great Teacher and that only as we sit at Thy feet will we truly learn. We ask this in the name of the Master. Amen.

Colonel McCain:

Mr. Secretary, distinguished guests, Class of 1932, Ladies and Gentlemen:

We are honored by the presence of high ranking officers of the Army, Navy and Marine Corps and I say now as emphatically as I can that I hope they will come down to the school many times during the course, announced or unannounced, and if they so desire, to go directly to the desk of any student officer in whom they are interested and ascertain for themselves just what we are trying to accomplish. This invitation is particularly applicable to Chiefs of Supply Arms and Services who constitute the Board of Advisors to The Assistant Secretary of War on the operation of the College and the scope of its curriculum.

We are glad to see so many wives and sweethearts here today. Woman today is, as she has been on down the ages, the mainspring in our noblest aspirations. However, as far as the soldier is concerned, there are two schools of thought on this point. One is illustrated by the old Indian Chief who, upon learning that his son was going to marry, said to him: "My son, the breath of a squaw will dull the warrior's blade". On the other hand, Genesis 2-18 says: "It is not good that man should be alone." Mr. Secretary, a check-up of this class shows that a very small percentage seem to hold with the savage, whereas the bulk of the class and your entire faculty, "for better or worse" stand by the Bible, Sir.

We are glad to welcome you gentlemen of the Class of '32. You have the greatest number of any class the school has yet had - fifty-two as against forty-six last year. If you are as good as that last class, and your past records indicate that you are, we are going

to have a most successful year. It is a splendid thing to see among you so many officers of the line of the Army and of the Navy and Marine Corps. If we ever have another war the Army and the Navy will have to fight it out in a spirit of cooperation. It is, therefore, certainly the part of wisdom for us to sit down together in time of peace and come to a common understanding of our common problems in order that essential cooperation may attain its maximum effectiveness in a minimum of time.

Those of us who were privileged to hear the masterly address of the Chief of Staff at the last graduating exercises of the Army War College will remember that his key note was the vast and continuing improvement in the implements of war throughout all history, from which he stressed the necessity for progress in thinking by all officers. He warned against what he termed "stereotyped thinking" and, to use his own phrase, "slavishness to unprecedented precedent."

You will find the problems in this school of tremendous magnitude. They cannot be approached from any narrow point of view. It was Homer Lea who once wrote: "A man who endeavors to be just, who seeks after perfection, has no immutable sentiments of his own; calmly he looks upon the world and all its transitory institutions, its constitutions, its kings and its gods, and his judgment is warped in no manner."

Now, The Assistant Secretary of War does not expect you to reach that pinnacle of the perfect mind. What he does ask of you is: that for the next ten months you divest yourselves as far as possible of all those partisan influences which naturally follow your years of service in the Army or Navy or any branch or bureau thereof; to subordinate for the time being all your current loyalties to that one which, to men of our profession, is supreme: the national defense in its broadest aspects. He asks you to get up on a high plane and look down upon every element of our national structure that comes within the purview of this College; to examine each part solely in the light of your intellectual integrity and then to state your conclusions concisely, courteously, constructively and hence without fear of anybody or anything.

Gentlemen, as you know, the intent of Congress as enacted in Section 5a of the National Defense Act was to put an able business man at the head of the business affairs of the War Department. He is The Assistant Secretary of War. This College is one of his numerous activities. He is here today and I am going to ask him to address you -----The Honorable F. H. Payne.

Mr. Payne:

Gentlemen:

I take pleasure in welcoming the new class to the Industrial College. We are glad to have you with us. I am especially glad to see in the student body a number of officers from the Navy and Marine Corps.

You will find that in several respects the Army Industrial College occupies a unique position. It is a pioneer in its field, and offers the only organized course of instruction in war procurement and industrial mobilization that has ever been developed. During its comparatively short term of existence it has acquired a prestige that now makes it outstanding in our Army's educational system.

