INDUSTRIAL FEASIBILITY TESTS (MP)

22 November 1948

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COLONEL MICKELSEN: General Holman, Gentlemen: One of the most important elements of your reference material for the Requirements Course is the book known as the "Requirements Manual." Because of its lurid cover, it has earned, in this hall of learning, the title of "Red Devil." From various speakers, as well as from this book, you have heard about feasibility tests. The man who can tell us the most about feasibility tests, from the Munitions Board level, is Colonel Niles, the Chief of the Military Requirements Division of the Munitions Board.

Colonel Niles.

COLONEL NILES: This is a new field.

You will recall that responsibility for testing the industrial feasibility of military plans is given to the Munitions Board by law and in supplementary instructions issued by the Secretary of Defense. Although you are familiar with the basic documents, I should like to call attention to the specific passages which apply. The law specifies that one of the duties of the Munitions Board is: "To prepare estimates of potential production, procurement and personnel for use in the evaluation of the logistic feasibility of strategic operations." The 9 June 1948 directive by the Secretary of Defense to the Munitions Board, the document commonly referred to as the Munitions Board Charter, prescribes that one of the powers and duties of the Board shall be to "advise the Joint Chiefs of Staff with respect to the feasibility, from an industrial standpoint, of actual or contemplated strategic or logistic plans."

To obey those instructions literally, the Board must have on hand at all times a comprehensive store of data on national resources. The Board must arrive at conclusions as to what are the personnel and industrial resources of the Nation and what proportions of them could be devoted to military activities.

However, the Munitions Board must work in cooperation with the National Security Resources Board in arriving at such estimates. One of the duties assigned to the Resources Board by law is to "advise the President concerning...programs for the effective use in time of war of the Nation's natural and industrial resources for military and civilian needs...." These provisions of law dictate that, as a matter of practical peacetime procedure, the two Boards must work essentially as a team, one bringing demand to a focus and the other, supply.

The Munitions Board probably will agree in most instances to peacetime rulings by the Resources Board as to what proportions of our national resources can be devoted, for planning purposes, to military activities. However, the Munitions Board will not hesitate to ask for increases whenever it believes that such increases are necessary and could be had without grave detriment to national support of the war effort.

We expect ultimately to be informed by the Resources Board as to how much manufacturing capacity, by specific industries, must be reserved for irreducible civilian needs, how much material must be reserved, and how much manpower, by skills, could not be released for service in the Armed Forces. One imponderable is how much manpower would have to be allotted for civilian-defense activities. For the time being, World War II data are useful as a measure of wartime civilian needs on a luxury basis. We are looking to the Resources Board to tell us what would constitute civilian requirements in wartime on a really austere or survival basis. We do not now have that information.

The first industrial-feasibility test conducted by the Munitions Board was initiated over 18 months ago, when it was then the Army and Navy Munitions Board and had full responsibility for national industrial mobilization planning. The second test is now under way.

The report on the first test was completed in December 1947. It took into account four elements. The first was uniformed manpower. The second was petroleum. The third was three materials--aluminum, copper, and steel. The fourth feature was prospective production rates for a few selected items.

The bases for requirements estimates for that test were the then independent mobilization plans of the Army, Navy, and Air Force. Their estimates for manpower, those three materials, and petroleum were consolidated and compared with World War II data. The Petroleum Board did the work on petroleum. Each Department provided graphs showing, for a few key items, desired factory output versus predicted output. About 55 items were covered in that way.

It was concluded by the Munitions Board that those unilateral plans could not be given the requisite industrial support without extensive, long-term and costly peacetime preparations. The three Departments were so advised, and the suggestion was made that the rates of mobilization be reduced.

Although considerable inaccuracy was inherent in the methods employed, the errors were not significant. There was wide divergence

between desired rates of mobilizing and equipping men and the rates at which they probably could have been inducted, received, supplied, and trained.

Industrial support of the combined forces at peak strength ultimately might have been achieved, but crippling shortages of equipment in the earlier phases would have been the rule.

