In July, 1940, there were 500,000 men in the armed forces of the United States. In July of this year there were about 9,200,000. In July, 1940, there were 4,100,000 workers in munitions industries. In July, 1943, there were 9,700,000. In July, 1940, there were 48,100,000 workers in uniform and in the employed labor force and in July, 1943, there were 64,600,000. These few figures are in themselves dynamic. They are so dynamic that few comprehend their significance. In fact, I doubt if there is a human being alive today who can fully comprehend all of the changes and adjustments that have taken place in this short period of time. At the same time it is true that upon the extent to which we can understand the forces that have been in motion depends the nature of our personal convictions concerning the immediate future.

It is my hope in this discussion to outline some of the dynamic factors involved in the mobilization and utilization of the nation's manpower in time of war so that we might better understand what has happened, better comprehend what must happen, and thereby enjoy fully deserved pride in our accomplishments and unswerving confidence in the future.

WARTIME ECONOMY

This is a wartime economy and not a peacetime economy. While that is a simple and obvious statement we do not always realize the vital differences in the two. To understand the manpower problem we must understand the type of economy in which it exists.

Manpower needs and production loads cannot be predicted with the same accuracy and skill over the same periods of time when a nation is fighting a war as they can when that nation is at peace. Consumption trends which can be estimated and planned with some degree of accuracy in peacetime are now governed by the degree of success or failure of military campaigns.

The course of war cannot be accurately predicted. Despite popular conceptions derived from the early campaigns of the Axis powers war cannot be run by the calendar. Neither can it be predicted in terms of past war experiences.

The pattern of war does not remain static. You cannot have millions of men fighting under varying and changing conditions without having their needs change in terms of specifications, quantity, quality, and location. This influences manpower and production schedules and every predicted change in these schedules is felt in every community of the country.

In peacetime the needs of a worker who is taken out of the production line are much different from his needs when he is taken out of the line in wartime to enter the armed forces. The 10,800,000 men taken out of the production line to enter the armed forces create an obvious hole in the productive capacity of the country. What is seldom realized, however, is that these 10,800,000 men in the armed forces not only create a loss in production but also place a tremendous additional load on the production facilities of the country because of their far greater need in terms of equipment, supplies, munitions, and machines of war.

This tremendous production which the armed forces require for their support and needs is not in turn translated by those men into productiveness which contributes to the standard of living of the nation. The significance of this observation is that it is impossible for any sane human being to conceive that we can supply men and material for war and at the same time preserve or even approximate our civilian standards of living in peacetime. War requires sacrifices by all whether they be in uniform, in the production line, in the home, or contributing to the maintenance of civilian economy. This is a "manpower dynamic" that is essential to our understanding of the manpower problem.

UNCERTAINTY IN MANPOWER PLANNING

The War Manpower Commission is the agency of the Federal Government to which has been assigned the responsibility for planning and administering those programs required to mobilize and utilize the human effort in this country. We have been criticized by individuals and groups of individuals for our indefiniteness in many respects and for changes in program and activities. It is my sincere belief that if those individuals understood and accepted the factors involved in this problem they might consider their criticism as being a bit unjustified. Nothing would delight us more than the possibility of telling every worker and employer in this country exactly what he might expect over the next three, six, nine, or 12 months. That individual or group of individuals

by Lawrence A. Apple}
who can predict the course of the war over the next 12 months could give every worker and employer a manpower calendar in terms of quantity, quality, and location. No one, however, has yet hazarded a prediction along this line which he is willing to support to the point of taking the full responsibility for the results upon the lives of 135,000,000 people.

All manpower plans and estimates are subject to certain changing conditions which are all elements of a wartime economy. Some of them are as follows: Casualties, physical standards required by the armed forces, production schedules and requirements in relation to the materials of war, legislation, manpower needs of employers of all types, dependency and occupational status of individuals, and so forth and so on. The changes in most of these are influenced by military campaigns and needs. The test of success in manpower planning and administration is quick adaptability to these changes as they occur or are imminent. This is one of the "dynamic factors" influencing the manpower problem of the nation.

