MOBILIZATION PLANNING FOR MILITARY TRANSPORTATION REQUIREMENTS

24 November 1954

967

CONTENTS

Publication No. L55-59

INDUSTRIAL COLLEGE OF THE ARMED FORCES

Washington, D. C.

Mr. Earl B. Smith, Director of Transportation and Communications, Office of Assistant Secretary of Defense (Supply and Logistics), was born in Pike County, Illinois, 17 January 1897. He was graduated from Dexter (Missouri) Business College in 1917. He served in World War I from 1917-19, advancing from the grade of private to second lieutenant. He began his career in transportation as a traffic clerk with the Scott County Milling Company, Sikenston, Missouri, 1919-20. From 1920-22 Mr. Smith served as chief clerk, Freight Department, Missouri Pacific Railroad in San Francisco, California. In 1922 he joined General Mills, Inc., advancing from assistant traffic manager to vice president and director of traffic, where he remained until November 1953 when he was given leave of absence to accept his present position. Mr. Smith has been active in various Transportation and Civic Associations during his entire career. This is his first lecture at the Industrial College.

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COLONEL NORMAN: General Niblo, ladies, and gentlemen: It is no doubt trite, but, I think, true, that civilization and economic progress advance no faster than the development of our modes and systems of transportation. It is likewise true that our military operations depend upon transportation for their successful accomplishment.

To discuss this very important topic of mobilization planning for our military transportation requirements, we have a person who is not only acquainted with our military transportation problems, but who is equally knowledgeable about our transportation industry and its relationship to our economy. Mr. Earl B. Smith, Director of Transportation and Communications, Office of the Assistant Secretary of Defense (Supply and Logistics) is on leave of absence from General Mills, Inc., where for more than 30 years he has been handling the problems of traffic management. Since 1948 he has been vice president and director of traffic of General Mills.

Mr. Smith's long career in the field of transportation has brought him into association with and membership in some of the leading transportation organizations of our country, including the National Defense Transportation Association, the National Industrial Traffic League, the American Society of Traffic and Transportation, and the Transportation Association of America.

Mr. Smith, I am very happy to welcome you to the college and present you to this year's class. Mr. Smith.

MR. SMITH: General Niblo, students of the Industrial College, and guests: Our national defense is so dependent upon the Nation's transportation system that mobilization planning must include a thorough consideration of transportation requirements and capabilities, and the controls necessary to insure a proper balance between the two. Advance planning of this kind was recognized by this college upon its establishment in 1924. Initial consideration at that time, of mobilization planning, included transportation as one of its elements.

The men and machines of war place a tremendous burden upon our commercial transportation systems, as we saw during World War II. Those requirements have since become more varied and complex. Transportation service must be available by land, water, and air, to whatever degree conditions require, if the maximum effect is to be delivered to the enemy. This may be emphasized by the reminder that ore at the bottom of the mine is of no value to the production of a weapon of war until it can be transported to the surface, and on through the various processes to the point at which a finished weapon can be produced. Neither is that weapon any good to anybody unless and until it can be transported from its point of production to the war zone and the battlefront. We must remember, too, that even though we may have soldiers, guns, tanks, and planes in the war zone, they are useless unless we can transport clothing, food, munitions, and fuels to them. In brief until the gun has been delivered, it hasn't even been produced.

My remarks this morning will be directed primarily to the transportation planning now under way within the Department of Defense (DOD) to the joint planning between the Government and the transportation industry, and to the organizational arrangement within and outside the DOD for carrying out that planning.

The Office of the Director of Transportation and Communications is in the Office of the Assistant Secretary of Defense (Supply and Logistics). This is a policymaking and coordinating organization. Its relation to the military departments is that of policy to operations. Our lateral relations within the Office of the Secretary of Defense are with the Joint Chiefs of Staff (JCS) and the other Assistant Secretaries of Defense and their staffs.

A working relationship between this office and the Joint Military Transportation Committee (JMTC) of the JCS has proven a very satisfactory one for arriving at consolidated transportation requirements. When, for DOD purposes or to meet the request of an appropriate civil agency, a written request is made upon the JCS for phased requirements, the JMTC is usually given the assignment. There are occasions when a request will be made upon one military department, as in the case of military requirements for rail transportation. Certain other long-range planning problems are suggested to the Joint Land Transportation Agency (JLTA). This joint agency is headed by an Assistant Chief of Transportation of the Army, and is engaged in planning the coordinated military use of land transportation in time of emergency.

