

# When the Defense Boom Ends

**INDUSTRY PLANS FOR AFTER THE WAR**



*Prepared by*  
**Research Advisory Service**  
**LIBERTY BANK OF BUFFALO**

## FOREWORD

Those who are concerned with the problem of cushioning the post-war readjustment of American industry will find encouragement and help in the comments and reports of manufacturers, economists, and engineers summarized in the following pages. Particularly impressive is the clear recognition of the importance of industrial research for maintaining employment, for providing beneficial use of expanded industrial plants, and for increasing efficiency when peace returns.

The conclusions which are presented here are reinforced by a survey of 1941 industrial research expenditures which was recently completed by the National Association of Manufacturers. This survey of a large group of representative companies showed that American industry is spending an unprecedentedly large amount on research in 1941. One and one tenth per cent of the gross sales of the companies reporting was devoted to research.

If we are to keep America at work after the war, I believe that research expenditures should be still further increased, and there is evidence in the following pages that many alert industrialists share this view.

Dr. Karl T. Compton, President  
Massachusetts Institute of Technology

TO HELP AMERICAN INDUSTRY  
PREPARE FOR THE POST-DEFENSE PERIOD

LEADING MANUFACTURERS HAVE ANSWERED THE QUESTION:

"What are you doing to prepare to keep up sales volume after the current defense market ceases to exist?"

Forty-two selected comments are summarized on pages 2 to 11.

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LEADING ECONOMISTS AND MANAGEMENT ENGINEERS HAVE ANSWERED THE QUESTION:

"What in your opinion should the manufacturer be doing now to prepare to keep up sales volume after the current defense market ceases to exist?"

Thirty-six selected comments are summarized on pages 12 to 23.

OF THE 360 MANUFACTURERS GIVING SPECIFIC REPLIES:

✓ 66% are maintaining or expanding their industrial research programs. Twenty per cent already have new products developed.

32% are maintaining or increasing their sales staffs to improve customer relations and build good-will.

18% X are maintaining or increasing their advertising expenditures.

(Some manufacturers are doing all three.)

AMERICA'S FOREMOST INDUSTRIAL  
EXECUTIVES ANSWER THE QUESTION:

"What are you doing to prepare to keep up sales volume after the current defense market ceases to exist?"

*In order to condense this survey to compact and comprehensible form, it has been necessary to omit many excellent letters. Most of these expressed opinions which were confirmed by the letters which we have reproduced. All replies were valuable for the statistical analysis, and we wish to express our appreciation to those who have cooperated so generously in making this report possible.*

*While certain basic trends of thinking are clearly visible, the reader will also find a stimulating array of conflicting thought on such controversial issues as a tariff, wages of labor, and price structures. These varied opinions have been quoted without regard to the views of the banks which sponsor the Research Advisory Service.*

CHARLES S. MUNSON, PRESIDENT -- AIR REDUCTION COMPANY

"A careful estimate of our business indicates that forty per cent of the increase in sales during the past five years has been due to the development of new products and to new uses for the Company's established products. I think that here lies the answer to your question, for we are constantly trying during this high volume of business to find and develop new uses for our established products and to develop new products. The very speed of this entire defense effort has made it possible for us to introduce more quickly methods which will be lasting, even in peace times. Perhaps another way of putting this is to say that in one year we have been able to promote new uses which in ordinary times would take several years to put into practical operation."

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ROBERT HALL, PRESIDENT -- AMERICAN DISTRICT STEAM COMPANY

"We are laying our plans to interest the Government to supply funds for building municipal steam plants in the smaller towns. We learn that it is the purpose of the Government, at the conclusion of hostilities, to spend between forty and fifty billion dollars over a five-year period, in an attempt to stabilize conditions and also to meet the unemployment problem when the men now in service have been returned to civilian life.

"We believe the construction of District Heating Systems will help to give employment to a great many men, also employment by the manufacturers who will supply necessary materials. By the operation of central heating systems, millions of tons of coal can be saved annually, cities made much cleaner, resulting in an improvement in the health of the citizens."

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J. D. A. WHALEN, PRESIDENT -- BOSTON WIRE STITCHER COMPANY

"Our Engineering Department is working on several new developments which we hope will spread our product over several new fields. If these products are as good as we hope and we can save potential customers considerable money and time,

then we believe that we will develop additional business to take the place of that which we will lose when the present rush is over."

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HERMAN W. STEINKRAUS, VICE-PRESIDENT -- BRIDGEPORT BRASS COMPANY

"Help our customers get Defense contracts if possible. Keep in touch with them even if we have no material to furnish.

"Keep the selling organization intact and on their toes by giving them a training course, a few at a time, throughout the Defense period, so that they will be better men when they have to take over the front lines again.

"Rehabilitate plants and equipment as far as possible and spend as much as we can afford on research and development for new products."

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L. V. BRITT, VICE-PRESIDENT -- BURROUGHS ADDING MACHINE COMPANY

"In our case the potential market created by past and present legislation will, to some extent, replace the present defense market. To enable our organization to better serve this potential market, we have recently enrolled our entire sales force in an intensive study of machine applications to all lines of business."

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R. C. BENNER, DIRECTOR OF RESEARCH -- CARBORUNDUM COMPANY

"Anything which is to be placed on the market after the war should be marketed to a small extent now, in order to educate industry as to its utility and to develop manufacture to a stage where it becomes practical to produce without undue delay later."

R. W. COMSTOCK, PRESIDENT -- COMSTOCK CANNING CORPORATION

"We have studied over the items in our line of products. We have picked out one we think most likely to reach a wide market with ample supply of raw material and likely to be acceptable in good times and bad. We have appropriated a substantial sum of money to be invested in advertising with the hope of taking this product out of the general run of our canned foods and making it 'ours.' The item selected is not yet produced in any volume by other packers."

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EDGAR N. GOTT, VICE-PRESIDENT -- CONSOLIDATED AIRCRAFT CORPORATION

"It is my opinion that in the aircraft industry the most important forward-looking step is the utilization of air carriers for handling freight and express, particularly for transoceanic delivery, in addition to the present passenger and mail routes and extensions thereof. This, of course, holds good particularly for the manufacturers of large aircraft such as we are producing."

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W. A. DARRAH, PRESIDENT -- CONTINENTAL INDUSTRIAL ENGINEERS, INC.

"We feel that the social and political trend during and after the war is likely to be such that business in the United States will be seriously handicapped, no matter what preparations may be made. With this thought in mind, we have set out to prepare a way for ourselves and other businesses in other fields where the same limitations are not expected. After careful consideration, we have selected South

America as our field of activity and believe that Brazil is the most interesting country in South America.

"Our plans include utilizing present types of machinery and processes, moving to Brazil certain key executives, starting new enterprises jointly controlled by Brazilians and Americans under Brazilian conditions.

"Our reports indicate that there is ample capital in Brazil, but the general feeling seems to be that in cooperating with a 'transplanted industry' Brazilian industrialists prefer to have at least a minimum amount of American capital as evidence of American interest."