MANPOWER ARITHMETIC

All of the statistics bearing on the manpower question might not only be boring but also would be too voluminous to be easily comprehended. Following, however, are a few significant figures which are at the very heart of the nation's activities.

There are 22,000,000 men between the ages of 18 and 37 inclusive registered by Selective Service Boards. This includes all men regardless of physical, military, or occupational status. Approximately 14,000,000 of these men can meet the physical requirements for military service.

The armed forces will require 10,800,000 of this 14,000,000 by the end of this year. That leaves us a balance of 3,200,000. Of this number 1,500,000 will be deferred for agriculture.

By simple arithmetic we now have 1,700,000 left for non-agricultural deferment. While that is more than are now occupationally deferred it must be realized that there are many men who have been deferred for dependency who, if they were not so deferred, would be for occupation.

Before we jump to the conclusion that there are a possible 1,700,000 deferments of able-bodied men for non-agricultural occupations, we must realize that none of the above figures provide for any replacement which will be needed to maintain the armed forces at 10,800,000. That need will be determined by the human cost of the military campaigns that are ahead of us. Neither do they provide for personal hardship cases.

This manpower arithmetic is another one of the "dynamic factors" which influence the handling of the manpower problem.

MANPOWER ALLOCATION

AND DISTRIBUTION

The whole manpower situation has definitely shifted within the last few months from one of utilizing the manpower reserves of the country to one of allocation and distribution of the manpower that we have. In July, 1940, there were 9,300,000 unemployed in this country. Within the next few months there will be less than a million regularly unemployed and these will be unemployables. The regular labor reserve is gone. New resources have to be developed and that which we have must be used to the greatest advantage in this war effort.

Allocation and distribution of manpower when there is no manpower reserve requires some kind of control of the common manpower pool. If various Government and private employers requiring workers were permitted to recruit where they pleased, when they pleased, and as they pleased, you would get a chaotic condition in the labor force of this country that would definitely retard the war effort and would quite possibly compromise our chances of ultimate success. That would mean that one employer would be recruiting from another and you would have wild competition in incentives. This the country cannot afford in wartime.

If it is accepted that control is necessary, then it is a matter of personal judgment as to where that control should rest. The only logical conclusion would seem to be that the Federal Government should exercise these controls in time of war. This is a "dynamic factor" in dealing with the manpower problem and unless it is accepted by the country as a whole the problem is made doubly difficult.

VOLUNTARY VERSUS COMPULSORY CONTROL

Control of the common manpower pool can be voluntary or compulsory. That, of course, is an elementary observation. It has, however, quite specific implications. The extent to which control must be voluntary or compulsory is dependent upon the amount of administration required.

The amount of administration required depends upon the cooperation which the public gives the Government agencies to whom the responsibility for control has been delegated. If industrial management, labor, and agriculture are willing to exercise voluntary control within the framework of Federal Government policies and
more abundant than the latter. Another common herbivore is the horse. This animal is smaller than most of the horses of the North American Pleistocene. Evidently sufficient verdure was present in the vicinity of the cave to sustain both grazing and browsing mammals. Apparently individuals of these larger animals floundered into the cave or their bodies were dragged in by carnivores.

Remains of an extraordinarily diversified assemblage of flesh-eaters are found in the San Josecito deposits. The cats include the sabre-tooth, the jaguar, the giant jaguar or great lion, pumas and lynx. The canid family is represented by foxes, coyotes and the extinct dire wolves. A black bear and an extinct short-faced bear are recorded. Among the smaller carnivores are the weasels and skunks, including the hog-nosed skunk. Insectivores and bats have been found fossil, and among the latter the vampire bat is perhaps the most interesting.