The Munitions Board report on the first feasibility test merely confirmed what had become quite clear to the Departments and to the Joint Chiefs of Staff long before the test was completed; that is, that the three unilateral plans, when added together, were too ambitious. The test hardly showed anything that was not previously known. To that extent, it was really a formality.

One outstanding reason for conducting industrial-feasibility tests in peacetime is to avoid the monumental labor of the calculation of requirements on a full scale. It will take at least a year, perhaps longer, at current rates of accomplishment, to compile all the estimates which must be provided for the plans now under examination, after decision has been made to go ahead with the full-scale calculations. I should point out at this point that work now going on will not be lost, however.

The instructions which the Army, Navy, and Air Force are following in the current test are given in Section XI of the Munitions Board "Requirements Manual" dated 1 August 1948. I believe you are familiar with them. In review, five elements are covered in the manual: manpower, materials, construction, petroleum, and manufacturing capacity. I will mention later on another element which is not covered specifically in the manual.

The Departments began work in the compilation of their estimates early in October and are expected to submit their data to the Munitions Board by the first of December. The Munitions Board report should be ready about the first of January.

The intent is to obtain rough estimates of needs by methods of approximation. The Munitions Board has not prescribed any particular standards of accuracy. We have encouraged approximations, letting the Departments use such means as seem appropriate to them, with the idea of expediting the work.

Possible destruction of production capacity by enemy action is ruled out. While this is not in accord with a standard assumption, assignment of damage factors simply is not practicable. The best we can do is try to derive ideas of what would be valid if there was no enemy interference. This at least should show the maximum that could be accomplished.

International aid needs are not being included because they are not known at this time. While it would make the test more comprehensive to have them, their absence will not invalidate the conclusions drawn. As a practical matter, the aid which we would give to allies would be whatever we could spare, within the limits of our total resources, over and above the needs of our own forces and the civilian economy.

Requirements for civil defense, likewise, are not known, and estimates for them are not included. The plan which was submitted to the Secretary of Defense by the Director of Civil Defense Planning a short time ago mentions a possible need for 15 million persons on full-time and part-time basis for civilian-defense activities. Certainly most of those people would be part-time workers and many of them would be persons already engaged in appropriate pursuits, such as policemen and firemen. That report also states that civil-defense supply items would be similar to those used by the Army, Navy, and Air Force, with very few differences in design. Typical items would be portable pumpers and fire hose, gas masks, protective clothing, and radiological and chemical detectors. Medical equipment and supplies also would be needed. No prediction is given as to quantities.

Getting back now to the things that are included in the current test, manpower comes first. Estimates for personnel in uniform will be reported for three years. The totals of these estimates thus will show the desired rates of withdrawal from the civilian labor force and the speed at which Selective Service operations would have to be conducted. From these figures also can be derived the probable need for civilians engaged in direct war work--employees of the Armed Forces and people in factories producing war goods. World War II figures show about a one-to-one ratio between personnel in uniform and civilians engaged in direct war work. In a future war of attrition the figure probably would be higher on the civilian side.

The Resources Board will supply figures as to availability of personnel and the Munitions Board will then compare supply and demand.

Estimated requirements versus probable manufacturing capacity for selected key items are to be provided by the procurement bureaus and services of the Army and Navy and by the Air Force. They are to be presented in the form of graphs showing desired production as compared to predicted production. The figures will be for three years, or until supply meets demand if that would occur sooner.

Chart 1, page 17.--This is an example of what I have asked for. I know that those in the back cannot read the titles, so I will read them for you. Estimated requirements versus estimated manufacturing potential, name of the article, the Department, the responsible procuring agency (across top of chart); the quantities (left side)

and the time (at bottom). This particular graph is for _____ _____. The top line in black represents cumulative demand. The other lines represent estimated production under different conditions.

Without any peacetime preparation, supply would not meet demand until about 2 years. The gap between cumulative demand and cumulative supply would not be significant, however, after about 18 months. The maximum gap would be about 9 months with no preparation.