Before discussing the planning for land, water, and air transportation in more detail, let me point out that mobilization plans for the use of commercial transportation are prepared in conjunction with the Office of the Director of Defense Mobilization, the Defense Transport Administration (DTA), the Defense Air Transportation Administration, and the National Shipping Authority. The integration of the military transportation requirements with the long-range national effort is a matter for day-to-day contacts.

The core of the Nation's mobilization planning is the Office of Defense Mobilization (ODM). The President's Reorganization Plan No. 3, which became effective 12 June 1953, abolished the National Security Resources Board (NSRB) and transferred its functions to a permanent ODM, which retained the authority and functions of the previous temporary ODM. The Director of the ODM has attempted in the past to coordinate transportation mobilization activities through a Committee on Defense Transportation and Storage, on which all interested Government agencies are represented.

The DOD has been keenly aware of the wisdom of having in existence a finished plan for the overall wartime control of transportation. The Department has cooperated with the civil agencies toward that end. Our concern for expeditious completion of this important matter, as well as for more emphasis on transportation mobilization planning in general, had, we believe, more than an incidental influence on the recent establishment of the full-time post of Coordinator of Defense Transportation within the ODM.

It is natural that the DOD, the major user of materials and services, and the ODM, the dispenser of allocations and controls, should work together as a team. In the transportation field we receive requests to indicate DOD interest in individual applications for necessity certificates. ODM Order I-12, dated 1 October 1954, is titled "Assignment of Defense Mobilization Responsibilities to the United States Department of Defense." The order lists some 27 functions upon which the development of the coordinated industrial mobilization program for the Government as a whole requires advice or action by the DOD. A few of the functions pertain to transportation planning.

Let us take a closer look now at the individual modes of transportation as far as DOD participation in long-range planning is concerned. We will look first at railroad transportation.

The task of developing the military requirements for railroad transportation during a period of mobilization is usually performed by the Transportation Corps, Department of the Army. In conjunction with the Departments of the Navy and the Air Force, determination is made by the Transportation Corps of the amount of transportation which will be generated by current war plans.

When it has been determined that a realistic summation of military requirements for railroad transportation has been presented, a presubmission conference is arranged with the Defense Transport Administration (DTA), which is the civilian agency having responsibility for its provision. Out of the ensuing discussion and evaluation comes the determination of whether there is adequate plant, equipment, productive capacity, and manpower to accomplish the task; or whether shortages will exist when the military and essential civilian requirements are combined. If the requirements are expressed in terms of the phased number of cars required during a progressive mobilization, the totals are translated into the same yardstick used by the railroad industry--net ton-miles for property and passenger-miles for persons.

As the result of recommendations from responsible Federal Government agencies for increasing the number of units in the freight car fleet, an expansion goal, carrying accelerated tax amortization for new construction, was established by the ODM under the provisions of the Defense Production Act of 1950, as amended. Almost simultaneously, the member railroads of the Association of American Railroads unanimously adopted a program in July 1950 to increase the number of freight cars to 1,850,000. On 1 October 1954 the fleet numbered 1,750,082 cars--almost 100,000 short of the program goal. So far there has been no indication that this program has been abrogated, but dwindling revenues during 1954 have retarded its consummation to the point that on 1 October 1954 there were only 10,232 freight cars on order.

The present status of the problem generated an appeal by the DTA to the ODM to increase the percentage of allowable tax amortization for new construction from 70 to 90 percent of the cost. The percentage was increased to 85 percent, but whether this increase will act as an impetus to the number of cars ordered is conjectural.

Now, passenger-car equipment. Early in 1954, as a result of a study of the military requirements for passenger-carrying cars in the event of mobilization, it was determined by the DTA that a deficit of 4,500 cars would exist in the overall requirement of the country. To

remedy this deficit, that office recommended to the ODM that accelerated tax amortization be granted for at least 80 percent of the cost of new construction. Since that time, ODM has established Expansion Goal No. 221 for 1,250 new passenger cars, to be started before 30 June 1955. As of 1 October 1954, 390 new cars had been certified by ODM, with a goal balance of 860; but there are no applications pending for additional units.

In connection with the establishment of this goal, an important proposal of the DOD was a means of retaining retired equipment as a reserve. To that end, an agreed plan was effected with the DTA, whereby any railroad applying for a necessity certificate would simultaneously submit a statement of equipment that would be retired having a life expectancy of at least five years, and a design suitable to the wartime needs of the military.

The Pullman Company also submitted a proposal whereby some 700 standard Pullman cars would be made available, at a nominal rental, for storage on military trackage, as a mobilization-readiness fleet of passenger equipment. The proposal was accepted; and this fleet, plus 366 tourist cars already stored on military trackage, gives the DOD a good backlog of sleeping cars for immediate use at a fraction of the cost of new construction.