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J. A. O'BRIEN, PRESIDENT -- DE LONG HOOK & EYE COMPANY

"We are attempting to prevent our customers from over-buying. Our efforts in this respect are along the lines of limiting each customer to what he bought during previous years, plus a reasonable amount for increased business.

"For months we have not sold any merchandise to any customer who had not previously bought from us. It would seem that if all primary sources limited their customers to reasonable amounts, then there should not be a big accumulation of merchandise on the shelves of distributors when this false prosperity ends.

"We have encouraged our employees to establish savings accounts with a Savings Bank. That they may be encouraged to do this, the Company offers a bonus of 6% or 8% on all savings made by any employee."

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L. C. LORD, PRESIDENT -- EARLY & DANIEL COMPANY

"We have noticed one large concern which we think is making a smart move at this time. The major part of their business is in a line which operates under a uniform price basis, so they have nothing to offer except quality and service. Wherever there are independent concerns, their prices are usually considerably higher than those of the independent; however, 25 to 30% of the volume of their business is in another line on which there is no established price basis. They are usually higher in price on that line, but recently they have been lower than any of their competitors. We have arrived at the conclusion that they have made all the profit that they estimate the Government will allow them to keep this year, and now they are going out and making new connections and friends by this method.

"With their established reputation for integrity and quality, any time they have low prices they have no difficulty in securing any available business. It is a little hard on the other fellow, but I believe that they are establishing new connections which will prove to be advantageous."

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F. W. LOVEJOY, CHAIRMAN -- EASTMAN KODAK COMPANY

"We are, partly by force of circumstances and partly deliberately, withholding placing on the market new models of apparatus, so that we shall have an accumulation of new goods to offer after the 'unlimited emergency' is over."

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JOHN D. CRUMMEY, CHAIRMAN -- FOOD MACHINERY CORPORATION

"We are taking an extra heavy depreciation charge-off during these prosperous years, which will result in a low overhead cost when the defense effort ceases.

"We are paying all our executives on a cash plus bonus plan, including a profit sharing plan for employees. The bonus and the profit plan will both decrease in total whenever profits drop off and thus automatically lower our expenses."

"We are maintaining a strong cash position and building up our working capital. We are greatly strengthening the lines which we learned by experience in the last depression continued strong. We are planning ahead in our research department for new designs and new machines to be offered after the defense market ceases."

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A. C. FULLER, PRESIDENT -- FULLER BRUSH COMPANY

"I believe there is great opportunity in meeting lower sales volume by a reduction in prices, the producer depending on increased volume to reduce general or overhead costs sufficiently to maintain the lower price schedule. In order to accomplish it, a close scrutiny of selling and production costs must be made and, temporarily at least, lower labor costs, as well as commissions and other selling expenses, should be made on the grounds that it is better both from the standpoint of the business and those employed in it to accept lower remuneration in the interest of a greater volume of work, resulting in more real wages and commissions."

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CHARLES E. WILSON, PRESIDENT -- GENERAL ELECTRIC COMPANY

"We have concluded that long-range planning, to meet various sets of possible conditions, is in order. To this end, early in the year we appointed a group of our leading research, engineering, manufacturing and commercial men to plan to meet the conditions of the post-defense era. One of the principal clauses in the franchise we gave them was to keep abreast of the great developments of the defense era, with a view to turning as many of these as are available to the purposes of peacetime expansion of business, with particular regard to the possibilities of finding developments of the current period that could be turned into new businesses that will utilize the greatest possible amount of labor in the dangerous decade for the free enterprise system that may lie ahead of us.

"This planning group is also concerning itself with the intensification of development effort in numerous existing large volume businesses, with the idea of having a reservoir of new items, new services available to industry and individual consumers, to create volume in the days ahead -- this latter being done in the belief that our wartime economy may judiciously create and maintain a reservoir of purchasing power which cannot be satisfied during the defense era but which will be available to provide substantial purchasing power and maintain the currently high standard of living."

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ALFRED P. SLOAN, JR., CHAIRMAN -- GENERAL MOTORS CORPORATION

"If we entirely ignore our post-war problems and do not anticipate same so far as we can, then we may well win the war and lose the peace. And, after all, the latter is of just as much importance -- perhaps more -- than the former.

"I am developing a definite program so that throughout all our ramifications we will be realigning our processes, products and policies, to conform to the post-war conditions when the time for applying same, arrives. Perhaps the most fundamental objective I have in mind is the absolute necessity of more intensive engineering, more intensive utilization of materials with the result that goods may be sold at lower prices and hence stimulate the demand. Personally, I cannot help but feel that we are bound to have to accept a lower standard of living unless we inject a greater degree of efficiency in the economy. In other words, we must produce more at less in order to maintain the volume of business in the face of lower purchasing power.

"Dealing with generalities, I might add this: I believe that the post-war era is going to present a real challenge to free enterprise and if American industry does not meet the challenge, the politician will."

E. J. THOMAS, PRESIDENT -- GOODYEAR TIRE & RUBBER COMPANY

"Studies of future civilian markets and their scope, together with possible long-term expansions, are being considered in both the domestic and export fields. This involves not only passenger car, truck and farm tractor and implement possibilities, but additional and new uses of rubber parts for various household and industrial equipment. There should be great possibilities for new uses and new products using sponge rubber, latex material, and plastics for furniture upholstery, wrapping material, clothing, etc.

"We are making preparations to maintain factory equipment in first class shape at all times, to improve building layouts, to install efficient and additional equipment, to institute advertising programs to maintain our high preference and good-will of the consuming public, and to keep close contact with our retail organizations, made up primarily of independent dealers, to assist and encourage them to carry on through the emergency, and to maintain and improve the number and morale of our personnel in factories, offices, and sales fields, both domestic and foreign."

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CARL H. GOHRES, ASSISTANT TO THE PRESIDENT -- GREYHOUND CORPORATION

"One of the things we are definitely laying aside as a program to be taken up during the next business recession is a complete terminal building program. There is no doubt that throughout our system today there are many locations where new stations or terminals are desired or urgently needed, but the construction cannot be undertaken owing to the scarcity, and in some localities absolute unavailability, of labor and materials. Here in Chicago we recently acquired a parcel of property in the Loop for a new union bus terminal, the cost of which, when completed, is estimated to be in the neighborhood of \$5,000,000. The construction of this property will have to await such time as labor and structural building materials, now virtually unavailable, can be obtained.

"The new equipment that we will get this year will represent only a fraction of our normal replacement needs since our replacement needs in normal times easily run into a figure of \$10,000,000, representing roughly five hundred vehicles at a cost of \$20,000 per vehicle. This is no inconsiderable item, and as a further contribution to the national effort to maintain business during the next recession we hope at that time to be in a position to inaugurate and carry through a complete equipment modernization program."

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W. D. JAMES, PRESIDENT -- JAMES MANUFACTURING CO.