If 26 million dollars were spent in peacetime preparation, supply theoretically would meet demand in the fourth quarter. If $27,250,000 were spent in peacetime preparation, supply theoretically would meet demand in the second quarter. For 35 million dollars, the curve not being shown on the chart, supply would meet demand in about 3 months.

This is one of the earliest charts presented. We know that most of them will not be in as complete detail as this one is. Later on, as the Departments have more time to study the matter, it should be practicable to predict for most of the important items in the procurement program what the price of time is.

Chart 2, page 18.--This is another example of the type of graphs that will be turned in for the selected items. In this case the curves are noncumulative. The solid curve represents demand and the broken curve, prospective supply. This happens to be _____ _____. In this case the curves are getting farther and farther apart. This graph was turned in with a statement that the situation was being studied and further data would be supplied.

The rule for selection of the items to be studied in this fashion is given on page 90, paragraph 3b, Requirements Manual, Munitions Board, 1 August 1948. Since you have read it or it is accessible to you, I will not repeat that rule.

This particular part of the test is intended to show primarily how rapidly a few selected items could be provided early in mobilization. It definitely is not intended to show how rapidly they ultimately could be provided. The further removed from M-day, the less accurate will be the estimates of probably attainable production rates.

Obviously, the ultimate rate for any single important item will be governed to a considerable degree by competing demands of other important items. However, in the early months, irreducible time periods would be needed for terminating civilian production, retooling, getting materials, recruiting labor, and getting new production processes established. In some cases there would be need for wholly new manufacturing facilities, involving about 18 months to build and tool, in typical instances.

In this feature of the test, considerations of availability of materials and manpower are ignored. The intent is to obtain probable output assuming that labor and materials would be available.

This part of the test will be almost entirely the work of the Army, Navy, and Air Force. The Munitions Board will assemble its predictions--one graph each for a total of about 150 to 175 items--and draw general conclusions as to production rate probabilities.

Investigation of material availability will be confined to aluminum, copper, and steel. The estimates for those materials are to be reported for three years by the three Departments. They are to show the quantities of materials needed at the desired rates of production for all items.

You no doubt will wonder how the Departments can estimate their demands for materials without knowing total requirements for end-items. They will simply use factors applied to World War II data and the data they had accumulated for their own unilateral plans. Of course, there will be some errors.

The estimates for materials as submitted to the Munitions Board will not give the actual rate of demand for them unless manufacturing capacity for equipment is considered adequate to meet early production demand, which we do not believe will be the rule.

In order to obtain estimates of how much material actually could be consumed, the Munitions Board will add together the data submitted by the three Departments and then apply arbitrary correction factors derived from a comparison of the manufacturing demand and manufacturing capability curves which I referred to a short time ago.

Consider, for example, aluminum. If there is, say, an indicated 50 percent gap between production demand and manufacturing capability for all aircraft included in the test--expressed in pounds of airframe weight--at any given time after D-day, the actual demand for aluminum with which to make them obviously would conform and the gross estimate for aluminum can be lowered by about 50 percent at that particular point.

Similarly, if it turns out that there is a consistent divergence between demand rates and probable production rates for articles made largely of copper, the actual copper demand rate would be lowered to correspond to the probable production rates for the end-items in which it is used.

You will conclude that we are proposing to use a crude method for making adjustments in material demand estimates, and you are correct in that assumption. However, that crude method is contemplated in

order to save time and impose a minimum workload on the Departments. We do not consider that such a method would be at all suitable for the much more exact test which will be conducted after full-scale calculation of requirements has been accomplished.

Arbitrary correction factors to the sums of the material demand estimates provided by the three Departments having been applied, the resulting net demand figures will be compared with material availability data to be provided by the Resources Board. This should show whether the plan is feasible or infeasible from the point of view of these three materials, insofar as equipment alone is concerned.

