

# Prospects for Postwar Industry In Southern California \*

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**W**HAT is to become of the greatly expanded war industries of southern California? Will they collapse and leave industrial wreckage in the form of serious unemployment, empty factories and corporate bankruptcies? Or will these enterprises convert to peacetime production and consolidate an important economic advance for southern California?

## OPTIMISTIC APPRAISAL

The author's summary conclusion is an optimistic one. There is no doubt but that the effect of the war will have been to stimulate industry in southern California in a permanent way. In quantitative respects there will be a tremendous contraction, both in number of enterprises and in number of workers. Some contraction is desirable, if only to relieve the critical shortages in the area, especially as to manpower. In qualitative respects the effect of the quantitative contraction will be highly beneficial. The more poorly managed enterprises and the less productive workers can very well be dispensed with. What a wonderful feeling it will be for employers to be able to fire unsatisfactory workers again! We may look for the continued profitable existence of practically all well-managed concerns, although most will be substantially smaller than at their wartime peaks.

The key to the postwar situation is the competency of the management of the enterprises that must make the transition from war work. In recent years of experience in production work for the Army Air Forces, especially intensive in the case of southern California, the author has observed the operations of a large number of these enterprises. The war has lasted so long that most of these concerns have had a thorough education in production management. They started as war babies, but they have grown up to be "plenty smart." There is no doubt but that many of them will survive and make an important contribution to the industrial economy of southern California.

So much for the conclusion. What is the reasoning that has led to this optimistic appraisal?

## RESIDENTIAL OR INDUSTRIAL AREA?

Before World War II southern California was preeminently a great residential area. The city of Los Angeles was one of the largest retail distribution centers of the United States. Its relative position in wholesale trade and in manufacturing was far less important than in retailing. Oil was the basis for most heavy manufacturing industry; motion picture production had been centered here ever since the industry began; aircraft manufacturing was becoming established as a major industry; the design and production of women's clothing was gaining national prominence; there was the long established complex of diversified industry based on the rich agricultural resources of the area. But southern California has been and probably will continue to be

one of the preferred places in the United States for people to live in. This fact is basic in projecting the industrial pattern that is most likely to emerge. As yet, there has not appeared in this great residential population a distinctive industrial working class. In this regard Los Angeles differs from most large cities. This means that the industrial development of the area thus far has been in proper proportion to the broader development of the community. We may look for a continuation of such a desirable situation.

World War II superimposed an industrial distortion on southern California. German successes in 1939-40 in Poland, Norway, Holland, Belgium and France resulted in war orders which began to change the industrial balance of the local area. The Navy and the Maritime Commission made plans to build ships at Los Angeles Harbor, and the aircraft companies started on their remarkable expansion. The shipbuilding effort expanded from most modest beginnings, but Los Angeles was already the leading aircraft production center of the United States. Since the war began, several cities on both coasts have equalled or exceeded Los Angeles in shipbuilding, but no other community has approached it in the production of aircraft.

The aircraft and shipbuilding companies are the more apparent industrial activities so greatly expanded by war demands, but an area of expansion of especially great significance to postwar industry in southern California was that having to do with the hundreds and thousands of accessory enterprises. These concerns, large and small, supplied the complex needs for parts, materials, subassemblies, and services required by aircraft and shipbuilding companies. After the war, these companies cannot depend primarily on the aircraft and shipbuilding industries for their continued existence. Units of this group are ideally suited, however, to convert to peacetime operations serving the southern California economy.

But before giving special attention to this significant group of subcontractors, vendors, and accessory enterprises, let us look for a few minutes at the aircraft and shipbuilding industries themselves, to note their postwar prospects.

## AIRCRAFT AND SHIPBUILDING

First, shipbuilding. The program in this industry already is being brought to a greatly reduced volume. The war effort has demanded an excessive overproduction of ships, measured in the light of peacetime needs. After the war it is probable that only a restricted and select list of yards will be kept in operation on the construction of new ships. The shipyards of Los Angeles may not be included on this select list, because of the possible relative advantage of other shipbuilding areas. Ship repair is another matter, however, and already shipbuilding facilities are being utilized increasingly for this purpose. In this regard Los Angeles undoubtedly has an important and secure future. The tremendous

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immediate flow of goods through Los Angeles Harbor will result in the use of a part of local shipbuilding facilities for ship maintenance and repair, and the continued employment of many of the more highly skilled shipyard workers. The long run prospects for this ship repair industry also are good. It is probable that the United States will maintain a merchant marine after this war at least double what it was before the war. The number of people required by the ship repair activities at Los Angeles Harbor will be only a fraction, perhaps 10 per cent, of peak wartime requirements, but they will include the skilled nucleus of craft and engineering specialists.