"Our business is unusual in some ways in that the services we render have to do with farm engineering. We help farmers solve their building problems. We maintain a very large research department and expect to have new methods, new equipment, and some revolutionary changes in the whole farming set-up ready for after the war."

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EDGAR B. JESSUP, PRESIDENT -- MARCHANT CALCULATING MACHINE COMPANY

"We can prepare selling campaigns now which are directed toward businesses which are hit by present priorities. Such firms will re-start with a rush. Their customers will be starved for goods. As a group, companies in this class are believed to offer a fruitful source of orders when they take inventory of what they will need to get under way again.

"Plans can also be made now for advances into what we call the 'frontiers' of our business, fields in which the use of our product is not regarded as the 'accepted' means of doing certain work. We know that what we make is well adapted to



many such marginal uses, but press of regular business has so far prevented our undertaking the work of tackling the new fields. When the lull following the defense rush is over, we hope to have things 'all set' to undertake some long contemplated advances into such activities.

"We hope to make a concerted drive on consumer goods industries. Past experience in the case of similar upheavals shows that the first companies to recover from a business shock are those which make the things that supply the daily needs of our people, as distinct from those which make equipment for producing other goods."

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E. M. ALLEN, PRESIDENT -- MATHIESON ALKALI WORKS (INC.)

"A month ago we sent out a questionnaire to all of our salesmen as well as the heads of the different departments of our corporation, aiming at a prepared program for us to follow as a result of the answers to this questionnaire."

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WILLIAM WELCH, PRESIDENT -- MIDWEST RUBBER RECLAIMING COMPANY

"I believe the greatest hope of cushioning the shock of a future depression is through spending part of current earnings in research. An additional reason for doing this is that research is a recognized charge against earnings, and since taxes can be figured at about fifty per cent of earnings, in many instances you get your research at half price."

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C. P. GULICK, CHAIRMAN -- NATIONAL OIL PRODUCTS COMPANY, INC.

"Our company policy for a year past, and for such a time into the future as circumstances may warrant, is directed toward an intensification of both technical and market research, but with the distinct understanding that the results of both phases of this research are to be placed on file. They will then be ready for introduction into the works both from a production and a sales point of view when the wheel of the business cycle begins to turn downward, and new products and new needs become necessary to bolster operations."

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FRANK L. McCARTNEY, PRESIDENT -- NORWICH PHARMACAL COMPANY

"For the better part of a year we have been working industriously to strengthen our present organization and this applies to all departments of our business. For example, we have taken the position that the less effective ten per cent of our sales staff should be replaced by men who should be more effective. In several cases we have had frank talks with the men who are doing only a fair or mediocre job and explained that while times are good, they should make an effort to find work for which they are better suited; that if they were to stay on with us, when the pinch came, they would likely be squeezed out and less likely to be able to place themselves to good advantage.

"To assist the new men, we have organized a sales school and we are already much pleased with the results of the effort.

"We are keeping all buildings and equipment at the highest possible state of efficiency. We are going on the theory that 'only the savage neglects to cultivate his crops when his stomach is full.' Just now we are enjoying a substantial increase in business, but we are not permitting this to prevent us from being quite insistent that better methods and better men are available where anything approaching inefficiency now exists."

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KENNETH PARKER, PRESIDENT -- PARKER PEN COMPANY

"This company has always maintained a comprehensive research department in engineering, physical chemistry, and metallurgy. Primarily all research work done pertains to the development and improvement of fountain pens and inks and better methods of production.

"At this time however, we are doing research work outside of these fields, particularly in the realm of powder metallurgy. Our experience in powder metallurgy in the production of exceedingly hard pen point material seems to offer a promise for the development and use of similar materials in other branches of manufacture."

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W. M. CORNELIUS, PRESIDENT -- PARKER RUST-PROOF COMPANY

"At the present time we are developing, in certain pilot plants located in the steel industry, materials and methods for treating sheets. This field is almost unlimited when you consider the huge volume of containers that are made out of thin sheet metal which require some protection from corrosion. We hope that any curtailment in our general lines will be offset by this new field which is pretty much virgin territory as far as we are concerned."

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A. W. ELKINTON, PRESIDENT -- PHILADELPHIA QUARTZ COMPANY

"We are attempting to lower our manufacturing cost to the minimum by intensive study.

"We are developing that market which potentially will enable us to buy our present raw materials, both now and in the future, at rock bottom prices.

"At the same time, we are hopeful of developing competitive substitute materials and the most economical manner of handling them. We are installing all the labor-saving devices which seem applicable to our method of manufacture.

"We hope to place on the market certain new products we have been developing, with the hope that when the depression comes perhaps one or more of these ideas may help carry the burden of producing our old line of chemicals.

"We are also avoiding expansion in our payroll wherever possible, preferring to pay overtime when necessary."

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SUMNER SIMPSON, PRESIDENT -- RAYBESTOS-MANHATTAN, INC.

"We must watch the leaks in our own business; wastes, defective goods, returns and poor production. We must develop and improve personnel in our supervisory jobs. Foremen should be trained for the days ahead. These are splendid opportunities for these men. Training men properly will lead to permanency in your business.

"There is an abundance of high-class constructive selling to be done today. There is an opportunity to obtain high-grade salesmen who will be set adrift by manufacturers of non-defense products. These men, properly groomed now, will prove investments against the day when the post-war competition confronts us; therefore, I recommend necessary adjustment in sales organizations in the field, a separation of the wheat from the chaff."

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JOHN H. GOSS, PRESIDENT -- SCOVILL MANUFACTURING COMPANY

"When we order machinery or equipment, we do not order special purpose machinery, but order what is commonly known among manufacturers as 'general purpose machinery,' that is, machinery which can be used for general manufacturing after this is over.

At the moment, of course, it is being tooled to make war material, but with a change in toolage, it can be adapted to making commercial goods. It is in every sense the latest design in such equipment and distinctly labor saving.

"We select our operators by an intelligence test, to make sure that they have the degree of intelligence called for, and we train them carefully, so that when this present situation is over, we will have employees who will be able to get the efficiency out of the machine when it is retooled for commercial output.

"This equipment will replace more or less obsolete, worn equipment, which we will scrap or liquidate, and which has been already largely, if not entirely, depreciated in our accounting.

"All this program is consistent with lower costs and should, theoretically, at least, enable us to meet the more intense competition that we will face."

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LOUIS RUTHENBURG, PRESIDENT -- SERVEL, INC.

"In preparing for the transition from emergency activities to those of the post-war period, we are broadly thinking in the following terms:

"What should be done to expand and diversify our products, and what project or projects can we undertake primarily as defense associated activities which may afford a basis for post-war activities?"

"The initial development of the first phase of the problem contemplates the continued development of gas actuated all-year air-conditioning and the development of gas water heaters. The second phase of the problem will involve continued investigation, but it appears at the moment that something worthwhile may be developed."

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E. G. STAUDE, PRESIDENT -- E. G. STAUDE MANUFACTURING CO.