Before reaching final conclusions as to materials, we must consider construction also. The Departments will submit cost estimates on construction projects of various types which would amount to more than 10 million dollars each--and most of the projects of which have knowledge at this time would cost at least that much.

We know, of course, that until full-scale calculation of requirements has been accomplished, the Departments cannot determine their construction needs with accuracy. Nevertheless, they do know that certain construction would have to be undertaken, and we can assume that the projects reported would be an approximate expression of minimum needs.

From the total dollar figures for each type of construction, materials estimates can be derived, as well as labor requirements. The materials estimates for construction will be added to the steel, copper, and aluminum needed for equipment in order to obtain total material requirements for comparison with availability. I should mention that the Resources Board, when providing availability figures, will take into account the needs of the Maritime Commission and the Atomic Energy Commission.

The last element covered in the manual is petroleum. This undoubtedly will be the least conclusive feature of the test because there are so many variables involved. The Departments are making their own estimates, taking into account the probable availability of fuel-consuming equipment. They are not supposed to call for fuel that could not be used in any given time period because of predicted nonavailability of heavy fuel consumers such as airplanes, ships, tanks, and trucks.

The Munitions Board will consolidate the estimates for petroleum turned in by the Departments and forward them to the Petroleum Board for the addition of distribution factor quantities and the probable needs of merchant shipping. The Petroleum Board then will forecast supply and make a comparison of supply and demand. This part of the test, therefore, will be largely the work of the three Departments and the Petroleum Board.

The feature I referred to earlier as not being in the manual is merchant shipping. The Joint Chiefs of Staff have estimated what transports, tankers, and dry-cargo ships would be needed, including those for civilian necessities as well as military operations. The Navy has figures on national shipping assets and will know in a day or two what would be the necessary merchant shipbuilding program. The Navy and the Maritime Commission will provide estimates of shipbuilding capacities.

The Munitions Board will then consider all information presented by the Army, Navy, and Air Force and the data furnished by the Petroleum Board, the Resources Board, and the Maritime Commission concerning those six items: manpower; manufacturing capacity for selected items; construction; steel, copper, and aluminum; petroleum; and shipbuilding. It will conclude from those six points of view whether the plan is or is not feasible. If it decides that the plan is not feasible industrially, the Board must give a fairly good idea of how much mobilization would be delayed and how much, if any, the planned peak strength of the Military Establishment would have to be reduced in order to stay within limits. I can assure you that the Board will be highly disappointed if it is forced to conclude that the plan under examination is too large.

An authoritative statement of hypothetical wartime military demands is badly needed, and we need it right now, even though modification would have to be made later on.

For training in unified procedures, if for no other reason, the Military Establishment should get into near full-scale action in this field as soon as possible. We need many requirements figures. Drill in our operations which involve the Resources Board also is necessary.

In concluding, I do not want to leave an impression that this type of test will be standard for the future. It is a new subject. Assuming that this present plan is found sufficiently feasible to warrant full-scale calculation of requirements, there will be a wealth of data about a year from now--the critical elements will have been brought to light and the people who draw the instructions for the next feasibility test will have a great deal more on which to go than we have had.

Thank you.

QUESTION: I have three short questions. First, how long does it take the Munitions Board to make feasibility tests? Secondly, with respect to the curves you have shown on the charts, does the demand curve include stocks on hand on M-day--war reserve stocks or stocks in the hands of the troops? Thirdly, has the Munitions Board detected any similarity between the requirements curves of various items? If so, is the demand curve for one item sufficiently similar to the demand curve of another item to enable you to predict requirements of the second

item from a known curve of the first item?

COLONEL NILES: As to time, the first feasibility test I referred to took about four months. It took the Departments about three months to get their data in; the Munitions Board had the figures for about a month and then came up with a guess.

As to the second point, the solid line on these charts is supposed to represent net procurement demand; stocks on hand which are usable assets are deducted. That solid line also is supposed to include the total Military Establishment requirement when one Department procures an article for the whole Military Establishment.