Its student body is carefully selected. No officer is admitted to the Industrial College unless his past record, as shown by his efficiency reports, is excellent. I can therefore assure each member of this class that he need not doubt his own ability to acquit himself with credit in the course. You are to be congratulated, not only upon the opportunities before you, but upon the excellent records which have earned for you the privilege of being here today.

The number of officers who may receive the course of instruction at the Army Industrial College is necessarily limited. The present graduate body includes only some three hundred officers. It is to this trained group that The Assistant Secretary and the Chiefs of Supply Services first turn in selecting officers to assist in the solution of problems involved in procurement planning.

Your year at the school should give you a broader viewpoint. You are closely associated with officers from all branches. The problems of those branches will be your problems. The course will include a study of the organizations that coordinated and controlled the procurement activities of this country in 1918. For the first time you will probably see the part played by your particular branch in its relation to the procurement program of the entire nation.

Industrial mobilization is a new study and is still in the development stage. Your own experience and your research during the coming year are expected to contribute to this development. The problem presented is now engaging the attention of Congress and has resulted in the formation of the War Policies Commission. This body has been conducting hearings since last march and formulating recommendations for transmittal to the President and to Congress. In the testimony given before it by national leaders you will discover the opinions of industry on this subject.

Again I welcome you to the Army Industrial College and venture the prediction that you will find the coming year both interesting and profitable.

Colonel McCain:

The principal speaker of the day is a man who, since entering the Army as Assistant Surgeon thirty years ago, has had a wide and varied experience both in peace and war. He has served not only practically all over the United States but has followed the Flag to many parts of the world, especially when and where there was trouble. He has not only had a distinguished career in his chosen profession,

6

having recently reached the top, but he has done other things besides. He is a graduate of Leavenworth and of the Army War College where he has served as instructor; he has been a member of the General Staff; he has been decorated by several foreign Governments and wears our own Distinguished Service Medal. He has a citation from Field Marshall, Sir Douglas Haig for gallantry on the western front and two silver Star citations in the United States Army for gallantry in action. His reputation in the Service is borne out by his record which reads not unlike a Kipling poem of a "first-class fighting man"-----Major General Robert U. Patterson, the Surgeon General.

General Patterson:

Mr. Secretary, the Commandant of the Army Industrial College, distinguished guests, members of the Class, Ladies and Gentlemen:

It affords me no small degree of satisfaction to be able to avail myself of the opportunity so graciously tendered by your Commandant to make the opening address upon this occasion - the initial meeting of the eleventh class at the Army Industrial College. As is well known to all of you, the Medical Department of the Army has a very important place in our military organization. Its functions may truly be said to be threefold in nature -

First, it is a professional and technical service;

Second, it is an operating service in the organization, administration and tactical handling of medical troops;

Third, it is a supply service in the purchase, storage and issue of medical supplies for the Army including procurement planning for war.

The latter function provides the motif for the great interest the Medical Department feels in the Army Industrial College.

It was my pleasure and good fortune to be present at the opening exercises of this College in 1924 when it was inaugurated as a result of the foresight and personal interest of the then Assistant Secretary of War (The Honorable Dwight F. Davis) as a means of developing trained personnel to assist him in discharging the duties placed upon him by the Act of June 4, 1920.

Contemplation of the subject of industrial preparedness has served to focus my attention upon what has already been accomplished in that important field, and how best to visualize what yet remains to be accomplished.

And so, in a spirit of sympathetic inquiry, let us seek this morning to acquaint ourselves with industrial preparedness, how it originated, what it means, and how it has developed.

In memory, each of us is able to go back to the tense days and months of 1917 and '18. It has been said by a distinguished statesman before we entered the World War that in a twinkling, with

a mere stamping of the foot - a million men would spring to arms if needed. And so they did figuratively - but where were the arms? The truth is that prior to the World War no war plans of any nation embodied matters of "supply" other than the consideration of a modest war reserve.

In speaking of the Great German General Staff, a German author wrote:- "We must also remember that though there was an accurate plan for general military service, not even the most primitive arrangements for general industrial service in war times had been prepared". Had there been such a plan history might now be different, for more than anything else privation broke the German morale and ended the war.