"We have several new machines developed at great expense to us that should have a large sale, and which we propose to advertise and otherwise promote the sale of to the extent that we may even employ more skilled labor, if it is available at wages the 'customer' will pay plus a reasonable profit, for ourselves, so we can get our original investment back."

\* \* \* \*

M. S. BROOKS, ASSISTANT VICE-PRESIDENT -- THE STUDEBAKER CORPORATION

"We feel that the owner of an automobile would much prefer to have his car serviced by the dealer from whom he purchased his car than to shop elsewhere, provided, of course, the efficiency of the work, charges, environment, and courtesy are comparable to that of outside service stations. We, in the automobile business, are taking the opportunity, during controlled production, to focus the attention of our dealers on these revenue-producing departments of their business that have been somewhat neglected in the past. We refer to the merchandising of parts, accessories, maintenance material and labor.

"With that in mind as an objective, we have been counseling with our dealer organization through meetings, personal contacts and other media, and it is pleasing to note that the effectiveness of this program is very evident already. The degree to which this additional profit will replace the profit from the sale of new cars will depend entirely on the level of business after acceleration of the defense market ceases to exist. We feel that the dealer who develops every department of his business to a point where it is well-balanced will be able to function profitably in the future."

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E. G. ACKERMAN, PRESIDENT -- THATCHER MANUFACTURING COMPANY

"We have installed a new service department in an attempt to build better relationships with our customers and to assist them in some of their problems of shortages, substitutes, etc. We are hopeful that this department will build goodwill for our company, also give us a better knowledge of our customer's business so that in later periods we can more fully give a service for the trade handling our product."

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PHILIP D. WAGONER, PRESIDENT -- UNDERWOOD ELLIOTT FISHER COMPANY

"The cornerstone of our planning is in the perpetuation of our research and engineering without curtailment at this time when we can sell all that we can manufacture. The temptation might be to cut down on this expense which is a relatively heavy one. Instead of that, we have pushed our research and engineering in the belief that once the national emergency is over it will be very essential to have new things to sell, and the new ideas which are being developed will be the basis of new models, better equipment, and the better handling of office problems for our customers.

"We view the matter of a fully-trained sales organization with perhaps equal importance. The tendency at the moment when we are actually oversold is perhaps to feel that the sales element of the business is not of the vital importance of more normal times. Perhaps at this moment it could be said that that is true, but what a short-sighted policy it would be to feel that way about it.

"First, we ought to be sure that the territories of this company are covered, and intelligently covered, by good men. Secondly, we ought to be sure that our Educational Division is at full strength and that our Sales and Service Schools are functioning particularly toward the day when new and better salesmanship will be necessary."

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S. M. VOCKEL, PRESIDENT -- WAVERLY OIL WORKS COMPANY

"We have not dismissed any of our selling force and six months ago we started on a program of getting as many new accounts as is possible. In fact, each one of our salesmen is under obligation to double the number of accounts he sells on or before May 1, 1942.

"The thought we had in mind is that we will, by this method, have an extraordinary number of accounts, and when we drift back to normal or sub-normal business, and after the emergency is over, the loss of ten or twenty per cent of accounts will at least tend to soften the blow."

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A. Q. PETERSEN, PRESIDENT -- WESSON OIL & SNOWDRIFT CO., INC.

"We are deferring until the end of the war repairs to present buildings and construction of new buildings, etc., and hope in that manner and at that time to do our share toward giving employment when the war industries will be slowing down."

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H. G. NAISEY, RESEARCH DIRECTOR -- WHITE BROS. SMELTING CORP.

"We are working on a process for the separation of metals by chemical means. We expect that the process, which is at present in the pilot plant stage, will develop to commercial production by the end of the war. We feel that it will be valuable to the country after the war in view of the fact that there will be excessive

quantities of scrap with inefficient methods of reclaiming them."

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AMONG THE NUMEROUS OTHER COMMENTS RECEIVED:

"Television is an infant industry and there appears to be little likelihood that television receivers can be manufactured in any quantity until after the emergency is past. Nevertheless, we are keeping television alive at very considerable expense by maintaining a regular program service in New York and planning for an extension of the service in at least one additional city in the near future. We do this believing that television should be an important new industry in the post-war period."

\* \* \* \*

"We have started a branch plant in Canada and are at this time erecting a factory there. We hope this branch will enable us to secure a considerably larger share of export business than we would be able to obtain in this country."

\* \* \* \*

"A general study is being made with regard to past and present markets and in connection with potential markets which are not served at the present time either because of lack of supplies or because applications are still in their infancy. This involves not only a number of surveys, but also a better understanding of the so-called 'depression resistant industries,' which can be expected to hold up volume considerably better during a period of recession."

\* \* \* \*

"We are keeping alert for new lines to manufacture in addition to our standard mining machinery. We have already taken on the manufacturing rights for the entire western snow belt of a particular type of Ski Tow. We feel that after the present war activity is over, there will be a let-down similar to that after the last war, and people will be seeking diversion. With the increase in popularity of outdoor sports in late years, particularly that of skiing, several western states will eventually have resorts similar to the Sun Valley project up in Idaho."

\* \* \* \*

"We are preparing to have made market product researches on certain articles that we believe will be in demand after the defense program ceases. These surveys will then be analyzed by our research and engineering departments with an idea of developing products that we can economically manufacture and distribute."

\* \* \* \*

"We are taking advantage of the present situation to reduce the number of non-essential items which we have been manufacturing by standardizing on fewer numbers and with less duplications, naturally our costs will be reduced."

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AMERICA'S FOREMOST ECONOMISTS AND MANAGEMENT  
ENGINEERS ANSWER THE QUESTION:

"What in your opinion should the manufacturer be doing now to prepare to keep up sales volume after the current defense market ceases to exist?"

DR. L. P. ALFORD, CHAIRMAN -- DEPARTMENT ADMINISTRATIVE ENGINEERING,  
NEW YORK UNIVERSITY

"Manufacturers should now strengthen and expand their research facilities. Such action may mean setting up research laboratories where none exist, expanding laboratories now functioning, and planning immediate and long-range research projects to improve all existing products, make new adaptations of existing products, develop new products, lower manufacturing costs of all products.

"Industrial research, at its best, is protection of a manufacturing concern against unfavorable changes within and competition without the organization. These within and without changes will be of great, even critical, significance in the conduct of business after defense spending is over."

\* \* \* \*

THURMAN ARNOLD, ASSISTANT ATTORNEY GENERAL -- U. S. DEPARTMENT OF JUSTICE

"When the emergency is over, it will not do for the business community to rely upon a continuance of Government spending as its sole protection against an immediate collapse of activity, whether or not a program of Government spending may be desirable during the transition period. Neither can business men escape their difficulties by attempting to conserve the capital values of their plants by high prices and reduced output. Though a few might be temporarily successful along these lines, the unemployment incident to such a program would rapidly become disastrous for all -- and since the volume of defense spending is unprecedented, the seriousness of a downward spiral collapse would be unprecedented likewise.

