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BALANCING NATIONAL REQUIREMENTS
AGAINST NATIONAL RESOURCES

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Reviewed by: Colonel Thomas C. Keach, USAF

Date: 5 November 1959

INDUSTRIAL COLLEGE OF THE ARMED FORCES
WASHINGTON, D. C.

1959-1960

BALANCING NATIONAL REQUIREMENTS AGAINST NATIONAL RESOURCES

22 October 1959

MR. PULVER: General Mundy, Gentlemen: Today we are going to look into what I like to call the granddaddy of all juggling acts, Balancing National Requirements Against National Resources.

Our speaker has also been requested to tell us about where we get one of the juggling balls. His scope includes particular emphasis on the determination of essential civilian requirements.

I am not sure that completely satisfactory solutions to these problems really exist, but, if they do, our speaker for today is perhaps one of the best qualified to enlighten us in this respect. He has served in government positions, dealing in requirements, since 1938, and now he is in the main stream of the problem as Deputy to the Deputy Assistant Director of OCDM for Production and Materials.

Mr. William Lawrence is one of the principal government officials directly responsible in this field.

Bill, it is a pleasure and a privilege to welcome you back to the College for your sixth lecture and to introduce you to the Class of 1960. Gentlemen, Mr. Lawrence.

MR. LAWRENCE: General Mundy, General Houseman, Admiral Patrick, Members of the Faculty, Gentlemen: You all have had quite a session this morning already, and probably one of the best speakers in the Department of Defense. I feel a little small coming after him. In fact, after looking at the list of distinguished speakers you have listened to this month, and noticing that their subjects in many cases directly bear on requirements planning, I feel a little bit like a young minister who was recently assigned to South Africa.

He was near a veldt, and one day while he was walking alone on it he came upon a huge lion. He didn't have a weapon and he didn't know what to do. He was terrified. So he sank down on his knees and started to pray. Nothing happened and after a few moments he opened his eyes and was astonished to see the lion beside him, also praying. The minister was considerably relieved, and he blurted out, "The power of prayer is great. I have been saved, and I have also made a convert." The lion just opened one eye, and said, "Man, I am not praying. I'm saying 'Grace'."

Since I have no knowledge of these previous talks, I hope that after I have said my piece I will not notice a prayerful attitude among some of you people.

The development of national requirements and the balancing of them against resource availabilities is done by OCDM and its delegate agencies

for three types of warfare: cold war, meeting local aggression, and general nuclear warfare. The basic rules for computation of requirements and allocation of resources for the local aggression and the general nuclear warfare are quite similar, but the similarity ends at that point. Our planning in the Government for cold war is negligible, although we do have some weapons, such as dumping surplus stockpile materials to compete with an Iron Curtain country's exports, if it were ever our national policy to carry out such actions.

Planning for local aggression or peripheral warfare places demands on our industrial production, manpower, and raw materials, and they are developed in the following ways.

In peacetime planning, lacking production schedules for civilian items, we estimate requirements by using a projected gross national product for the mobilization years in our planning period. The gross national product can be projected by manpower or by dollar value of the individual segments of the total product. A manpower projection, which is usually the most reliable, involves estimating the total labor force to be available in the future years. This is multiplied by the estimated average hours of work per week, then by 50 weeks for the total annual manpower hours. This total of hours is multiplied by an estimated average dollar output per man-hour. The military and atomic energy mobilization requirements for goods, services, and construction, based on the plans of the Department of Defense and the Atomic Energy

Commission, are calculated by the respective agencies in terms of dollars and number of men, and are subtracted from the totals provided by our estimate of the national product.