In June 1954 Director Flemming of the ODM outlined to the DOD his responsibilities in developing and evaluating current and full mobilization requirements for railroad transportation facilities, stating that heretofore studies of the problem had been consistently questioned. A representative group was set up to study the problem and provide that office with recommendations for its solution. The committee is composed of railroad officials, officials from other industries, and a representative from the DOD and the DTA. The committee has since been divided into three subcommittees, to consider, separately, freight cars, passenger cars, and locomotives. Their reports are due in December.

Appropriate feasibility testing indicates that the freight traffic-load capability of our railroads today is about 34 percent greater than it was in 1944. Using this constant factor, it is reasonable to assume the railroads under present-day operating methods could move about 990 billion net ton-miles per year with the existing freight-car fleet of 1,750,000 units, which is slightly less than it was in 1944.

During the peak year of World War II, 1944, our railroads produced 369 passenger car-miles per passenger train-hour; while for the year 1953 they produced a total of 423, or an increase of 25.4 percent. During the 1944 period a total of 4.65 billion passenger car-miles were produced. By adding the 25.4-percent increase to that total, we find that by this constant factor we can produce an estimated average of 5.83 billion passenger car-miles per year under conditions of similar equipment ownership to that in 1944.

The preceding examples of improved railroad efficiency were due chiefly to new freight and passenger cars, Diesel electric locomotives, automatic block signals in both directions, pushbutton classification yards equipped with car retarders and speed control, modernized methods for renovating passenger equipment, centralized traffic control, remotely controlled switches, electronically controlled interlocking plants, and radio and microwave communications.

Centralized traffic control, in conjunction with the use of Diesel electric motive power, has perhaps contributed most to the increased railroad operating efficiency. For example, a single-track line so equipped can handle slightly more than double the number of train movements formerly possible. In January 1946 there were only 6,495 miles of railroads using centralized traffic control; while at the end of 1953 there were 19,572 miles of road so equipped. An examination of a map on which the lines so equipped have been plotted reveals that the most congested roads during the peak period of 1944 are now capable of doubling their traffic load.

We must keep in mind that land transportation planning activities are also international in scope and responsibility. Under the North Atlantic Treaty Organization structure, there is the Planning Board for European Inland Surface Transport. This Board, on which the member nations are represented, is developing plans and unearthing problems now that will bring about more effective wartime collaboration among the powers bound together by that treaty, as a means of better utilization of existing transportation in Europe.

Now, a word about highway transportation. With the registration of automobiles, busses, and trucks having been almost doubled in the United States since 1944, more emphasis is being placed on the improvement of highways to meet the requirements of essential traffic. To this end, the United States National System of Interstate Highways has been determined the principal system of highways to serve the national defense. This system is limited in extent to 40,000 miles.

Because it has special importance to both peacetime and defense needs, primary emphasis is being given by the state highway departments and the Bureau of Public Roads to improving this system and the principal urban roads connected therewith. Strategic highways of comparable defense importance may be designated and recommended by the DOD for consideration by the Commissioner of Public Roads as a means of seeking priority in their improvement, if such action is justified by the volume, type, or critical nature of defense traffic. The DOD has further recommended that the deficient sections of this system be improved to the highest practical uniform design standards.

When the President recently proposed a 50-billion-dollar, ten-year highway program, he appointed a committee of seven state governors to report to him on its implications. The President also appointed a Special Advisory Highway Committee, to be chaired by General Lucius Clay. A third group is the Interagency Committee on the President's Highway Program, the Chairman of which is Mr. Du Pont, Commissioner of Public Roads, and on which the DOD is represented. The Clay committee will coordinate the efforts of the other two groups.

The problem of use of highways and availability of transportation facilities, including equipment and fuel, is one of great concern to the DOD. The JLTA, previously mentioned, is now in the process of establishing joint highway transportation boards throughout the continental United States for the purpose of utilizing over the highway common-use military transportation, in augmentation of commercial transportation, during land transportation emergencies declared by the Secretary of Defense. This agency also has recently undertaken to determine what actions should be taken by responsible agencies to assure that adequate highway transportation will be available to meet military requirements during emergencies.

Now we will pass on to the subject of ocean shipping.

The importance of a strong merchant marine to the national defense has been recognized by each Congress since the enactment of the Merchant Marine Act of 1936. The merchant marine policy of the United States contemplates the maintenance of a dual-purpose merchant marine, to serve commercial and Government peacetime needs, and defense needs in wartime.