"The remedy lies in cultivating the accumulated civilian demand to replace the terminating military demand, and in establishing a goal of low prices and full production in order to make such cultivation possible.

"The necessary first step is planning by each business enterprise as to how it will convert its plant back to civilian products and as to what kinds of new products it will develop.

"More important, however, is provision now for the policy of low prices, without which the market will not absorb our enlarged producing capacity. This involves financial plans which will bring us out of the emergency without an inflated capital structure and a consequent incentive to protect it. It likewise involves the maintenance of competition, the elimination of monopolies and bottlenecks, the further development of vigorous agencies to enforce competition, and the planning for such a diffused ownership of the post-war industrial establishment as will make competition possible. Unless we face the end of the emergency with the pressures toward low prices in full effect, programs to produce enough to maintain prosperity will start under an almost insuperable handicap."

\* \* \* \*

DEAN KENNETH H. CONDIT -- SCHOOL OF ENGINEERING, PRINCETON UNIVERSITY

"Regardless of the outcome of the war, there is going to be an enormous reconstruction job to be done. Those engaged in the construction industry may well study the characteristics of the new materials continually being developed to ascertain how they may be used in the job ahead of us. They should also be prepared for new methods of construction.

"In the field of aeronautics, this war will probably have a highly stimulating

effect on development, and we may well look to a wholly new position for the aeronautical industry. I think that the potentialities ahead of the aviation industry are likely to be paralleled in other industries.

"One of the major jobs for which we ought to prepare is the reconstruction of our labor forces when the defense industries close down. If we manage to handle the dislocation in the opposite direction than now taking place, we may be better able to handle it when conditions turn the other way. There seems to be little question that labor unions are here to stay and that they are going to take an increasingly more important part in the making of industrial decisions. Those manufacturers who have not accepted this situation, and have not prepared themselves to meet it, should certainly give it very careful consideration.

"We are probably in for increased public ownership whether we like it or not, and the better prepared we are to deal with it the more successfully will industry function."

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MORRIS L. COOKE -- OFFICE OF PRODUCTION MANAGEMENT

"There are a good many obvious things which manufacturers should be doing now, such as preparing new products, the fabrication of which will be consistent with facilities and consumer demand as they are likely to be after the war. But I believe even more important and vastly more difficult is for our manufacturers to prepare psychologically for the world that is to be. If one dreams of getting back to the conditions as they were on some past date, one is barred out from thinking effectually as to a period not yet hardly in the making. Again, if we are to have a truly great post-war industry, there must be unity in it.

"The industrial development of the last generation or two is the envy of the world, and there was in it a large measure of unity. Looked at from the standpoint of industrial relations, we know now that that unity rested on a basis which has ceased to be satisfactory. But we must recreate unity on a new basis. This means the study of collective bargaining on a local, regional and national basis, but on a basis which will raise the scale of living and give us an industry that is constantly approaching our ideals. Racketeering and ca' canny on the part of labor will be as much out of place as a domineering attitude on the part of the employer."

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DR. GEORGE S. COUNTS -- TEACHERS COLLEGE, COLUMBIA UNIVERSITY

"The most important thing to do at this time is to bring together in conference, representatives of the more important groups involved in order to get them to face the problem. I have in mind labor, professional, and consumer groups, in addition to business. If the best minds from these groups cannot at least establish a basis for dealing with the emergency, there can be little hope of avoiding a terrific crisis."

\* \* \* \*

ALVIN E. DODD, PRESIDENT -- AMERICAN MANAGEMENT ASSOCIATION

"I should suggest activities by manufacturers along the following lines:

"(1) The Maintenance of Products Research. This, to my mind, is money well spent, for seed thus sown is going to produce a harvest at a time when American industry will need a heavy crop of new products and new ideas to satisfy consumers and to compete with the strong overseas markets that will follow the war.

"(2) The Maintenance of Market Research. Hand-in-hand with investigations in the laboratories should go studies of the changing consumer markets. The vast upheavals in consumer wants and in the economic status of various classes of our population are going to create genuine problems for tomorrow's sales managers.

"(3) The Maintenance of Advertising Momentum and Consumer Acceptance. A hiatus

between contacts with normal markets at this time because of defense business can be wisely bridged by a sound advertising program. There is danger that defense period substitutes may supplant permanently the pre-war products.

"(4) Plan for Lower Unit Costs. The 'sold-up' condition in many concerns now caused by the armament program may obscure in the eyes of some companies the importance of operating upon an ever higher plane of efficiency. A deterioration of managerial efficiency now may prove to be a burden not easily shaken off when normal times return.

"(5) Employee Relations. Emphasis upon non-financial incentives for employees at this time may prove an important bulwark against situations and conditions that might develop in the future. Every employer should try to make his company attractive to work for, not merely by offering high wages, but through wise, sound industrial relations and personnel administration.

\* \* \* \*

DEAN W. B. DONHAM -- GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, HARVARD UNIVERSITY

"The first and most important thing that business men ought to do is to get out of their present defeatist frame of mind. Business morale needs to be rehabilitated.

"Specifically, business men should stop expecting that there will be a tremendous depression after the present emergency because (1) the period following the World War does not support this view, (2) there will be tremendous shortages of all sorts of consumer goods after the war, -- even more so than after the last war, and (3) the present attitude of business in expecting a depression is the surest way to produce a depression.

"All the record of history points to the fact that wars set in motion great technological changes and encourage great bursts of productivity. The full impact of these changes and the enhancement of productivity comes in the period after the war is over. There is no reason except the reasons that lie within our own hearts and minds why this cannot be true again. I believe that business men who go around with long faces saying that America has reached economic maturity and there is no further basis for progress are signing their own economic death warrants.

"The next most important thing that business men can do is to develop product research and new uses research as actively as possible during the current period in order to be ready with all kinds of new products for the market of tomorrow.

"Perhaps the next most important thing is for business men to break away resolutely from the concepts of price stability, price maintenance and so on which have dominated the scene so much during recent years. They should be prepared to be much bolder in their explorations of possible elasticity of demand."

\* \* \* \*

V. GILMORE IDEN, SECRETARY -- AMERICAN INSTITUTE OF STEEL CONSTRUCTION

"The most important post-war program will be the rebuilding of our cities. For the most part, American cities were not built in anticipation of high speed traffic which has resulted from the impact of the automobile. Express highways through the cities will make necessary the building of many elevated highways. In London a very comprehensive plan for building a series of such roads has already been drawn. Many American cities have similar studies in hand. In Detroit the studies have progressed to the point of making drawings. The removal of these bottlenecks in traffic will, at the same time, entail a great building program for off-street parking as well."

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W. H. GRIMES, EDITOR -- THE WALL STREET JOURNAL

"Each business should keep itself in the strongest possible position even though by doing so it may entail the sacrifice of some business which could be had now.