The remainder of the national product is distributed among the major segments, which are durable and nondurable consumers' and producers' goods and construction, on an average percentage pattern that the segments have followed for the past few years, with a judgment factor as to whether there will be an increase or a decrease in the segments during a mobilization period. This pattern of dollars provides our delegate agencies the necessary guides for their estimation of requirements. It should be noted that the Business and Defense Services Administration, due to their responsibility for all manufactured goods, do the lion's share of the requirements work in the Government, other than that, of course, for the Department of Defense. A good illustration of the complexity of their job is that, within the segments of consumer durable and nondurable goods and producers' durable equipment, they establish dollar indexes for more than 600 individual product codes, and from these indexes estimate requirements for materials, components, etc. In addition to BDSA's contribution, 21 other government agencies submit requirements for construction. BDSA also supplies most of our data on resource availability.

With these dollar value indexes, and from the proposed mobilization

construction programs, the delegate agencies compute their requirements for steel, copper, aluminum, and nickel alloys by using use factors related to dollar value of output which have been developed over records submitted by industry to the Government. These requirements are added to the Department of Defense and the Atomic Energy Commission mobilization requirements, and an estimate is made, sometimes, in the State Department of the foreign requirements that might be generated in a mobilization year, which completes our whole picture.

I might say at this point that through the years we have always had two weaknesses in our requirements picture--foreign requirements, both military and civilian, and purely military construction. In no instance have we ever received from any delegate agency any estimate of these requirements other than occasional special estimates from the State Department, and as a consequence we are still making "guess-timates" from World War II data. With the exception of military construction, none of these requirements is of sufficient magnitude to cause concern. Military construction is a peculiar problem. While we have never had any difficulty getting detailed estimates of the civil works projects of the Corps of Engineers, we have never succeeded in obtaining military construction. Apparently there are no plans for such construction definitive enough to make an estimate.

From these basic studies, on steel, copper, aluminum, and nickel,

we are able to make our analyses and establish the objectives for the 75 materials in the National Stockpile, the various components which we have studied of those which have caused difficulties in past mobilization periods. We make the study of analysis for industrial capacities and other things which pertain to production and materials.

The procedure for obtaining requirements for stockpile materials is less detailed than for the basic materials I have mentioned, in that over the years we have developed many short-cuts and factors. Let me assure you, however, that there is nothing slipshod in the work done on stockpile materials, components, or other things that we plan for. For example, determining the bulk of the manganese requirement is relatively simple--we use a factor of approximately 14 pounds of manganese for each ton of steel estimated in the basic study. To this is added the requirements for pig iron production and other uses such as fertilizers. Another example is bismuth, which has no such major uses. It is therefore estimated on its past use pattern, projected forward to levels of activity indicated by the total mobilization--GNP. Bismuth's major uses are pharmaceuticals, fusible alloys, other metallic alloys, experimental uses, other uses such as porcelain painting, enameling, optical glass manufacture, nuclear applications, permanent magnets, and thermoelectric materials.

Judgment as to whether a specific use would go up or down in

wartime must also be made in these projected uses. I might add that this judgment is checked by eight government agencies in addition to OCDM through the device of our interagency commodity committees, and all agencies must sign all statements of supply requirements for stockpile materials.

Through the years, I have been continuously appalled at the amount of labor that goes into the preparation of the supply and requirements statistics of the stockpile reports and the preparation of the reports themselves. I have made several efforts to eliminate some of the detail but without success. The detail has been invaluable, however, in the last couple of years, as it has been a strong weapon against all the investigations which have been made of the stockpile, one of which is currently going on. So far not one paper has ever been questioned. Only our naive judgment of continuing military uses of some metal or material has come under fire.

Estimation of component requirements is even more detailed sometimes. A good example would be the optical elements for military end items. The unit factors for this study covered two books, each the thickness of the Washington telephone directory.

From these analysis, also, we determine the gaps in our mobilization base and take steps, through financial incentives, to eliminate them. I should say that we took steps until early 1957. In that year

the military concepts of mobilization reduced requirements for military hard goods for a three-year planning period from about \$300 billion to \$106 billion. This radical reduction obviously caused considerable change in the Government's mobilization planning, and we are even now winding up many of the Government's programs which brought about the tremendous U. S. industrial expansion which would have been necessary if we were to meet the tremendous mobilization demands of 1954 to 1957.