As to similarity between the curves, we don't have enough so far to know. The Chemical Corps got through a little sooner than the others, and we were able to get these particular examples from it; but we have not seen the other curves. I don't know what they are going to look like.

QUESTION: Colonel, you mentioned that, in the computation of material requirements, the Services use the factors of World War II experience and the unilateral plans, and then at the Munitions Board level you apply certain correction factors. Could you tell us how these correction factors are arrived at and give us an example of one?

COLONEL NILES: You are speaking of what we intend to do for the feasibility test now under way?

QUESTIONER: Yes.

COLONEL NILES: The Departments will come up with estimates of what they think would be needed in the way of, let's say, copper. Their estimates will be based on World War II figures plus material requirements that they calculated last year and the year before in connection with their then unilateral plans. They know what the size of the new plan is in a general way. So they are expected to make an estimate of what would be the copper, aluminum, and steel required for the manufacture of all important articles under this new plan, based on what they know about material demands for their own previous plans and World War II production.

Is that clear so far?

QUESTIONER: Yes.

COLONEL NILES: Now, their estimates for material will probably be valid for peak-strength demands, at the time factory production has gotten under way, new factories have been built, and they get into full operation. That may not be for two or three years. In the opening stages we cannot properly assume that material would be chewed up as

fast as the demand curves would indicate. Therefore, if we find a consistent lag, say, of six or eight months or a year, or some other figure between desired factory output for end items and predicted factory output, we can cut down the predicted demand for materials accordingly. It will just be an arbitrary decision. There is not going to be very much statistical research going into it; I can assure you of that.

QUESTIONER: That operates, then, something like a budget cut at a higher level. In other words, you just don't have it, so you cut it. That is what it amounts to.

COLONEL MILES: Well, it would be wrong to ask the Resources Board for tentative assignment of material that couldn't be used because factory production wasn't in a position to use it prior to being tooled up and ready to go in the early stages.

QUESTION: Colonel Miles, you stated that the military Departments would make an estimate of required new construction. To what extent is industry assisting in this determination? Or how do the military Departments go about determining new construction?

COLONEL MILES: That depends entirely on the judgment of experienced officers in the three Departments. The Air Force, for example, knows that, as a result of increased airplane size, there would have to be much heavier fields. The people who supply ammunition know they would have to have new facilities for certain new types of ammunition. The training people know that they would want new types of training facilities. So it is all a case of judgment as to what they would need. It is not accurate, of course. The National Security Resources Board and industry are not being taken in on that feature at this time. It is just a case of military judgment. Later on they will come into it.

QUESTION: The "Requirements Manual" eliminates consideration of common components in the determination of materials requirements. Can you indicate how the Munitions Board is going to allow for those materials?

COLONEL MILES: The errors resulting from leaving out common components would be smaller than many other errors allowed in this feasibility test. They are not significant. I can elaborate on what the intention is for full-scale calculation of requirements if you want me to go into that. For the purposes of this test, errors resulting from leaving out common components would be inconsequential.

QUESTION: Of those two curves, the one for demand and one for production, which do you consider the most accurate? And could you give us an approximate idea of the order of accuracy of those curves?

COLONEL FILES: We think that the curve for demand would be more nearly accurate than the one for production. They are both based on judgment. One is military judgment as to how much would be needed as modified my the application of a lot of arithmetic, and the other is how fast the man who has had experience in the past war thinks it could be obtained, taking into account the competing demands of other important items. The chances are that the one on demand can be shown by arithmetical means to be much more nearly accurate.

QUESTION: Colonel, you have indicated that, in making a feasibility test on any particular item, if the item proves to be infeasible, one of your recourses is to go back to the Departments and ask them if they can possibly revise their estimates downward, or; secondly, if they could possibly recommend a rephasing of the mobilization planning to spread it out over a longer period of time. Is there any other recourse that the Munitions Board has before it goes to JCS and says that the plan is infeasible? I have in mind people finding an oversupply in one phase of items, in which case emphasis might be transferred to other items which are short.