"Our underlying thought should be that after the present emergency there will exist a pent-up demand for goods and along with it the financial ability and willingness of the consumer to satisfy that demand. That existed after the World War, but after a time consumers balked at prices and the movement of goods from manufacturer to consumer was interrupted.

"The ability to price closely depends on the strength and cash resources of who does the pricing. A generally weak economic picture is made weak by the weaknesses of its component parts. The opposite is also true and if each part is put into a strong position the whole structure will be strengthened."

\* \* \* \*

DR. CHARLES H. JUDD, SCIENCE COMMITTEE -- NATIONAL RESOURCES PLANNING BOARD

"What the American people need is much greater understanding of the youth problem and much greater popular participation in the solution of it.

"Manufacturers should interest themselves in the program of instruction in local schools. This program should include not merely traditional subjects, but above all, courses in economics, political science, sociology, industries, and technical subjects. Large concerns should adopt plans for shop training of a number of youth. Small concerns should organize part-time educational programs in consultation with public schools."

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DR. THEODORE J. KREPS, PROFESSOR OF BUSINESS ECONOMICS -- GRADUATE SCHOOL OF BUSINESS, STANFORD UNIVERSITY

"Manufacturers should make every effort to keep prices down. Their contracts with the Government should be figured on as nearly irreducible cost basis as possible. In the measure that business goes after easy profits now it is bound to reap the whirlwind of post-war deflation, liquidation, and bankruptcy.

"This would seem to be an excellent time to get out of debt. This suggestion sounds impracticable to those who believe that prices are going to rise and who think that they will be lucky enough to get out from in under just before prices break. While individual business men can no doubt make a great deal of money by going into debt, there is no such thing as everybody 'getting under the umbrella.'

"Manufacturers will do well to render conspicuous service in the defense effort such as will win back not only the respect but the admiration of the people of the United States. That will enable business to have a larger voice in whatever post-war plans are put into operation and it may protect business against adverse legislation."

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DR. W. RUPERT MACLAURIN, DIRECTOR, DEPARTMENT OF ECONOMICS -- MASSACHUSETTS INSTITUTE OF TECHNOLOGY

"It is our general belief that the great possibilities for the future lie in an increasing application of fundamental research to the problems of industry. This field has only been scratched at the present time. It is our hope that increasingly companies in the United States will come to realize that their budgets for research should be expanded and that research planning should include, as an integral part of its work, proposals for new products and the introduction of new processes to take place after the present defense boom is over. Many significant innovations will probably need to be put on the shelf temporarily, to be introduced after priorities are eliminated.

"Manufacturers should, where possible, set aside at least one man on the staff whose function it would be to spend considerable time thinking in terms of possible new products and new developments to meet the post-defense situation."

\* \* \* \*

ERNEST V. MONCRIEFF, PRESIDENT -- SWAN-FINCH OIL CORPORATION

"I think a great educational program could be conducted at the present time for all purchasing agents, or those who have the policy of purchases under their direction, to reduce all purchasing at the moment to what is required. There is a tremendous amount of purchasing going on for the building up of inventory, due to the fear of not being able to get the materials when they are required. If this is allowed to continue and to be in existence when the end of the present crisis arrives, the consequence will be that the lack of demand will be cumulative and will be reflected in all parts of our economy."

\* \* \* \*

LEWIS MUMFORD, SOCIOLOGIST

"At the present time, unfortunately, our thinking about the present war and the post-war situation has centered around the notion that the present war is following the same lines as the past.

"This is a great mistake -- indeed, this kind of retrospective thinking is almost as dangerous as a complete lack of foresight.

"In the post-war world private enterprise will be able to remain in operation only if it accepts the terms that are offered more or less to the rest of mankind, on a survival or subsistence basis. It will function on the basis of paying its mechanical operating costs, meeting its annual wage bill, and reducing payment to investors to a modicum of the interest and profits originally expected.

"The lack of hard-headed thinking on the part of American business leaders now will only increase the scope and duration of the present -- not emergency -- but catastrophe."

\* \* \* \*

ERIK OBERG, EDITOR -- MACHINERY

"To adequately employ American industry, the standard of living of the great mass of the people must constantly improve. The living standard can only be improved through increased production, which is the only way in which there can be increased real earnings. Increased production can be achieved in two ways, by improved machinery and by the willingness of people to work. Manufacturers today can prepare for the time when the present war effort is over by making themselves ready to produce efficiently, and at reasonable cost, products that will be in demand.

"First of all, the great mass of the population of the United States are inadequately housed. Then there is a tremendous field for air-conditioning in homes and offices. It may be that fifty years from now houses may be considered below par if they have no means for cooling at least some rooms to a comfortable temperature.

"Many of the war plants could be converted to the manufacture of the needs of the building program, including air-conditioning. The machine equipment available may not be suitable, but the greatly enlarged machine tool plants will be able to take care of any demands for new equipment needed for new manufactures.

"Some real thought must be given to the adequate handling of traffic so as to avoid the tremendous congestion. Here, too, will be an opportunity for manufacturing and contracting enterprises."

\* \* \* \*

DR. HARLOW S. PERSON, MANAGEMENT CONSULTANT

"If ever there was a time for the point of view of each for all and not each for himself, now is that time; for the basis, structure and processes of the economy as we have known it are being dislocated by world events, and the economy that is

developing will likely be, although capitalistic, substantially different from that to which we are accustomed.

"Reconstruction must proceed by rearrangement of the dislocated structure of the older economy in such a manner as to develop adequate -- which means greatly increased -- purchasing power of the consumers who must take up the output of our national producing plant, if the economy is to remain dynamic. Limited purchasing power and restriction of production in adjustment thereto would be suicidal to private enterprise, for it would mean a declining standard of living. This the people of the United States would not accept; they have enjoyed a relatively high standard and trends in the direction of a lower standard would stimulate them to experiment with organization of production and distribution on some collective basis. It would be evidence of wisdom on the part of private enterprise to work out in its own interest a less drastic functionally equivalent arrangement.

"Guided by this general point of view, I offer the following specific suggestions as to a program of education and action by manufacturers of the United States.

"1. As has been done for instance in Sweden, the manufacturers of the United States should attempt to remove costly conflicts with labor by instituting an association, board, or other group representative, especially and exclusively charged with working out a national labor relations policy on a realistic basis, and with actual implementation of that policy by lines of action that anticipate and resolve specific cases of conflict. Such activity, if realistic, will recognize that labor has a major functional status in an industrial economy, that organized labor is now a powerful force, and that adjustments must be made that will make this a beneficent force in the general manufacturing economy.

"2. Manufacturers should re-examine the nature of price and the relation of price to the dynamics of an economy. This would undoubtedly lead to the conclusion that the rigidities that arise in consequence of widespread influence of the doctrine of price maintenance are detrimental to progress in a capitalistic economy -- more likely constitute a force that makes for progressive decline. The notable growth of industry during the past century has been based in large measure on price reductions in step with developments of an increasingly productive technology. Latterly the trend has been toward price maintenance with impairment of stability and progress. The new frontier of industrial expansion -- to replace the former frontier of unexploited physical assets -- is present in the untapped levels of consumer purchasing power, accessible only by the route of progressive price reductions as these are made possible by technological economies.