Second, aircraft. Southern California will remain the leading center of aircraft production in the United States for at least several years after the war. During each year of the war, approximately two-thirds of the total aircraft production has been directed by West Coast managements, although half of this amount was produced in Mid-West branches of West Coast concerns. At present the relative position of western concerns over eastern concerns in the national picture has increased. This concentration of an industry vital to the national defense in a geographically small and exposed location is, from a security standpoint, admittedly undesirable. Efforts will be made to secure greater dispersal. It is difficult to see a practical way to bring about such a relocation. The present tendency is, in fact, to return aircraft production to the mother plants, as war demands taper off.

The aircraft industry undoubtedly will contract severely, but there will be a continuation of substantial, balanced design, development and production organizations at each of the mother plants here in southern California. It is probable that local concerns will get more than their proportionate share of postwar business, at least in the immediate postwar years. Other factors which will cushion the shock of contraction after the war will be, first, the fact that work now subcontracted in the East to such companies as Briggs, Murray, Good-year, Pullman and Hudson eventually will be returned to the mother plants, and, second, that production methods will be adjusted so that they will be economical for smaller output, with the result that more workers will be required to produce each plane that is built.

In spite of this substantial prospect for the mother plants of the local aircraft industry, tens of thousands of workers now employed will no longer be required. This group of displaced war workers probably will be less of a problem than laid-off shipyard workers. About half of the aircraft group will be women, many of whom will leave the industrial labor market.

#### ACCESSORY INDUSTRIES

Now let us consider the case of the large number of concerns which have grown up during the war to serve the aircraft and shipbuilding industries. The situation which brought them into existence—to increase the productive capacity of those holding direct contracts for airplanes and ships—will be reversed. Much work now subcontracted will be pulled back. In rare cases only, during the extensive war experience, did subcontractors prove to be as low cost in their operations as the airplane companies themselves.

The thousands of large and small concerns which have been active in war work in southern California fall into several groups:

1. Prewar companies which converted to war work. When the war is over these companies may be expected to return to their former line of operations. In some cases this may mean a severe reduction in size. Many

of these concerns will be tempted to retain the large scale of operations to which the war has accustomed them. They may use their normal civilian work to hold their organization together while they experiment with new work.

2. Prewar and new wartime companies whose line of operations during the war can be expected to continue, on a curtailed basis, after the war. This will be the case of a considerable number of manufacturers of aircraft fittings, for example. Los Angeles has become such a center for the aircraft industry that manufacturers all over the United States may be expected to place orders with specialty manufacturers here.

3. Wartime companies whose entire business will disappear after the war. This group constitutes the heart of the problem. It includes sheet metal fabricating and assembling enterprises and many machine shops. The shortage of facilities to do machining became so critical in 1942 that a tremendous expansion was undertaken. In 1944 a condition of excess capacity existed, and some of the less successful enterprises went out of business. The prospect for many more of these machine shops after the war is not good. In few cases are they capable of manufacturing a complete article; so they must depend upon job contracts from others.

With this quick view of the wartime expansion of industry in southern California in mind, let us now turn to the industrial opportunities that will exist in peacetime lines after the war.

#### OPPORTUNITIES

It must be remembered that the local metropolitan area is one of the densest and richest retail markets in the United States. After the war there will be a tremendous pent-up demand for a large assortment of the articles that are familiar to every household. Professor Slichter of Harvard University has estimated that there is an accumulated need for 3,500,000 vacuum cleaners, 7,200,000 electric clocks, 23,000,000 radios, 5,000,000 refrigerators, 10,300,000 electric irons, 3,000,000 washing machines, 1,500,000 waffle irons, 1,800,000 heating pads, 3,700,000 percolators, 4,500,000 toasters, and he has noted that there are now 7,000,000 fewer automobiles in the country than there were before the war.

Southern California's share of these accumulated needs would make an impressive volume of business. Some lines, such as automobiles, probably could not be developed profitably on a local basis, but others present genuine opportunities. Eventually, nationally known trademarks probably will regain much of their former market, but for at least three years the prospect is that demand will surpass supply, and well-managed local enterprises might enjoy considerable success. The shelves of stores are bare, customers are now not as discriminating as they will be and normally are, and the great manufacturers for the national market will find it difficult to move fast in accomplishing the transition to full peacetime operations.

In addition to the manufacture of established types of articles, the door will be wide open after the war to exploit commercially the many techniques and situations that have been developed during the war, some of them revolutionary. Among these are cheap and plentiful aluminum and magnesium, improved and plentiful alloy steels, tremendous quantities of cheap electric power, high octane fuels, rapid advances in petroleum chemistry, especially in relation to such applications as synthetic rubber, rapid advances in the field of plastics, marked steps forward in radio, especially radar and

television, jet and rocket propulsion and the gas turbine. Professor Slichter has referred to this war as the most remarkable of all time for the number and the significance of the technical developments, taking place while it was being fought, which have peacetime applications.