Unless the merchant marine is adequate to support international defense commitments, there is serious doubt that potential enemies could be held in check in the event of war. The DOD recognizes that a Government merchant marine program developed solely on the basis of national defense could seriously jeopardize the maintenance of a strong national economy. To the end that the national economy will not be overburdened by national defense expenditures, the DOD cooperates with the Department of Commerce and the Maritime Administration in implementing the spirit and intent of the basic merchant marine policy in the light of economic and defense considerations.

The DOD forwards to the Maritime Administration the Annual Review of Shipping, prepared by the JMTC of the JCS. This review compares total United States civilian and military ocean-shipping requirements for personnel, cargo, and bulk petroleum with the capabilities of all ships deemed to be available in time of war; and also comments on the general conditions of active and reserve ships and the shipbuilding industry. The individual military departments furnish the in-place shipping requirements for the above review, time-phased by months, to various geographical locations throughout the world, in terms of notional shiploads.

The wide variation in the size and speed of merchant ships has resulted in the use of the term "notional ship" to represent a planning unit. Because of the preponderance of war-built ships in our merchant fleet, the notional dry cargo ship is equivalent to the well-known Liberty ship; while the notional tanker closely approximates the T2-type tanker in general use in our merchant fleet.

United States passenger vessels vary even more widely in size, capacity, and speed than do the dry cargo and tank ships. There is no class of passenger ship readily identifiable as the equivalent of the notional transport.

Requirements for the support of the civilian economy during a war were provided by the NSRB, which has since been absorbed within the ODM, in terms of commodities, origins, and long tons. By the application of appropriate stowage factors and turn-round times, notional ship requirements for essential civilian ocean traffic were determined.

Total shipping availabilities are the inventory of the active merchant fleet, plus the ships in the national defense reserve fleet, plus some 400 war-built ships which fly foreign flags, but which, by reason

of the sale contract, are subject to return to United States control in the event of war. Other foreign-flag shipping has not been included in the Annual Review, because it is not possible to determine whether they will be available. World War II figures show that our allies provided us with about 715,000 gross register tons of shipping, in return for 5.5 million gross register tons.

The Department of Defense-Department of Commerce memorandum of agreement dealing with the utilization, transfer, and allocation of merchant ships provides for the assignment to the Military Sea Transportation Service (MSTS) during peacetime of stated numbers of Government-owned ships for direct operation by MSTS. Additional shipping capability is to be obtained by utilizing the capacities of scheduled shipping services and time charter of privately owned vessels. When these sources have been exhausted, the Maritime Administration will provide additional Government-owned shipping under a cost-plus-fixed-fee arrangement with private companies. In the event that American-flag shipping is not available, MSTS is authorized to employ foreign-flag vessels. Under conditions of full mobilization, the Maritime Administration will provide the additional Government-owned merchant ships required for direct operation by MSTS, and will requisition and operate all other vessels available to the United States on cost-plus-fixed-fee agreements with private shipping companies.

The Joint Maritime Administration-Navy Planning Group, comprised of technically trained shipping personnel, has been established on a continuing basis, to study and make detailed recommendations as to the size, type, and composition of the active operating merchant fleet, the national defense reserve fleet, and the new construction required in the event of war. Because of the impact of a wartime shipbuilding program on the production facilities of the United States the ODM is vitally interested in new ship construction plans. The DOD furnishes technical advice and representation to the ODM Committee on Shipping and Shipbuilding, and requirements for new construction of naval vessels, and supports the Maritime Administration in obtaining allocations of materials and manpower for new merchant ship construction.

The most practical and useful types of general cargo ships, both from a commercial and a military point of view, are vessels similar in general size and characteristics to the C2 and C3 type vessels. The cargo-handling equipment should be redesigned to decrease present loading and discharging times, and be able to handle the outsized pieces

which are common in military cargoes. Troop transports should be of the P2 type, with accommodations for 4,000 troops and 250 cabin-class passengers. Tankers should be of about 25,000 deadweight tons capacity, with a maximum draft of 32 feet. It is estimated that about 85 percent of the ports of Europe cannot accommodate vessels with a draft in excess of 27 feet. However, this draft limitation results in greater numbers of ships and manpower to sail them. As a compromise, we therefore recommend that the majority of United States flag vessels draw not more than 30 feet when fully loaded.

In addition to conventionally designed vessels, specially designed cargo vessels are required for the carriage of rail cars and vehicles on wheels or tracks. Vehicle-carrying ships are essentially of two basic types: the roll-on, roll-off type and the lift-on, lift-off type. The latter type is further divided according to whether the lifting cranes are mounted shipside or dockside.