"3. Related to this problem of price reductions is the problem of corporate capitalization. This should be re-examined in the light of the part it plays in the price structure; especially the influence of the prevailing custom of capitalizing technical improvements, and in times such as war capitalizing exceptional profits.

"4. Manufacturing would be wise to re-examine also the doctrine of free trade. Restrictions on the free flow of commodities throughout the entire world, restrictions on free access by all enterprisers on common terms to the raw materials of the world -- these restrictions appear to have played a large part in generating the troubles that now plague each national economy as well as the world economy."

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DR. A. A. POTTER, DEAN OF ENGINEERING -- PURDUE UNIVERSITY

"Every industry should have a planning board, made up of its best managerial, engineering, commercial, and scientific talent. This planning board should study trends in public needs in a world of peace and should plan new devices and new products for the manufacture of which the present facilities of the plant may be utilized. The world conflict may stop very suddenly and unless adequate plans are now made for utilizing our facilities in men and equipment, grave consequences are bound to follow."

\* \* \* \*

DR. WALTER RAUTENSTRAUCH, PROFESSOR OF INDUSTRIAL ENGINEERING -- COLUMBIA UNIVERSITY

"The first thing that needs to be done is to get at the facts -- estimate the probability of raw materials supply, productive capacity, available man power and probable domestic and foreign markets in each line of manufacture. This, perhaps, may be done most effectively by associations of manufacturers interested in the production of our principal products of manufacture. This would call for the setting aside of a fund for carrying on this research and engaging competent personnel to make these studies. The association would receive these reports and study them with reference to the National Economy as a whole. I realize this is a very large undertaking. It should be begun immediately. Without a competent scientific survey of probable future trends, I don't see how any manufacturer can do anything toward steering his own future course."

\* \* \* \*

DR. JOHN W. RIEGEL, DIRECTOR -- BUREAU OF INDUSTRIAL RELATIONS, UNIVERSITY OF MICHIGAN

"A manufacturer might maintain customer service activities to the best of his ability, furnishing repair parts or repair service, and aid customers to utilize his products, which they already own, to the best advantage.

"In preparation for post-defense markets, it would appear desirable to maintain such service activities for the purpose of market analysis and study of developing needs on the part of customers. Maintenance of these contacts should assist in product development during the emergency period.

"I would suggest that manufacturers maintain a good skeleton organization and try to place on a leave of absence basis their competent employees who at present may take up work in defense industries. It would seem highly desirable to have these arrangements such that an organization can be reconstituted when priority difficulties cease and more normal peace-time demands are to be filled."

\* \* \* \*

ARTHUR ROSENBAUM, ECONOMIST -- SEARS, ROEBUCK AND CO.

"Elimination of obsolete machinery will be essential for the success of the individual manufacturer and will provide capital goods production at the time it will be needed the most.

"The field of prefabricated residential construction offers great potentialities IF the State can bring about the working in harmony of the two great labor union movements. The importance of research cannot be minimized. Existing products can be improved, new products developed, so that they can be marketed without delay when the emergency is over.

"Our manufacturers may have to revamp their profit expectations on capital investment. Business men must realize that the lessons learned from the depression of the early 1930's will not be forgotten by the Government. As manufacturers stopped producing, because they could not make a profit, the Government stepped in and gave the unemployed a dole. The post-war administration is not likely to adopt the same pattern in combating unemployment. It is more likely to tax existing business very heavily and make the necessary investments itself to give work to those needing it if private business fails to take up the slack."

\* \* \* \*

HERBERT H. SCHELL, PRESIDENT -- SHELTON LOOMS

"The economy of high wages which exists in this country has proven its value many times over. It has been the foundation of our system which provides the highest living standard existent in the world today. Much as we would like,

however, to raise this standard of living, let us recognize that its only vulnerable spot is the fact that it now is at least three times higher than any other standard of living in the world.

"Let us organize properly to sensibly sell our system to the rest of the world, and to bring economists from all over the world to our shores to show them samples of our accomplishments. If we can get the peoples of other advanced countries to understand and adopt the philosophy of high wages, I think we will have done much to straighten out the problem after the war."

\* \* \* \*

DR. ROBERT G. SPROUL, PRESIDENT -- UNIVERSITY OF CALIFORNIA

"1. A portion or all of the sales force should be continued, dealer connections should be maintained, advertising to some extent continued, and, in general, market relations should be so adjusted as to reduce the resistances to regaining old markets.

"2. Prepare in general to supply the large reservoirs of unfulfilled demands created by defense and war shortages. To accomplish this, it will often be necessary not merely for firms to endeavor to reestablish themselves in their own former markets, but also to push into new fields.

"3. Market analysis and product engineering should be combined in preparing plans for new and improved products and methods.

"4. It will be important for industry to attempt constructively to pass along the full improvements and economies of modern technology in low prices to consumers. The big market is the mass market and too frequently in the past products have not been fitted to this market from the standpoint of costs and prices.

"5. Since at some stage in the post-war readjustment private effort alone will not be adequate, it will be highly important for industry to have thought through its relations with the state and to be prepared to ask for adequate public assistance as well as to attempt to checkmate unsound government policy."

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MERLE THORPE, EDITOR -- NATION'S BUSINESS

"Here are a few principles which I believe the manufacturer will have to observe:

"1. Maintain his organization as nearly intact as possible.

"2. Keep his salesmen on the job and see to it that they keep their contacts alive, even though it be necessary for them to work for the time being as field service men or good-will builders.

"3. Maintain a continuous program of advertising. Adopt a plan, perhaps similar to that of General Motors, whereby a fixed amount is budgeted for institutional advertising and a pro-rata amount of gross sales is set aside for regular trade advertising. Devote a part of the institutional advertising toward maintaining public support of the American system of free enterprise.

"4. Conduct as much research as possible in order to develop new methods, new processes, new products, wider uses for present products.

"5. Keep a constant check on what materials are likely to be available and discover how to use satisfactory substitutes if essential materials are not to be had.

"6. Use ingenuity at every turn to pare down production costs.

"7. Overhaul and strengthen present methods of distribution.

"8. Keep a constant eye on the market. Increased wages will greatly improve the buying power of some 40,000,000 workers and farmers. Heavy taxes will seriously depress the buying power of half a million upper middle-class buyers -- the present 'luxury market.'

"9. Prepare to do business on a lower margin of profit than heretofore.

"10. Keep informed on current developments in national affairs. What happens on the legislative front in Washington and in the bureaus, agencies and commissions

will affect every business and industry in the country.

"The most important thing for the manufacturer to do perhaps is: Keep constantly in mind that business conditions in America are undergoing a terrific change and that, if he is to survive, he and his methods will have to keep changing, too."