For example, in the past six weeks, the Government has established a new stockpile policy which permits the disposal of all inventories in the National Stockpile in excess of maximum objectives or six months' normal usage by industry, which ever is greater. Of course, we still have the usual restrictions placed on such disposals by statute, such as Congressional approval, six months' notice, and no serious disruption of normal markets; but an indication of Congressional intent may be inferred from the 1960 appropriation act which permits us to sell those portions of the stocks of those commodities which are normally rotated, without repurchase.

We started about a week ago selling off part of our natural rubber stockpile. We rotate normally about 50,000 tons of natural rubber each year. We are going to sell that entire 50,000 tons without any repurchase. It took considerable time, I might say, about eight months,

to get everybody in the Government, the State Department, particularly, in the mood to where we would sell rubber. Since we have finally started, though, we have found that the sales have been extremely good in the first 3 or 4 days, and we have been able to maintain the price at between the 40 and the 41 cent level, which is pretty high for natural rubber.

Rapid tax amortization for new facilities, which is another one of our financial incentives, dies on December 31 of this year, and, while we still have the authorities of the Defense Production Act Borrowing Fund, the Fund itself is in a deficit position and is valueless as an expansion instrument.

I do not wish to convey to you the thought that we are abandoning any part of our industrial base which is necessary to support a mobilization effort. On the contrary, we hope to maintain this base at its present high levels, for we know that we can support any war effort, short of nuclear attack on this country, without further industrial expansion of any kind, except for new weapons which are not currently in production, or some new exotic metal which has no past history of quantity usage.

In wartime, most of the information for the essential civilian, war-supporting industry, and export requirements is generated by the materials control system that has been in effect, and therefore little

use is made of estimating procedures such as the gross national product for other than such things as maintenance, repair, and operating supplies. The control system we will use in our next mobilization period for limited war will be some version of the simplified Defense Materials System which we now have in operation. By "simplified" I mean a system which controls with a minimum of paper work, and only prime contractors receive allotments of materials. All other producers and suppliers merely certify that they are manufacturing defense-rated materiel.

This system can be easily expanded to cover any or all parts of our economy, and it is ready to operate at all times. There is some question in my mind as to whether a materials control system covering the entire economy will be necessary in any future mobilization period for limited war, that is, for the control of production, although it might be needed and used as an economic control. My reason for this statement is that the military take of our total steel capacity will be only about 10 percent, 18.5 percent of the copper, and 19.5 percent of our aluminum, and even these small percentages will probably be halved when we receive an up-to-date computation of military requirements. It should be pointed out that our most recent set of requirements for the basic materials--steel, copper, and aluminum--are derivatives of strategic planning of 1956-57 vintage.

This state of affairs cannot be blamed in the slightest degree on those people in the Department of Defense who direct or do the work on requirements. They would have been quite willing, I am sure, to compute requirements for us on later strategic concepts--and notice that I have used the word "concepts" and not "plans"--but it would have been for a limited war without nuclear attack on the U. S. and therefore a little different from the figures we are now using. It should be remembered that the requirements work-load we place on the Department of Defense is a sizable one, involving 2-1/2 to 3 years to cover all of our needs for statistics for stockpiles and other parts of our planning. You can understand our reluctance to request the initiation of such an undertaking, particularly so when we have had some hope that we might some day obtain the Department of Defense requirements which plan for an attack on this country.

This is the third year that I have stood on this platform and discussed such a possibility, and I had thought that prior to this talk today we would be immersed in such a study. Unfortunately, we are still standing on the brink, but I have some renewed hope, due mainly to the efforts of one of your speakers earlier this week from the Department of Defense. In OCDM we have had the same sort of delays, but we have started a preliminary analysis of attack damage on our principal U. S. resources.