There are now only six ocean-going vessels in operation under the American flag, specially designed for rail-car transfer. The Department of Defense has taken positive action to expand this tiny fleet. Funds have been appropriated for the construction by MSTS of one prototype vessel, which will provide experience and know-how to private companies. The last supplemental appropriations act contains authority for the DOD to acquire by purchase, or by lease for seven years, six vessels of this type. We are now engaged in conversations with several companies in an effort to assist them in planning for the size of proposed vessels, terminals, methods of loading, and possible traffic patterns and volume of movements.

In the tanker field, funds have been appropriated for the construction of four commercial-type supertankers, to be built by the DOD; and authorization has been received to charter 15 additional supertankers, to be built by private capital, for periods not to exceed 10 years. The DOD supported the tanker trade-in bill, which provides for owners of usable tankers to turn in the vessels as part payment on new tankers.

Now a few paragraphs about ports.

Port planning has been moving forward also. Experience has clearly demonstrated that, in order to avoid congestion at ports, close and continued coordination between ocean and land carriers must be exercised at all times. The Interagency Committee on Port Utilization has developed a plan for the coordinated control and allocation of port

facilities to the various claimant agencies. The DOD has proposed an overall transportation control organization, headed by a single administrator, who will be assisted by individual administrators for land, sea, air, and ports.

Port activity in the United States has greatly decreased in the post-war period, due chiefly to the decline of domestic waterborne commerce, which, prior to World War II, constituted approximately 60 percent of all port business in the United States. Since this trade has dried up, port capacities greatly exceed the available business.

Contrary to popular opinion, not all the decline of port business is in the small ports; the larger ports have also suffered. The remedy so often suggested--that the DOD divert cargo to smaller ports--is obviously not an answer to the problem.

Since it is impossible for the DOD to support all ports, it was considered best to determine which ports would be needed for military use in time of an emergency. As the first step, the JCS were requested to estimate the reduced capacity of our various ports in the event of enemy attack. When this study has been completed, it will provide guidance for the military departments to prepare alternate port plans.

Now, as to our inland waterways--little known and less appreciated by the general public is the tremendous growth of the United States inland waterways system. It is estimated that 220 million ton-miles of cargo, in barges, scows, lighters, and carfloats, move every 24 hours over the 28, 382 miles of United States rivers, canals, and harbor channels. Much of the expansion is due to constant improvements of floating craft, terminal facilities, and materials-handling equipment.

In cooperation with other agencies of the Government, the DOD is preparing a comprehensive study concerning vertical bridge heights over navigable streams. The DOD interest in inland waterways centers on the use by the Navy of streams leading to the sea, the use of the streams for transportation of DOD cargo, and statutory responsibility within the Department for maintaining and improving inland waterways.

As to air transportation--it should not be necessary to extol the virtues of air transport, whether it is employed as a logistical carrier or whether it is used to obtain a military advantage through speedy deployment of forces. Suffice it to say that transport air power is now considered essential to the winning of a modern war.

As with other media of transportation, mobilization planning with respect to air transport deals mainly with requirements and capabilities. In wartime, transportation is generally in short supply; air transport is no exception.

There will be in a future war three classes of air transport requirements that must be met--namely, military, civil defense, and essential industrial. These requirements will have to be met by the airlift resources that are available immediately on the outbreak of hostilities. From a national defense point of view, it is essential that the airlift capability required for war be developed in peacetime.

To develop the airlift capability required for wartime operations, the full potential of civil and military aviation must be exploited. The development of the military airlift capability is a direct responsibility of the military. The development of the potential of civil aviation can be encouraged and assisted by the military, but requires the fullest effort by the civil air transportation industry.

In the military increased capability is being developed through the modernization of the air transport force, through improved cargo-handling techniques, and through improved terminal design. In addition during wartime the daily rate of aircraft utilization will rise considerably over peacetime levels, with a corresponding increase in airlift capability.

Through the use of commercial air transportation services in peacetime in meeting normal logistical movement requirements, the DOD is directly contributing to the strength of United States civil air carriers. Air transport is assuming ever greater stature in military logistic systems; and, as its use is expanded, the requirement of commercial airlift will increase, as will the air industry's capability to augment military air transport forces in wartime.

It will not be enough to depend on the military air transport force alone to meet airlift requirement, as the force will fall far short. Why is this true? It is true because our national economy simply cannot support a military air transport force in being in peacetime adequate to meet wartime airlift requirements. Therefore, mobilization planning must necessarily be predicated on the concept of augmentation of military air transport forces by aircraft from the civil air carriers' fleet.