COLONEL FILES: What you are talking about would come later on when we have much more comprehensive and accurate knowledge of requirements. We are dealing here with only a relatively small number of items. What we are really trying to find out now is whether full-scale calculation of requirements is warranted.

This kind of test goes back nearly two years, when the Munitions Board kept trying to get out of the Joint Chiefs of Staff and the then two Departments a comprehensive estimate of military requirements. They objected to giving us a full-scale calculation, because they said it would take too much work. Then the Munitions Board said, "All right. Give us a sample. Calculate a few of them." And that is what they did.

That is what is going on right now. We hope to have a big enough sample to indicate in a general way whether the plan is feasible or not. If it is wholly infeasible, then we can recommend revisions only in a general way. We have to paint with a broad brush.

QUESTION: Is it true, as some of us understand, that this first feasibility test is purely a bill-of-materials test, with the Munitions Board getting little or no information as to what is behind it? In other words, a Service says, "We need so many million tons of aluminum," and gives little or no information as to what that is going into. Is that correct?

COLONEL WILES: That is correct.

QUESTION: That leads up to the real question. With that as your information, I fail to see, if your initial set of figures indicates that the thing is not feasible, either how you can tell whether it is really infeasible or how you can make a cut other than an across-the-board cut, which is certainly not conducive to a balanced program.

One of the things I had in mind was that I read just recently that in the last war, when there was talk about a shortage of aluminum, it was suddenly discovered that quite a bit more aluminum could be gotten by convincing the Navy that aluminum furniture was not needed on battleships.

In this particular case, if you come up with a shortage of aluminum or something else and you don't know what that is going into, how are you going to know (1) whether it is infeasible, (2) whether you can simply take fat from somewhere along the line and make the thing feasible for that particular item, or (3) how you are going to make a balanced program when you start cutting?

COLONEL WILES. It depends on the degree of shortage. If the thing looks completely infeasible, we will make some searching inquiries as to what went into their estimates. But we are most anxious to get full-scale calculation of requirements under way, and we are going to accept some shortages which may look serious, in order to get the thing going. You are perfectly right in assuming that we must go back of the estimates if we reach the conclusion that the plan would have to be thrown out, and we would go back of them.

QUESTION: My question has to do with industrial construction. You mentioned that the dollar figure of construction was broken down into material and labor. I wondered about construction equipment. A great amount of construction equipment will be required for that construction, and that might well be a critical factor. Would you discuss that, please?

COLONEL WILES: Yes. We are not going into that. We recognized that it should be considered. If the Bureau of Yards and Docks and the Corps of Engineers come up with startling deficiencies in heavy equipment, for which they are responsible and would compete with civilian contractors, it may be necessary to do something in that line.

QUESTION: Colonel, when does the Munitions Board expect to get the civilian requirements from NSRB? And is any future full-scale feasibility test worth much without them?

COLONEL WILES: No. Right now we are dealing with a rubber yardstick, rather two rubber yardsticks--military demand and how much could be squeezed out of the civil populace. We don't know when the NSRB will have such information. We wish we did. It will take a year

before the military can do a full-scale calculation of requirements for the plan under examination, assuming that it is found feasible. By that time the Resources Board should have some pretty good figures. At least we are counting on that.

QUESTION: Were the 55 items you mentioned selected to represent certain segments of the manufacturing economy, or were they selected on some other basis?

COLONEL NILES: The 55 items you refer to were for the first feasibility test. We expect to have about 150 or 175 for the test now under way.

Perhaps I had better read the pertinent passage in the manual. This refers to the items to be considered for manufacturing capacity.

> "The articles placed on the key list should be those which would be indispensable for combat and training and could be considered as setting the rate of demand for the bulk of the items on the procurement program if the timing of all elements of the production program were properly phased. Articles which would represent heavy demands for materials or labor or which involve long lead-time factors should be listed, but other items for which serious deficiencies in manufacturing capacity are anticipated should also be included. They should be complete items, with essential equipment installed and ready to use. Listing of controlling components in lieu of finished items is not desired."