A survey of the entire mammalian assemblage makes the conclusion inevitable that the life of the Ice Age in this region of Mexico was far more abundant and more diversified than that of the present. Definite impoverishment of the bird and mammal assemblages has come with the passing of the Pleistocene and the advent of Recent time. It appears logical to conclude that the richness of this past life developed under optimum climatic conditions, furnishing for the herbivores even greater opportunities to obtain food than prevail in the area today. It should be mentioned in this connection that the cave occurs now in an elevated region supporting a pine and oak plant association. More extensive grasslands interspersed with forests, and existing under at least a slightly cooler climate with greater rainfall than the present, may comprise some of the major features of the environment in which these organisms lived.

Thus, from San Josecito Cave comes a tangible link with the life of the immediate geologic past. The kinds of creatures that once lived in and about the locality are, for the most part, readily identified by the “dry bones” entombed in the strata laid down in the cavern. The facts of occurrence and association of the fossils furnish likewise a basis for an interpretation of the conditions under which the birds and mammals existed. This material record of an episode in later geologic history not only adds many new facts to paleontology, but also extends geographically the picture of the Pleistocene life of the North American continent.

**Manpower Dynamics**

*Continued from Page 9*

standards, a minimum of administration is required and the success of voluntary control is assured.

Any control, however, impinges on individual rights and privileges. Unless it is accepted that certain individual rights and privileges must be restricted in time of war, voluntary restrictions cannot be developed and compulsory ones might be imperative. This is another “dynamic factor” in dealing with the manpower problem.

The mechanism has been established by which management and labor can agree to the restrictions upon freedom of movement to which they will both submit themselves. This mechanism is known as War Manpower Commission voluntary stabilization agreements. The National Management-Labor Committee of the War Manpower Commission has referred to these agreements as types of voluntary compulsion. That may sound a bit facetious but it is extremely fundamental. If we are willing to write our own rules and are willing to abide by those rules it is a much more pleasant form of self-denial than rules which are promulgated by others and forced upon us. The only enforcement behind such rules is honor and loyalty and, after all, what greater form of enforcement is there? This is another “dynamic factor” in dealing with the manpower problem which can only be realized to the extent that the people of this country accept the implications of this basic principle.

The handling of the manpower problem starts and should be handled almost entirely within the employer’s individual establishment. In dealing with manpower the employer must give ample consideration to the type of management practices which exist in his establishment, the caliber of the supervision, the nature of the labor relations, the personnel program, policies, and practices that exist.

For decades an educational process has been going on toward the creation of better employer-employee relationships. Particularly since the last war there has been a rapid development in this field. Those employers who will review the constructive proposals that have been made since the last war will soon solve their own manpower problems. They will immediately give personal and diligent attention to turn-over, absenteeism, the use of types of workers not qualified for military service, and the extent to which the full capacities of workers are being utilized. Since the manpower situation in time of war requires individual sacrifices, there are no exceptions. If it is appreciated, therefore, that there must be restrictions upon both management and labor, it will likewise be appreciated that the nature of those restrictions and how they will be administered should be worked out jointly by all parties affected. This is a “manpower dynamic” of the greatest import. How much longer will some of us fail to accept it?

**SUMMARY**

This has been a rather general presentation of specific principles. There is nothing in it which makes news or startling headlines. To some it may even be dull and boresome. It may, to others, be disappointing since it does not answer their own specific problems.

This presentation is a sincere attempt on my part to introduce into this discussion certain basic factors which must become dynamic in the consciousness of those who hope to contribute tangibly to the mobilization and utilization of the nation’s human resources. Anyone who does not accept the fact that wartime economy is different from peacetime economy, that manpower plans cannot be definite predictions, that there is one correct answer to manpower arithmetic, that the problem is now allocation and distribution of manpower, that controls are necessary, that the extent to which the controls are voluntary is dependent upon the amount of administration required, and that in the last analysis the manpower problem has to be solved in the establishments in which the work is being done by the workers and the employers who are held responsible for getting it done, will find that adequate handling of the manpower problems facing him is impossible.

It is a great satisfaction to realize that there is a growing understanding of these manpower dynamics. There is increasing indication of the willingness of local communities and establishments to solve these problems at the source. This is a hopeful sign.