When computing requirements for a nuclear war, which involves attack on this country, our first concern is with the survival period—and later the rehabilitation and reconstruction period. By arbitrary means, we have assumed that the survival period will cover roughly the first six months after an attack. The period of rehabilitation and reconstruction will begin some time during the survival period and will continue indefinitely.

As you would assume, the survival period will be concerned mainly with meeting the following objectives:

1. Survival of the remaining U. S. population. That means the feeding, the clothing, the housing, the medical care, etc.
2. Successful continuation of the military effort.
3. Restoration and maintenance of basic essential services, including provision of government functions at all levels.

Survival of people has generated two major lines of endeavor in OCDM--one, the operations function, which is fairly widespread at all levels of government and provides for rescue, relocation, feeding, clothing, billeting, medical care, radiological defense, and many others; and, second, the provision of resources to sustain the operations. In the resource field we have, until now, concentrated on the so-called survival items. These items, approximately 200 in number, cover food, sanitation including potable drinking water,

clothing and body protection, housing, fuel and energy, and drugs and medical supplies.

A supply-requirements calculation for medical supplies, which has been done twice as a prerequisite for a proposed stockpile program, is a good illustration of resource planning for a survival period. It is a relatively simple task, although it is tedious and very detailed. A brief explanation of the procedure is as follows:

a. A pattern of attack was assumed, using the so-called "Risk I," ("Nuclear Attack Hazard in Continental U. S.,") which was prepared by our National Damage Assessment Center, with the close cooperation of the Department of Defense and many other agencies and departments.

b. This attack generated 60 million casualties out of a total population of 180 million.

c. Applied against this casualty pattern, which assumed a two-thirds death rate by the end of the six-month period, were dosage factors computed by the Public Health Service. The noncasualties were provided with an "austerity dosage" during the same period, based on normal usage of the item.

The resulting totals provided us with our total gross requirement for medical survival items. The Business and Defense Services Administration of the Department of Commerce, and the Public Health

Service of the Department of Health, Education, and Welfare, surveyed stocks at producer, wholesale, hospital, and retail drugstore levels and applied the Risk I damage pattern to them on a geographical basis. I might say that this type of survey had never been done before in the history of the Government. We have learned quite a bit from it and have also obtained some very valuable information which we had never had before, and we think that we should continue it because the results were so good.

The resulting supplies available covered our 180-day needs for only 21 of the 119 items on the list. The other deficient items gave us a total requirement for stockpiling of \$574 million for the six-month period. An additional cost of \$150 million for a number of 200-bed prepositioned hospitals brought the total cost for medical survival to \$724 million. It should be noted that this requirement is more than three times the normal capacity output of United States companies without any damage, which is another way of saying that a stockpile of these items appears to be the only means of survival. Unfortunately, our program for stockpiling survival items seems to be going backward rather than forward, and we are not making the progress necessary for nuclear-age readiness.

Part of the reason for this is economy. In fact, I would say it is the major reason. Another factor, I would say, is that there are people

in the Government today who don't believe that we will ever fight a nuclear war and that therefore we shouldn't spend the money for it.

The factors developed in this study provide one of the necessary tools for a nuclear mobilization period. Our regional offices, with estimates of the casualty load and available supplies, should be able to develop their supply-requirements picture very quickly after an attack so that they can allocate their existing supplies in places where they are needed most.

In fact, these factors, which are under fairly regular review, have been used in both Operations Alert 1958 and 1959. In 1958 we asked our regional offices to compute requirements for approximately 80 survival end items. There ~~were~~ only about 40 of them which ~~were~~ medical. The others ~~were~~ split up among clothing, food, and some other things. We asked them to submit them to our National Relocation Site. The results were generally poor, but we were able to put together a national supply-requirements statement that would have been a fairly good basis for decision-making. In 1959 the number of items was reduced to 60, but other requirements, such as transportation, manpower, etc., were requested, and the regions attempted to get the States to submit their requirements in order that a regional picture could be put together. The State exercise was a flat failure. The regions themselves made their own area estimates and were able in 2 or 3 regions to complete

the supply-requirements relationship, but, when attempts were made to allocate the surviving resources regionally, everything seemed to go haywire. The construction of a national balance sheet was abandoned before the final phase of the operation started.