With such a variety of industrial opportunities on every hand, why should any competent war enterprise have to fold up? What is necessary to make the transition to peacetime work? The answer, simply stated, is good management; management with foresight and management with breadth of understanding of all of the factors involved. There will be two special problems which are probably new to most war industries: product design and sales management. During the war there has been but one customer, the government, and normally it or the prime contractor provided the detailed specifications for the product. These two functions, product design and sales, must be recognized by the war industry with peacetime ambitions.

Let us turn for a moment to an aspect of the general problem of conversion to civilian production. Much will depend on the time that is afforded to make the shift. A good start already has been made. Last summer and fall, spot authorizations to make certain civilian goods were granted by the W.P.B. The declaration by the Navy that shipbuilding was to be curtailed meant that the labor market would ease. The announcement that B-17 production at Lockheed and at Douglas Long Beach was to be reduced 50 per cent removed pressure from a large number of subcontractors and gave them more time to work out alternate plans. If Japan had held out for any considerable time, there would have been a minimum of shock to war industries and a maximum of opportunity to make an orderly transition to civilian goods production. The war in the Pacific exerts a tonic effect on all West Coast cities because of the tremendous volume of war goods that flows through them.

#### PROSPECTS FOR LOS ANGELES

We have been told that Los Angeles will play an important role in the promising future of the Pacific area. This opportunity is great indeed, both in manufacturing and in trade, but there is a big "if" as to its fulfillment. If the world has really learned how to live together in peace as the result of this horrible war, then world reconstruction can be accomplished rapidly. Los Angeles will need all of its industrial resources to serve not only the rising standard of living in the Pacific area, but all over the world. It remains to be seen whether the political climate of the world is ready for this constructive possibility. Unless thinking on international matters becomes much sounder than it was before the war, the future of Los Angeles in so far as foreign trade activity is concerned will be modest indeed.

It may be disappointing to some that the author has not spoken of the possibility of the aircraft companies' taking up some line of activity other than the manufacture of aircraft. Such a step would be unwise. The aircraft manufacturers have excellent productive talents and some of the production techniques are readily applicable to other lines of goods. With the war at an end, however, competition will not be largely on a production basis. It will shift to product design and to sales. If some of the great national concerns with established distribution organizations were to arrange with aircraft manufacturers for the production of articles consisting largely of sheet metal, especially aluminum, it would make sense. This would be the case in such lines as metal furniture, bus and trailer bodies, and display equipment. It is probable, however, that non-aircraft

companies will be as well or better situated to take on this kind of work. There does not seem to be much possibility for any substantial development along this line. One may rightly hope that the aircraft companies will stick to their field. The aircraft industry itself has tremendous peacetime potentialities; there are probably no pastures greener than those of the aircraft industry during the next few years.

We hear frequently of the possibility of the establishment of new industries here in southern California as the result of the war. This may be; the Kaiser steel plant at Fontana is an example. Judged on an economic basis, this venture may be regarded as a war industry. Its adaptation to the peacetime economy of the southern California area probably will be a political football for years to come, much as Muscle Shoals was after World War I. Mention has been made of the possibility of establishing completely integrated automobile manufacturing activities on the West Coast. This is not an impressive possibility. The prewar practice by Ford, General Motors, Chrysler and Studebaker of assembling automobiles on the West Coast may be carried a step or two further; a body manufacturing plant, for example, might be located here. The great automobile plants probably will decentralize operations away from their present Michigan centers and the West Coast may get a few additional subassembly operations. This is all that one may look for along the automobile line. During the war Pasadena has become a substantial center for the manufacture of scientific instruments and gauges. This industry has favorable peacetime possibilities.

#### THE LABOR SITUATION

An important factor in the conversion of wartime industries in southern California will be the attitude of organized labor. Los Angeles owes much of its progress and present superior economic status to the situation that has existed as to the non-militant policy of labor. Much of this growth has been at the expense of West Coast cities where labor attitudes have discouraged industrial location or expansion. The prospect of labor peace in southern California continues to be good. The labor movement locally has progressed during the war in a statesmanlike manner. As a result, it is in a position to deal constructively with the great problems that will be encountered in the conversion of war industries, not the least of which may be the reduction of labor costs through wage cuts. Los Angeles characteristically has been a difficult labor market for unions to control. It is probable that this basic condition will continue. We need but look at the armed-camp situation between industries and unions in Detroit today, to appreciate how fortunate is Los Angeles in this respect.

#### ENGINEERS AND SCIENTISTS

In conclusion, a special point may be made of the role that engineers and scientists can play in this adjustment of southern California industry to postwar operations. They can take a leading part in solving the technical problems of product design and of engineering sales which companies will encounter when they take up the production of civilian goods. Whether in a laboratory or in an administrative capacity, one may hope that they will make the unique contribution to the solution of this critical industrial problem of which they, as engineers and scientists, are capable. There is an opportunity for them to profit in personal and professional ways, as well as to fight a significant battle to win the peace.