With us conditions were somewhat better. "War Orders" by the Allies and "observation" for more than two and a half years had given us some impressive objective lessons and even definite information. In the fall of 1916 Congress had created the Council of National Defense, although it is true that the Council could only advise and supervise. It was not until March, 1918, that Mr. Wilson decided to delegate some of his "war powers" to the War Industries Board. However in a future emergency the Council of National Defense may be utilized. Authority for its existence still remains upon the statute books as a law of the land, and around it peace-time plans to meet a major emergency can be made, to which any President may turn for co-ordinating action in the execution of his policies.

Other super agencies will no doubt be needed. It has been said that for us, during the World War - Mr. Wilson in behalf of the Government, Mr. Gompers, for labor, and Mr. Gary, for industry - were the master minds. It is hard to conceive of a national emergency of magnitude in which a similar set-up would not be invoked. It is predicated upon the very nature of our institutions. Be our Industrial War Plans ever so complete, a President must of necessity turn to labor and industry for aid in their execution. The two cannot win a war, but they can lose one.

It will be remembered that in 1917 and '18 war board after war board came into existence - the Fuel Administration, the Food Administration, the Railroad Administration and others. For each one questions of what to do, what not to do, how to do and who was to do it, had to be worked out, and much time was wasted.

To quote from a speech in the House of Representatives of Hon. J. M. Wainwright, former Assistant Secretary of War:-

"If there is one lesson of the World War which stands out with impressive clearness and force, it is the vital necessity in advance of war and in time of peace of making preparation along the industrial side of warfare. As all know, the lack of provision in this regard was a source not only of delay and greatly increased cost, but had the conditions been otherwise, without allies to hold the sea and the battle lines while we were preparing, it might have been the source of great embarrassment, if not discomfiture. In refashioning the national defense act after the World War to

8

write into it the lessons of our experience, no subject more seriously engrossed the attention of Congress than that of making some provisions to insure adequate supplies in time of war.

"The principle that the whole matter of procurement of supplies for our military forces, both in peace and war, was a business rather than a purely military function was recognized. The control and supervision of this task had previously never been definitely fixed. In consequence the Congress wrote into the national defense act, section 5(a), imposing the responsibility of this supervision and control upon a civilian official, the Assistant Secretary of War, thereby raising that office to one of great importance. The Assistant Secretary of War thus became charged not only with the supervision of the procurement of supplies generally, but was made responsible for preparing plans in time of peace for industrial mobilization in time of war, or in the words of the statute, with 'the assurance of adequate provision for the mobilization of matériel and industrial organizations to meet war-time needs'. This latter responsibility marks a turning point in our political and military history,\*\*\*"

For the first time our people had come to a realization that modern warplans must embrace a utilization of all elements in our national life, and Congress had in its creation of the General Staff and the Office of the Assistant Secretary of War raised up operating agencies to that end.

Let us now inquire into the interpretation of section 5(a) of the National Defense Act as quoted.

As with any departure from accustomed lines of thought and methods of procedure not a little groping and uncertainty marked the beginnings of the work of the Office of the Assistant Secretary of War. The statute charged him with the "assurance of adequate provision for industrial mobilization in time of war". Immediately such questions arose as: what constitutes adequate provision; how may it be assured; what sort of an operating organization is necessary; what must be the relationship between the Assistant Secretary and the General Staff on the one hand, and the supply branches on the other; with industry; with labor? How much of the work should actually be done by the organization of the Assistant Secretary and how much by the branches, how should contact with industry be established and maintained? Plainly, much clear thinking was needed, and fortunately from the beginning the Assistant Secretaries of War have been able men possessing the ability to surround themselves with like associates. And so, little by little, doubt and uncertainty have given place to logical deductions and stable policies.

There has been established in the Office of the Assistant Secretary a central controlling organization, and in each of the supply branches a similar organization, charged with the preparation of the Specific Industrial War Plans of the branch. The requirements of the Army for a major emergency have been fairly well defined and computed.