In OCDM we seem to suffer from some kind of phobia in regard to these Operations Alert. No single group has run the operations on a continuous basis from one year to the next, no lesson learned in one Operation is ever considered again, and no decision is ever made on a vital question. In fact, sometimes we seem to avoid making decisions in the hope that the problems will go away. Unfortunately, they don't, and we hear the same old broken record year after year. I feel that the past three Operations Alert have demonstrated, and conclusively so, that, if we were to suffer a nuclear attack on this country in the near future, we would have the utmost chaos. At the national level, making allocations or bringing about survival would be difficult, but I believe we might muddle through, due to the number of people still in government and in industry who have had extensive mobilization experience and experience in the allocation of resources.

On the other hand, our regional offices have shown, to date, little real ability to obtain the necessary information to make resource management decisions, and, even if the information were available, it is doubtful that any worthwhile allocation procedure would be developed

at this level.

This is not intended to be a blanket indictment of our regional offices. They have many good men now and they will have more when they are fully staffed. However, the learning process takes time and, until this is done, we cannot say we are ready for an emergency. The Federal agencies and departments, including OCDM, have been derelict in supplying their knowledge to the regions in an expedient manner, thereby decreasing their readiness even more. However, there is another obstacle to the regions' readiness which is alarming--particularly for the survival period--the matter of States rights. The chain of command of most charts of our organization shows a straight line running from the Director of OCDM to our regional offices, to the State governments, to county, city, and other local authorities. Actually, this line of authority ends at the regional office, and the States and other government subdivisions accept direction at their pleasure.

The directors of OCDM regional offices face no rougher problem than that of obtaining acceptance by the State governments of their direction. Usually, such acceptance is more gracious when accompanied by a little of the Federal green. The failure of the last Congress to provide appropriations for State grants did not improve this situation.

It should be remembered that our allocation system of World War II and Korea was based on future production and therefore was relatively

easy to control. In a survival period we will be living "off the shelf" with the probability of little or no new production for maybe 90 up to 180 days, or maybe even a year. This means that the States will have first crack at existing inventories, and the supplies may well be exhausted before the regional director can even communicate with the State authorities.

In the Operational Alert 1959 several States--and I won't name them here--made known to one and all that they would take care of themselves and they didn't need any help from the Federal Government. Also, several States now have laws supporting their own civil defense powers which would certainly conflict with any regional or national effort for recovery. I don't need to tell you gentlemen that panic and mob spirit, inspired by disaster, can ruin even the best-laid plans. Despite all these difficulties, however, our regional directors must somehow work out plans which are for the good of all.

The restoration of our essential services--power, communications, transportation, etc.--will require large amounts of components, materials, and equipment. Therein also is a great danger, not of seizure, but rather of the dissipation of a supply that is needed for the start of a rehabilitation or restoration period. Since stockpiling of a great many finished items appears improbable, we will have to take the chance that the restoration of these services must take a high priority and will take the supplies even though we will need them later.

Production and Materials, in cooperation with BDSA and the Department of Defense, are now attempting to place in each region inventory data on survival and other items which are needed for survival purposes. We are also going to try to provide the names and addresses of the locations of stocks. If we can't do it, we expect the regions to make the surveys themselves. We are also examining the Production Allocation Program of the Department of Defense as a means of establishing trigger contracts with producers of survival items. This would be better if we had some money to back it up. For example, we have trigger contracts on general-purpose machine tools with 20 or 25 of the largest machine tool producers in the country. These contracts are backed by the money in our Defense Production Act borrowing fund. As I indicated earlier, though, that fund is gone now, and we are going to have to go to Congress even for the money we need to pay the interest that we owe the Treasury. It's not a very popular undertaking.