The Civil Reserve Air Fleet Plan, commonly known as the CRAF plan, has been adopted as the means to augment the military resources. This plan has been developed through the cooperative efforts of the Departments of Defense and Commerce and the airline industry. It provides for the modification, at Government expense, of 308 four-engine aircraft of the civil fleet to augment the fleet of the Military Air Transport Service (MATS) within 48 hours after the outbreak of hostilities. These aircraft will be manned by civilian crews and operated by the airlines themselves.

It is not enough to develop increased airlift capability. Careful planning to insure effective utilization of the national airlift resources and to insure that the most urgent airlift requirements are met is essential. Consequently, the Departments of Defense and Commerce are jointly developing a "wartime air priorities system," which will be administered in wartime by the DOD.

The wartime air priorities system will apply worldwide to all United States civil carriers' aircraft and those military air transports expressly designated by the Secretary of Defense. It will provide the means of evaluating the urgency of air traffic and affording entry of such traffic on the basis of priorities into the air transport system.

The withdrawal of CRAF aircraft from commercial operations poses a serious problem, which is being faced by a Civil Aeronautics Board Industry Advisory Committee on Aviation Mobilization, on which the DOD has membership. It is the responsibility of this committee to determine to what airline points service must be provided in wartime; and then to work out a route pattern, the "war air service pattern," which will meet national needs and which will result in the most effective utilization of the remaining aircraft inventories, which will be comprised primarily of short-range, four- and twin-engine aircraft.

Increasing use is being made of air transportation services by United States industries and other commercial enterprises in their distribution and marketing processes. In fact this use has grown to such proportions, and in wartime will probably assume greater proportions, that it must be reckoned with in mobilization planning. In a country suffering extensive bomb damage, industries will have an urgent requirement for airlift in order to rehabilitate plants, to prevent work stoppages, and the like. Sustained military operations require the continued and uninterrupted operation of war-supporting industry. The

Government recognizes this fact. It is currently working with the airline industry to determine the essential civil airlift requirements and to devise the most feasible method of meeting these requirements, as well as those of the military. The DOD is actively participating in this program.

The military procurement of aircraft speaks for itself insofar as DOD support of the aviation manufacturing industry is concerned; and you are familiar with the military use of commercial air transportation services. Equally important in time of mobilization are the repair and maintenance facilities operated commercially. In order to insure this capacity to support military forces in wartime, increasing use is being made of commercial facilities for the overhaul of military aircraft and component parts thereof. Today's national policy of deterrent air power dictates that we maintain a military capability strong enough to convince an enemy that war against the United States or its allies would invoke instant, devastating retaliation. As a corollary, it is mandatory that air transport must be present to complement our combat strike force. It is the objective of the DOD to develop and maintain the transport capability which is required to insure the flexibility and mobility of our combatant forces.

In conclusion, I hope this digest of transportation planning activity within the DOD will assist you in your course at this important institution. Transportation has been my lifetime study; and I am more convinced than ever of the need for more planning and better organization of its functions with respect to national defense. As time goes on, transportation appears to be receiving more recognition in keeping with its importance. I will be glad to answer any of your questions; and for those of you who may wish more detailed information for use in connection with your studies here at the college, I wish to extend a welcome to visit me or the members of my staff at any time. It has been a pleasure to have appeared here today.

QUESTION: Mr. Smith, in case of an all-out mobilization is there in the Department of the Air Force any agency that is set up to handle transportation; or is that all together in one centrally located place?

MR. SMITH: It is anticipated that it will be done through the wartime transportation organization that we hope will be set up as an agency in the ODM. It is not yet in existence. There is none in existence at the present time that is all gathered in one place.

QUESTION: Would you please comment about the desirability of having such an agency?

MR. SMITH: We are so much in favor of it that I think it was our agitation to the ODM that resulted in the creation of this new post of Coordinator of Defense Transportation. We advocated it not only in the case of air transportation, but also in the cases of rail and water. We thought there were too many loose ends and too many places in which people were talking about transportation but not doing anything about it. We had the feeling that for all agencies of transportation there should be one control organization. And we felt, additionally, that it should not be in any organization that is a claimant for transportation; that it should not be in the Department of Commerce and not in the Department of Defense, but in some independent nonclaimant organization; we could think of none better than the ODM.

That is the reason we urged Director Flemming to create this position, one intent of which is, we hope, to set up on paper a wartime control organization for transportation which will have not only the different organizational structures necessary, but, on paper, the men and money, to fill all those posts.

It might be that the overall organization will have to be headed by what we call a transportation war lord. Under this war lord will be, as these plans are at present in existence--they have never been implemented--an air section, a water section, a ports section, land, and so on; that there would be one place in which we tie together all these loose ends of transportation and have one centralized control.