9

In October, 1921, the General Staff submitted to the Secretary of War its tentative general mobilization plan. It was the first plan of such nature in our history, and although three modifications have since been effected, and with changing conditions others must of necessity follow, never-the-less it gave a contemplated military program with type armies and equipment, and tables of allowances.

In possession of a general mobilization plan the Assistant Secretary for the first time had concrete problems upon which to work.

Apart from current peace-time procurement, and connected with Industrial War Planning only, he established the office of "Director of Procurement" under which are four Divisions - Administrative, Commodities, Procurement Control, and Industrial - which are mentioned here only as an aid to an understanding of the general policy adopted with respect to the relationship of his office with the supply branches, and with industry in civil life. With the above set-up in mind it may be seen that out of the chaos of the formative period have come order and control.

Through the Administrative Division, the Assistant Secretary has at hand necessary legal, statistical, training, and up-to-the-minute progress information; by means of the Commodities Division contact is established and maintained with industry; and raw material control is exercised; the Procurement Control Division through the sections which control priorities, allocation, prices, contracts, and foreign relations, directs procurement of supplies, and exercises co-ordinating and supervisory action over all the supply branches. In the Industrial Division the Assistant Secretary has retained in his own office matters common to all the supply branches, to industry, and to procurement in general. The character of this is indicated in the names of the sections of that Division, viz., power, labor, transportation, facilities, conservation, and fuel.

However, "organization" is not all in the execution of any plan or the performance of any duty. The practicability of an undertaking and its usefulness in meeting the needs must be made convincing - must be "sold" to the personnel entering into the organization and to those with whom it comes in contact or upon whose co-operation it depends.

The Assistant Secretary at the outset realized that it was necessary to "sell" the idea to the personnel of his own organization, to that of the supply branches and to industry. Furthermore it was desirable that an agency be at hand having as one of its chief duties the study of procurement problems, and the adoption and carrying through of objective investigations; and further that by continued familiarity and thought with questions known to be in a state of uncertainty, to be able to aid in their gradual crystallization and the development of valuable ideas and sound policies.

10

It was also held essential that officers indoctrinated with the views, organization, and methods of procedure of the Office of the Assistant Secretary be trained and returned to the branches - thus insuring throughout the Army uniform and co-ordinated effort in planning activities and in contact with industry.

In conformity with the realization of this need, in February, 1924, Mr. Davis, then Assistant Secretary, caused the Army Industrial College to be established as an instrument to vitalize the statute and contribute to an "assurance of adequate provision".

Although at first limited by lack of a clear conception of what to teach and how best to present the subjects to the student body, gradually a course of instruction has been formulated which is both scientific and practical, and is yet elastic and stimulative of individual effort, thought, and initiative.

As had been anticipated, the studies and solutions of problems by the directing heads and members of the student body have gone far in aiding to clear the way for decisive action by the Assistant Secretary in the promulgation of policies, and in routine administration.

Year by year the College has grown in influence and broadened its scope. Always the Planning Activities of the Assistant Secretary have controlled and shaped its course. The curriculum has always been laid down along definite lines. With singleness of purpose the formulation of a specific procurement plan for every item, raw material, and resource vital in meeting a major emergency has been emphasized.

Thus we have briefly considered what has already been done. Let us now consider how best to view what has yet to be accomplished.

One of the first things inviting the attention of procurement planning officers is the Army's relations with the rank and file of industry. Are we as supply officers doing our best to enlist their co-operation as a matter of civic duty? Are we succeeding in convincing them of the good of the idea of Industrial War Planning?

Industrial War Planning must not be looked upon as a task capable of being finished, and the data relative thereto placed in a safe as a confidential document to be brought to light when our existence as a nation is threatened. Instead it must be viewed as a living, ever-varying thing demanding constant study and modification to meet changing conditions, new situations and unforeseen needs. It is a part and parcel of our system of National Defense, and is held so to be by Congress by its action in providing for it in the National Defense Act.

In fact the statute makes it mandatory. It must be realized that just as we shall always have before us the problems of national defense so shall we always be confronted with the problems of procurement planning.