A summarization of a survival-period allocation procedure would be that those items which I mentioned previously as the major objectives of a survival period would all have equal priority, subject to change by the authority which is prevalent in an area. However, until some control can be exercised by some area of the Federal Government, the priority will be little more than a hunting license, unless steps are taken which will insure the coordination of the use of surviving items

in all levels of government.

As I stated earlier, we are just beginning to embark on an analysis of the recovery and restoration period after a nuclear attack on the United States. About all that I can tell you about it is some of the things we are doing to get ready for it. Both the Department of Defense and the OCDM will use the Risk I, "Nuclear Attack Hazard in Continental U. S.," to determine the patterns of attack and resulting damage. This study, which can be described as a composite of several different attack patterns, results in relatively heavy damage being inflicted on both military and civilian targets, and recovery from the attack will require considerable ingenuity and makeshift arrangements for both the military establishment and industrial production.

After this damage analysis has been completed for the major industrial categories, now on the tapes of the National Damage Assessment Center, we shall attempt to construct a gross national product model, based on surviving population but modified by the type and amount of industry available to us post-attack.

Provision will have to be made for the priority activities, such as survival, continuation of the military effort, and restoration of essential services. From then on, I feel that it is going to be a matter of "cut and fit." In other words, we will begin to restore the most urgent things first, always keeping in mind the resources available to us.

Naturally, the newest facet of military planning--which is a reconstituted military force which requires a reconstituted mobilization base--is also going to provide us with an immediate problem--one that will divert resources from something equally essential, such as food production.

From this study, which promises to be a very interesting one, we think we will be able to determine the actions we can take which will improve our capability to survive.

Thank you, gentlemen.

MR. PULVER: Gentlemen, Mr. Lawrence is ready for your questions.

QUESTION: Sir, would you expand a little more on what this Risk I type of attack is, what the magnitude of the attack is, how many cities are hit, how many megatons of the weapons, or give us some indication of the magnitude of the attack?

MR. LAWRENCE: I am afraid I don't know that. I did know, but I just can't recall. Let me think. I think the weapon attack was between 600 and 800 megatons. I don't know how many military targets there were. I think there were about 127 industrial and population targets, about 50 percent of which received direct hits. I am sorry I don't know the rest of that detail. I think, actually, though, this Risk I will be sent down here to the College and it will be available to

you gentlemen to look at it. It is a considerable study. It has about 25 volumes altogether. It is not all completed yet.

MR. PULVER: We are thinking about getting this and adapting it for use in the Final Problem.

MR. LAWRENCE: I think you should. I think if everybody in the Government would use the same pattern we would eliminate a lot of the apparent discrepancies we have in our damage analysis in one place or another.

QUESTION: In Operation Alert 1957 there were significant relocation activities by government agencies in Washington and other areas. For instance, the ZI Army Command was relocated to alternate stations. Also, cadres of various offices and agencies moved to their relocation sites. This seems to have been receiving increasing or decreasing emphasis over the past years, with fewer people actually engaged in the Alerts in the following years. Can you explain why this might be so?

MR. LAWRENCE: I think the answer to that one is very simple. It is money, mainly, the lack of appropriations for these people to travel and relocate. This has been the real drawback to participation at the relocation sites. I think there has been some thought, too, that a number of the relocation sites were not very appropriate where they were located, that they were susceptible to attack, and that perhaps it would be better if people went elsewhere. I know we have plans now

for the people from almost all the government agencies, or at least some portion of them, to be at our own relocation site. We are now equipped to handle a considerable number of people, so that we will have some of the agency representatives at High Point at all times.

I think that money has been your major drawback in the last two years, particularly, in relocating a sizable number of people in these Operations Alert.