QUESTIONER. It does not, then, represent any attempt to sample American industry at all, to see that every part of industry is represented?

COLONEL NILES: Definitely not. It is not tied to industrial segments. The kind of thing you are talking about can come later on when there will have been a full-scale calculation of requirements. We intend to arrange the requirements list in several different ways, one of which will be according to the kind of industry that would normally produce the goods--textiles, shoes, construction equipment, and so on.

QUESTION: Colonel, I would like to go back to this question of civilian requirements. The thought comes to my mind that civilian requirements may not be a definite quantity, in this sense: This country never accomplished the degree of austerity that was reached by Great Britain, largely, perhaps, by reason of the fact that we were farther from the source of danger. They were under the gun. They were in the position of having to either accept those very austere

standards or of sacrificing their chances for success. Furthermore, when we went into the last war, the method of attack of the Japanese at Peark Harbor did a great deal to make it possible for the Government to impose controls which could not have been imposed had we gone in on any other kind of basis and certainly if we took the initiative in entering into the war. So that civilian requirements, it seems to me, in this country--and in wartime as well as in peacetime because Congress still controls in wartime--may not be a definite matter. It may be a question of how scared we are and the degree of danger which the country as a whole faces. Will you comment on that?

COLONEL NILES: I agree with you.

QUESTION: Well, then, how are you going to get an answer? In other words, if the requirements of our economy constitute one of the most important factors, how are we going to determine whether there is any possibility that a plan is feasible? It might be feasible with a certain degree of scaredness, and it might not be feasible if we didn't have that scare factor.

COLONEL NILES: That scare factor is the key to the thing. As a practical matter, the Munitions Board, I think, will support military estimates that may be considered as on the high side. If somebody drew a line and said that civilian requirements are on this side and military requirements are on this side, and you can have what is over there, I don't believe that the Munitions Board would agree to stopping right on the line as the invariable final word. You can never find out what the country can do unless you set your demands high. I think we will be crowding that line. This is of course only my personal opinion.

QUESTION: In connection with your relations with the National Security Resources Board and as a matter of procedure in connection with these feasibility tests, do you furnish the data on your requirements in terms of end items to the National Security Resources Board or does the NSRB furnish you what its estimate is of your top limit?

COLONEL NILES: Let us take up all the items and make that clear. For manpower we will get availability figures from the Resources Board. For materials we will get availability figures from the Resources Board. For petroleum we will get availability figures from the Petroleum Board, and it will consult with the Resources Board, I believe. For construction we will get figures from the Resources Board as to availability of materials; for end items we expect to rely primarily on the judgment of experienced officers in the Military Establishment. On merchant shipping, the Maritime Commission, with the Navy, will have figures on capacity to build ships, with regard to what goes into them and shipyards. The Resources Board, though, will have to add the materials for merchant shipping to determine availability.

Does that cover it?