QUESTION: Mr. Smith, one of the greatest problems the military departments have is the supply of spare parts, because of the large number that we need to have when a vehicle breaks down, or equipment is worn out or is past repair. Would you discuss the possibility of transporting spare parts exclusively by air transportation; and whether, in your opinion, doing away with the longer pipelines that we must have with the conventional rail and water movements and by motor vechicles would on the overall basis be more expensive or less expensive?

MR. SMITH: Our feeling is that in the case of a great many items of supply--and that would be one of them--we will either go to what we call premium transportation--air transportation would be a good example--which would mean a reduction of the supply going through the pipelines. It would be more economical, and certainly give much better service,

we think, to the military departments if we should develop more of that premium transportation.

In order to have something of that nature in existence, and in order to have some experience in a thing of that kind, the Air Force has now operating under contract what we call "LogAir," which is a contract operation daily between certain Air Materiel Command depots throughout the United States. I think the experience to be gained from that is going to be very useful on this very point that you have raised.

There was a very extensive study made by Harvard University--I don't think it was before 1952--in which it recommended very strongly a reduction of the pipelines by the use of faster transportation, including air. But it pointed out that before you can overnight switch from the old conventional types of transportation to your speedy air transportation, you must change a lot of other things in the military and private freight procedures, in order that your gain in that respect will not be lost through delays in the conventional types of transportation. It would require a great many changes before we could get down to the point where we probably should be in our premium or air transportation, where we can get its full benefit in the reduction of pipelines and better services.

QUESTION: Mr. Smith, you have mentioned tax amortization being used as an incentive to encourage commercial carriers to procure the end items required for mobilization. I am not sure exactly how that works. In other words, does ODM have authority to grant it without obtaining permission from any other Government agency? And how does the company use it? Just what would be deducted from what in the tax picture?

MR. SMITH: They have authority under the law to do that from day to day. They have what we call blanket authority--I think, more or less at their discretion, based upon recommendations received from other agencies--to say whether or not to grant amortization in specific cases at any particular time.

As I said, they have that now on freight cars and passenger cars. I believe in the one case it is 85 and in the other 80. That means, as I understand it that they are allowed to take 80 percent of the cost of the item and amortize that over a period of 5 years rather than over the long life of the car, which would be 20 years or more.

Bill, if you don't think I have answered that question sufficiently, will you give some more detail?

MR. WILLIAM P. GUILER: Chief, Transportation Planning Branch, Office of the Assistant Secretary of Defense (Supply and Logistics): ODM often sends the DOD applications from the transportation organization, as you have just mentioned, for freight cars or passenger cars. Just yesterday we had referred to us an application from the Southern Railroad covering the proposed construction of more than 100,000 dollars' worth of main track. Just recently ODM has brought in main-line construction under this program. ODM is asking DOD to see if it can find any relation between these proposed improvements and national defense.

Another example is this: The Southern Pacific wants to replace that long wooden trestle across Great Salt Lake with a permanent rock fill. It is going to cost many millions of dollars, and it will take probably several years for its completion. The application was submitted to the DOD, and we told ODM the relation between that and moving personnel and cargo to the west coast ports in the event of war.

MR. SMITH: That is a percentage, isn't it?

MR. GUILER: That is a percentage, depending on the relation of national defense. Sometimes it is 50 percent, or it may be 80 or 90 percent, if that percentage is announced beforehand. We have numerous applications. One pertains to a brake shoe company that wants to set up a new plant and is trying to tie that in with the necessity for having a certain production capacity of these components. As you can well imagine, the majority of these people would like to find a way that it would have some relation to defense.

QUESTION: My question pertains to the increased use of airlift in the next war. It is well known that during the last war MATS carried around an awful lot of useless steel and wood in the form of excess weight in the cargo transported. We know that if we could, for example, design out about 20 percent of the weight in our ground generator, our power plant, we could carry about five of them instead of four, which in effect would be an increase in our airlift capacity. What is the DOD doing to encourage the military, or to prod the military, so to speak, into designing that weight out of the equipment that is going to have to be carried in that way?

MR. SMITH: We are trying not only to reduce the weight of the bare item itself, but also the weight normally required for the packing of this material, these end items, for transport to the points where needed. We have recently been actively trying to reduce not only the weight of the item itself, but also the weight of its packing and the other material that goes into it. And, as you know, they are also trying to design planes with parts of less weight, so that they can carry more fuel and more payload.