Another thing you have to remember, too, is, if the problems that we are playing in the attack are not such that they require the services of a lot of people, it is kind of difficult to justify an expenditure of sending 50 or 100 people to some place to sit around for 2 or 3 days not doing anything. That is one of the things that we have to consider also as to the number of people who have gone out in these particular Operations.

QUESTION: Mr. Lawrence, would you care to say a few words on the use of our stockpile as an economic tool for stabilization as well as for mobilization?

MR. LAWRENCE: Well, as I have said, with these surpluses of materials that we have, if the time ever came, for example, when Russia wanted to force some of our, say, aluminum producers out of certain foreign markets which they had developed, this Government, if it chose to do so--although this has never been our policy--could use

this surplus that we have and put it into those same markets at practically no cost. It would be a cost to the Government, but the money has been spent already anyway. I think it would be a very effective weapon, if the time ever came when Russia got to a point in its production where it had the capability for exporting a sizable quantity of material and would try to drive us out of the market.

QUESTION: Sir, you mentioned that you are experiencing difficulty with the regional offices maintaining control, and you envisioned experiencing even more problems during an emergency. Do you have any alternate proposal in mind? Do you think that some other course of action might be taken?

MR. LAWRENCE: No, I don't think I have any alternate proposal. I think, as I said, that the regional directors have got to, in some manner--and I don't know what the answer to this is--get the governments of the States to sit down and agree with them as to a common course of action. If everybody goes off on his own, and each State does as it pleases, nobody is going to come out of it right.

I wish I did have some alternate solution. I think everybody has given this a lot of thought, at least here in Washington, but I don't think we have come up with any answer. After all, States rights have been with us a long time, and this issue has never been solved very successfully in our history, that I know of.

QUESTION: Sir, to go back to a previous question on the Russians and the world market, and the effectiveness of the stockpile as an economic countermeasure, there have been some recent indications of Russian action on the market. Of course you know the background on the world petroleum markets, where Venezuela and the people in the Middle East don't feel that an adequate amount of their productive capacity is being used, and therefore their national revenues are lower than they would like them to be. Recently the Russians have started a program of exporting both crude oil and finished petroleum products to more and more nations outside of the Soviet Bloc and they have done this with an effective drop in the price of the product.

One step that has been taken recently by a gentleman hired by the Venezuelan government has been to see if they could establish a world cartel outside of the United States to kind of control the price of oil.

Has the OCDM looked at this thing as an attempt by the Russians to further keep our relationships with both the Middle East countries and Venezuela upset? Has any thought been given to that possibility? Right now, incidentally--I would just like to add this--these people are really upset in the petroleum field. This kind of follows along in this economic work.

MR. LAWRENCE: Actually, I am sorry I can't answer that one. The Department of the Interior has the prime responsibility for petroleum

planning. We have a Fuel and Energy Group in OCDM, but I think the basic part of our petroleum planning is done in Interior.

Of course, the most active petroleum planners that there are anywhere in the Government are the military petroleum people in the Office of the Assistant Secretary of Defense, Supply and Logistics. I think they have more of the data and more knowledge.

I don't know if any thought has been given to our participating in a cartel of that type.

QUESTION: Sir, you mentioned that certain States have passed their own civil defense laws. Can you expound on why they did this? Are they unhappy with what the Federal Government is doing? Or are they trying to forestall the Federal Government?

MR. LAWRENCE: No, I don't think that they are unhappy. What they are trying to do is to put some teeth in the civil defense function. The best example of this is the State of New York, where they have very strong civil defense laws. They have the proposition that all new structures will have shelters in them--this is mandatory. I think that New York has perhaps gone much further than any other State. But all of them apparently are in the process of establishing stronger laws.