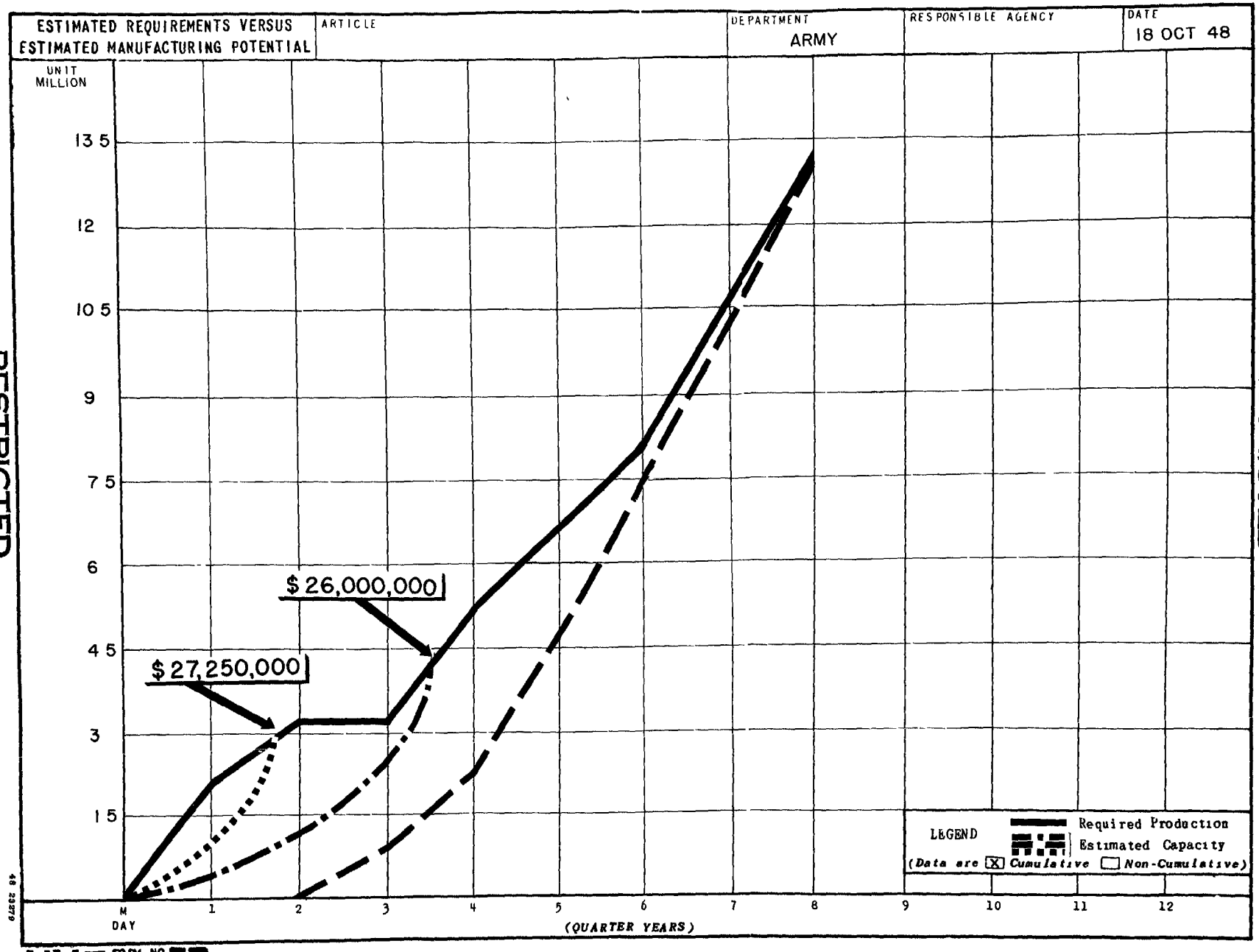
QUESTIONER: That answers the question. In other words, this feasibility test basically belongs to the National Military Establishment. We are collecting these data from other agencies to supplement the test, as distinguished from the procedure that would actually be in existence if you were demanding materials for an actual program and submitting requirements to the National Security Resources Board.

COLONEL MILES: Yes. That sums it up.

GENERAL HOLMAN: Colonel Miles, here at the Industrial College we consider this question of requirements one of the most important subjects that we present. I think, from the questions this morning, you can get some estimate of the degree of our interest. We certainly are indebted to you for coming here and helping us explore the subject; we hope that we can continue to get from your office the results of these feasibility tests as they progress through the Munitions Board. Thank you, sir.

COLONEL MILES: Thank you, General.

(7 December 1948--450)S.



NME FORM NO 37
1 JUL 48

Chart 2

ESTIMATED REQUIREMENTS VERSUS ESTIMATED MANUFACTURING POTENTIAL

ARTICLE

DEPARTMENT: ARMY

RESPONSIBLE AGENCY

DATE: 18 OCT 48

NMF FORM NO 37

RESTRICTED

RESTRICTED