Our self-respect, our rights and obligations as a nation, our relationship with other nations all demand that we keep ourselves strong and able to perform our part in the advancement of the social, economic and ethical well-being of the world. This can only be realized as industrial preparedness accompanies all proper measures of readiness to meet an emergency.

As an instrument for the accomplishment of this, Congress has seen fit to authorize and the War Department is conscientiously promoting the summer training camps and other means of instruction and indoctrination, in the hope of furthering high national ideals, and of promoting good citizenship among all classes of our people. The adoption of well-considered policies upon the part of those in authority and the development of individual and collective self-reliance among our citizens will go far toward the desired end.

Upon a similar foundation must Industrial War Plans be built. From the very beginning industry has looked askance upon the project and in not a few instances has been none too enthusiastic, if not actually hostile. However, it may be looked upon as a testimonial to the soundness of the idea of our industrial preparedness when one notes that throughout the country the larger business interests have been among the very first to grasp its meaning, and among the most active in helping to bring about the accomplishment of the mission.

In making the industrial surveys, with but few exceptions, the managements of big business interests have been most courteous to procurement planning officers representing the branches, and have made available to them every possible facility. This has been done many times at no inconsiderable expense of effort and money.

Similarly, not a few of the men high up in industry are serving as chiefs in the different branch procurement districts, and are giving ungrudgingly of their time and experience. Others have accepted commissions in the Officers' Reserve Corps and by advice and example are rendering invaluable service.

But not everywhere is such the case. In going about the field of American industry, as no doubt many of you will upon the completion of this course, you will find misunderstanding, indifference, and even resentment. As General Cheatham said in speaking of this very matter before this College: "It required patience and a full and frank explanation of what it was all about, together with the assurances that the data given us would not be made available to their commercial rivals, before we could gain the confidence and help of the business men".

Often you will have need of all the courtesy, tact, persuasion, and perseverance of which you are capable. But it is to be borne in mind that just as it is the duty of the instructors in

12

the summer training camps to stress national defense in its many ramifications, so it will fall to the lot of procurement planning officers to do their bit in helping to secure the wholehearted support of the business world for Industrial War Planning as an essential part of our plans for national security.

Another important thing to be thought of in procurement planning is the necessity of keeping our equipment abreast of modern progress. Therefore our tables of equipment and of allowances must be up to date. Certainly each article adopted must be considered in the light of changing conditions. As a thermometer registers the temperature, so in a sense must these tables reflect the results of new inventions and discoveries and modern applications of older materials and appliances.

What a train of altered doctrines of warfare has followed the perfection of the aeroplane. Perhaps still others will attend the development of the gyroscope.

The discovery of the mosquito as the transmitter of malaria, and of so called typhoid vaccine as a preventative of that wrecker of campaigns, typhoid fever, need only to be mentioned.

Chlorine gas, long known to the world, by a new application of its use in 1915, made a change in the armamentaria of armies. So also the lowly Chinese "Stink Pot" has had its glorification in the modern smoke screen, which greatly affects the strategy and tactics of maneuver both on land, on water, and in the air.

Furthermore consideration must be given to the changes that have occurred in the thoughts, aspirations, and the manner of living of our people at the present time. A system of supply and an indifference to creature needs, comparable even to the Napoleonic era are not for us of the present day.

Matters such as these all have their bearing on Industrial War Plans. In so far as the special mobilization plans are concerned, so also must the geography and geology of the theatres of operations be considered:-the climate, flora and fauna, prevailing diseases of the inhabitants, their habits, their modes of warfare, the local availability of supplies, and the kind and extent of existing transportation facilities. The influence of these matters upon a supply situation is obvious. The thought is - are we in procurement planning giving sufficient heed to such factors?

Still another thought is the influence upon our supply work of the careful study of records and statistics. In general, they represent experience, and as such, if properly classified and studied for possible light in procurement planning, they may yield much information. Each supply branch has records and statistics which often are looked upon as a liability instead of a potential asset. Much depends upon a correct evaluation of their significance.