I don't think they are unhappy with the Federal law. I think they just think that the Federal law doesn't go far enough and that they've got to take some steps of their own. This is as it should be. I don't

think that we have had any dissatisfaction on their part. It is unfortunate that some of the laws that they have preclude action by the Federal Government. For example, in New York they have requisitioning and seizure powers, and that type of thing, which is fine for the people in New York, but the supply of some commodity may be vital for the survival of a State adjacent to New York. Unless the Federal Government has some say about where it will go, the other State maybe will just sit there and die.

QUESTION: Sir, under the possibility that we may have an attack without warning, I presume that our Reserve and National Guard Forces have not been called up. They have a lot of military government units, and hospitals, besides the tactical units. Do your plans envisage the utilization of these organizations as such?

MR. LAWRENCE: That is a little bit out of my field, but I think I can answer that and say that the military forces which do not have mobilization assignments are, under an agreement with the Secretary of Defense, made some years ago, available to the civil defense directors for civil defense activities.

I think that there may be a problem here. I think that is what you are leading to. I am afraid that some of these Reserve Forces have two assignments, and people haven't coordinated the planning too well.

QUESTION: Going back to the economic aspects, you at one time

had a fund which you could use to help industry in this country. Do you have much political pressure to save a dying industry by making purchases of materials to increase the stockpile, and do you have pressure put on you to buy stuff that isn't required by the military or anyone else?

MR. LAWRENCE: Did you ask if we have political pressure on us to buy commodities?

STUDENT: Yes, say, to buy more titanium now, to increase the production of titanium.

MR. LAWRENCE: Well, that engenders writing more letters than anything else we do in OCDM. It is absolutely fantastic the amount of political pressure and every other kind of pressure that has been brought to bear on us. For example, there is pressure to continue our domestic purchase programs for manganese and cobalt. We have had to face Congressional committees, some of which were very hostile, because the members happen to be from those States where these mines are closing. On manganese we have a purchase program which has been going on for, I guess, 4 or 5 years. At one point, back in 1954 or 1955, Secretary Flemming, who was then the Director of ODM, made a statement before a committee of the House in which he said that we would buy manganese until some time in 1961 or until we achieved 28 million long-ton units, which is about 300,000 tons or something approximate to that, of manganese. That one statement has been misinterpreted in more ways

than anything I have ever seen. We have had people swear up and down that Dr. Flemming said that this program would continue until 1961 and that they^{had} just made a quarter of a million dollar investment in machinery to mine the stuff and they were going broke. People have carried their appeals to the President, and everything has come out of it.

STUDENT: I guess my question should have been: Are you forced to yield very often to these pressures, after you have made all your calculations of what we really need?

MR. LAWRENCE: No. We have been adamant in our position, particularly now, because we don't have any more money.

QUESTION: Relating back to the economic use of the stockpile, how about using it internally in the country, instead of externally, as pressure?

MR. LAWRENCE: That is one thing we have always tried to avoid, that we would ever use the stockpile for manipulation of the market price. I think the law itself is very clear on that point. When we make a disposal, we cannot dispose of quantities which would cause any serious disruption in the market. It is one thing we have to be most careful about. We had an example a few minutes ago of the product titanium. We've got an awful lot of titanium, not in the stockpile, but in what we call a revolving inventory, which was built up because of the

projected demand by the Air Force for the metal. The use of that metal, as you probably know, went down the drain, and we have all this stuff. Some of it has very high hardness which can be used for certain alloying purposes.

We recently had two quantities out in Boulder City, Nevada, where the Bureau of Mines had done experimental work on the production of titanium. One lot of 70-1/2 tons had a very high hardness of about 180 and over. We put the stuff up for sale, and the whole industry descended on us. The two Senators from Nevada assured us that, if we offered any more, they would provide us with all the trouble we could look for for the next five years.

MR. PULVER: Mr. Lawrence, in behalf of all of us here at the Industrial College, I want to thank you for a very frank and thorough description and appraisal of our plans and policies.

MR. LAWRENCE: Thank you. It has been a pleasure.