We are having the problem right now, as some of you may know in the Air Force, of trying to use a very light-weight radio receiver and transmitter. It is fine from the standpoint of reducing weight, but it is not presently 100 percent satisfactory from the standpoint of function. We may be going to extremes in one regard and causing damage in another.

But, the problem and the practice generally is receiving attention--perhaps not as much as it should be, but it is certainly not being overlooked.

QUESTION: Going back to our Democratic regime, at the Key West Conference there was an agreement made whereby the Navy would be responsible for water transportation, the Air Force for air transportation, and MATS for the rest. At that time there was some agreement as to just where land transportation would come in. What is the policy now? Is each service still handling its own or is there overall centralized responsibility for land transportation? What is the thinking on that?

MR. SMITH: There is no centralized responsibility for land transportation. Each of the three services--and you might also add the Marine Corps--is responsible for its own surface transportation in the zone of interior.

There has been a great deal of talk about the very subject that you bring up. That may be sort of a touchy one. There have been a lot of people asking: "We have the Military Air Transport Service, and we have the Military Sea Transport Service. Where is the Military Land Transport Service?" Well, it doesn't exist; each one of the services has its own responsibility in this regard.

Whether it will change within the next few years I would prefer not to predict. But it is a problem and it is being considered. I do think however--and I don't believe anybody would object to my saying this--

that under the present method there is a good deal of duplication. I think unquestionably even in the case of emergency it would cause us a lot of difficulty and probably make rather ineffective some of our controls. It is a matter that is receiving consideration.

QUESTION: Did I understand you to say that the DOD would control the allocation of priorities on air transportation in time of emergency?

MR. SMITH: That is the present plan. There is in existence a pamphlet of some 100 pages on the subject.

QUESTION: Isn't that contrary to the plan that these controls should be in the hands of a nonclaimant agency?

MR. SMITH: I think, if we get this agency in ODM, this function would automatically go over to this organization. As it is now written up, it will be in DOD. But I know we have discussed that very thing. Our feeling is that, without any question, if we get this wartime transportation control in ODM, this would go right along with it and be a part of it.

QUESTION: Under this amortization I belive you mentioned that the idea has been that these contracts would be cost-plus-a-fixed-fee. We have had speakers say that this is not considered the most desirable type of contract. Would you care to comment on that?

MR. SMITH: I don't know too much about the desirability of that type of contract but it is the plan now contemplated. I will call upon Mr. Ralph Sheaf to answer that question.

MR. RALPH M. SHEAF, Transportation Planning Branch, Office of the Assistant Secretary of Defense (Supply and Logistics): What is contemplated is sort of a World War II general agency agreement, whereby private shipping companies would operate ships on the basis of so many dollars a day. Regardless of whether or not you like the cost-plus contract, and whether it has certain disadvantages, it is the only way we can see to do it.

MR. S. S. HILL, Jr.: You mentioned the freight car population as having declined to 1,750,000 cars of all types. We have been quite worried over here by the decline from the goal which had been set up. I wonder whether we may look forward to any program for expanding the

fleet either by such a Government subsidy as we might arrange for or perhaps by trading in old cars for new ones. Would you comment on that?

MR. SMITH: It is a rather serious problem. That is one reason this committee was appointed just recently by the Director of the ODM. It was for that very purpose--to study the requirements with regard to classes of cars and their availability to meet those requirements.

It is quite certain that there will be a shortage of railroad freight-car equipment. So the big question is going to be--and it is one that might cause a lot of concern, I am sure--How are we going to overcome that shortage and meet the requirements ?

There are several plans being talked about. I think the one that is perhaps closest to what you have mentioned is a proposal that we perhaps should stockpile, not the completed equipment itself, but the essential parts of the railroad rolling stock; so that, instead of having flat cars and box cars stockpiled--a thing I don't think you will ever get private industry to do; in other words, I don't think they would stockpile cars that they need in their day-to-day business--we will have in some place a supply of the essential parts, with the understanding, or with the suggestion, which has been made, that the requirements of the railroads from day to day for those essential parts be taken out of this stock, so that they are constantly being replaced in the stockpile instead of letting those parts become old.

That is a serious problem, but one that is receiving consideration. There is going to have to be a way found to meet it. I don't think we can expect private investors to allow many cars to stand on the tracks unused. I don't think the Government would want to do that either. But we might agree on some plan to stockpile some of the parts. It is a serious problem. It is receiving attention.

COLONEL NORMAN: Mr. Smith, I am sure I express the true feelings of everyone when I congratulate you for an outstanding lecture and discussion period. Thank you very much for coming over.

(1 Feb 1955--450)S/gmh