Recently in my own office there has been completed a more or less continuous ten-year study of war casualties and their relation to medical service and replacements. It has been printed and issued as Army Medical Bulletin No. 24. In having to do with the medical service it naturally has its reflected influence upon Industrial War Plans as represented in the type and distribution of Medical Department personnel, equipment and supplies. Such studies cannot fail to furnish one of the soundest of bases for calculating the kind and amount of supplies likely to be needed under given conditions.

It is evident that the amount, even the type, of surgical dressings, surgical appliances, and other supplies will vary according to the character of the military opposition and special conditions existing in the theatre of war for which the material is destined.

With respect to types of casualties - they too must come in for consideration. The studies in Bulletin 24 just referred to, show to a nicety the percentages of casualties to be expected from gas, artillery, gunshot, bayonet and other weapons. Likewise, they indicate the location upon the body and the character of the injuries the law of averages is most likely to render probable. It is plain that such information is most valuable in reaching decisions as to Medical Department equipment and supply. Gas has impelled upon us the need of special facilities for treatment. Ordinarily artillery wounds need larger dressings and more of them than do injuries from the rifle. Experience also shows quite definitely that out of every thousand casualties a certain number will be fractures of the long bones, another figure will represent injuries to the body cavities, another wounds of the head, and still another wounds of the skin and muscles.

Given such data, supplemented by information culled from a sanitary survey of the probable theatre of operations, collected by the General Staff and other agencies in the preparation of the Specific Mobilization Plan, the Medical Department is in position intelligently to prepare for its part in any specific situation.

That sanitary surveys are essential in the preparation of mobilization plans is witnessed in history by the many well-known failures of campaigns because of lack of adequate preparation due to the incidence of diseases now known to be preventable. Malaria, dysentery, typhoid, smallpox, and other diseases have played their part in bringing about military defeats, the fall of dynasties, and even to the downfall of nations.

Yet another thought - and that is of mass procurement. Items of equipment must, if at all possible, be commercial in type, available for original purchase in the open market and capable of being turned out by industry in large numbers.

Articles which are not commercial should be of standard materials, produced in our country, readily obtainable, and susceptible of rapid manufacture.

14

Too often all elements of the Army, in the desire for equipment that is as near to perfection as may be, lose sight of this axiomatic need of mass procurement. It is the duty of all of us, and particularly of procurement planning officers continually to give mass production the consideration it merits. A major emergency may force it upon us at any time.

In connection with this doctrine of making one's self satisfied with a less perfect article in order that one fairly efficient and procurable may be always actually at hand, let us glance at the list of so-called strategic items, i.e., material not produced or available in the United States. There are twenty-six of them. For each of them a supply branch must prepare a specific procurement plan, working out in detail ways and means of meeting a deficiency in an emergency should the sea-lanes be closed to us and procurement denied. In doing this, refuge must, to a greater or lesser degree, be had in the development of substitutes. As an illustration: jute is carried upon the strategic list. Exhaustive study in the development of substitutes has convinced the Commodity Committee on "fibers" that by the use of substitutes for jute procurement planning needs may be largely met, and it is understood that the committee is about to recommend the removal of jute as a strategic item. It may be that in some manner not yet discovered other strategic items may also be removed from the list. In any event it is well for us all to be seeking opportunities to develop or find suitable substitutes for these important supply items either in the raw material or the finished article, whenever such action can be had without marked loss in efficiency. This will be of material aid in the formulation of our Industrial War Plans.

Gentlemen of the Class of 1932, in bringing my remarks to a close, although a repetition of what I have already said, may I charge you again in the light of what has been accomplished to think very earnestly of what may yet be accomplished. Let us be certain that by cooperation our Industrial War Plans may be so complete that should our country again be confronted by a major emergency it will find her strong in material preparation, and ready to back up the man-power of the nation in its mission on land, at sea, and in the air.

Colonel McCain:

We are very grateful to General Patterson for his remarks. Mr. Secretary if you have nothing further, the exercises will be concluded.