\* \* \* \*

DR. ALFRED H. WHITE, PRESIDENT -- SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION

"Each corporation should appoint, at once, an individual or a committee to study the probable effect of our present gigantic industrial effort upon its own future operations. There will certainly be unusually keen competition from foreign countries striving to make their way back to prosperity. There may be accumulations of raw materials in South America and the Orient which will be dumped on our shores. We will have huge manufacturing plants to be converted to new uses, and large quantities of new materials like synthetic rubber, nylon and magnesium whose commercial development has been tremendously accelerated. Should not every corporation survey its present plant and product and make careful studies of possible future developments?

"This study should include a factual survey of its raw materials, products and markets. If it seems that any of them are likely to be disturbed by the new conditions, then further studies should be made of the probable effect of these new conditions. It is quite possible that problems will be revealed which indicate that experimental research should be started at once.

"It may be argued that none of the trained personnel can be spared from their present important work. It will be granted that everyone is busy, but no ship captain would ever take the position that he could not spare a competent man as a look-out. It may be maintained with some reason that the members of a corporation's staff are so close to their work that they cannot see it in proper perspective. A consultant might well be employed because of his different viewpoint. Industries which maintain trade associations may well organize cooperative studies of probable future trends which will affect the whole group."

\* \* \* \*

AMONG THE NUMEROUS OTHER COMMENTS RECEIVED:

"All manufacturers now depreciate their buildings and machinery because the Internal Revenue Department permits them to do this and also, secondarily, because the machine actually depreciates. However, the rate of depreciation has been determined more from the standpoint of what the Government would permit than from the standpoint of what the owner actually intends to follow. By this is meant there generally is no intention of replacing the machine when it has been fully depreciated. This should be remedied. Our entire defense program would be very much further along if every manufacturer had replaced every piece of equipment after it had accumulated depreciation reserve equivalent to 90% of its original cost.

"A very much more uniform demand for durable goods would be experienced if the revenue laws were so shaped that each owner would incur a penalty for each year a machine is retained beyond its depreciated life. There is nothing unjust about this viewpoint, because the owner would not keep the machine under those conditions if it did not earn this penalty or use tax.

"The owner experienced advantages during those years he charged off depreciation by the amount of the depreciation. Therefore, the owner should not get a free ride after the machine has been fully depreciated. Something of this nature

would create a big market for all durable goods manufacturers."

\* \* \* \*

"It is my suggestion that manufacturers voluntarily give a fraction of one per cent of their indirect labor payroll to their trade association to be used for research in development and promotion.

"An agreement should be made with the unions so that should we run into any members who cannot see 'eye to eye' with us for some reason or other, we would have the force and pressure of the unions to hold every manufacturer in line."

\* \* \* \*

"Let the U. S. Government make a deal with South America to encourage American immigration. When we get people down there like ourselves, who buy what we make, then we will be able to sell more of our products. By having our American people firmly entrenched there, it will build up these countries and permit healthy expansion apart from American territory. South American countries are our natural frontier and need development, but in the American way."

\* \* \* \*

"The most important thing that we all face together is a realization that we will have to scrap all Reciprocal Treaties and raise our tariffs higher than ever before, or else reduce our standard of living to a competitive point with the later markets we are going to have to compete with."

\* \* \* \*

"At the beginning of the last great depression, an appeal was made from Washington for manufacturers to maintain wage rates so that buying power would not be reduced. We believe that this was the very worst thing which could have been done and that it served to intensify the extent and duration of the depression. If the point could be well established that once the war is over it would be necessary for all costs to be reduced, including wages and taxes, then the whole country might be gotten into a frame of mind to make the adjustment period much less difficult. It is probably not too early to get this line of reasoning placed before the public."

\* \* \* \*

"Increases of productive capacity can be effected in such a way as to minimize later adjustments. Second shifts have been added in many plants as an alternative to additional new machinery installations. This naturally decreases the fixed overhead charges per unit of production which are undoubtedly going to be a major factor in determining later business status.

"Even though the system of contracting-out may, in cases, result in somewhat higher immediate costs, it may, nevertheless, possess net advantages in limiting the expansion needed at the moment.

"Blanket increases in terms of a certain percentage or of so much an hour continue and aggravate existing inequalities within a wage rate structure. This type of increase also changes the basic rates, usually the most inflexible part of the wage-rate structure. Wage increases now necessary should be made through the payment of bonuses, extras or allowances. A lack of attention to current wage policy can easily result in a wage structure that is not amenable to deflation when the necessity for that course becomes apparent.

"A present recognition that the future will most likely see a trend toward lower operating costs will necessitate attention to improvement of methods by many manufacturers. This is important to the continued existence of individual concerns and is important from the social point-of-view in that lower costs can provide the most sanguine hopes for a continuance of the type of economy for which

we are ready to fight."

\* \* \* \*

"Credit ought to be available to small business men. What will give our capitalistic system its best chance is a great multiplicity of not-too-big businesses carried on efficiently."

\* \* \* \*

"While employment is good and the farmer's income higher than it has been in the past ten years, I would increase local taxes rather than decrease them. I would spend less money for public improvements at this time than any time in the past ten years. I would save the surplus money collected from taxes and spend it on public improvements when the recession comes. Plan these improvements now. Reduce taxes when people are least able to pay.

"Ask civic organizations for recommendations for public improvements. No doubt there will be many wild suggestions, but let's get them all and reduce them down to sensible things that should be done."

\* \* \* \*

"The wise course must be, as never before, courageous and even daring employment of people, even when markets are temporarily thin.

"The latter step will require a very decided liberalization of private credit facilities. Also, while decrying the tendency toward public financing of private industry, it would be justified in a post-war depression, both because the average manufacturing credit is superior to most, resulting in less loss to the government, and also because it would be a much quicker and effective way of starting the wheel rolling, than to have public funds passed around indiscriminately by various public bureaus, as has been the case in the last eight years."

\* \* \* \*

"Endeavor to convince the government at the end of the present war that it is an unwise policy to dump on a weak and fluttering domestic market surplus quantities of products which the armed forces or other government departments use every day."

"I think a great educational program could be conducted at the present time for all purchasing agents, or those who have the policy of purchases under their direction, to reduce all purchasing at the moment to what is required. There is a tremendous amount of purchasing going on for the building up of inventory, due to the fear of not being able to get the materials when they are required. If this is allowed to continue and to be in existence when the end of the present crisis arrives, the consequence will be that the lack of demand will be cumulative and will be reflected in all parts of our economy."

\* \* \* \*

"Business men should now see to it that definite provision is made for setting up in this country, for the benefit of American exporters generally, adequate export credit guarantee facilities which will enable any manufacturer to extend reasonable credit terms to responsible buyers abroad and secure protection of his foreign receivables. Great Britain, Germany, and every other major exporting nation have long made such facilities available to their nationals engaged in export trade."

\* \* \* \*



## THE RESEARCH ADVISORY SERVICE

was established to locate answers to the technical problems of business and industry. It is a clearing house dealing with the results of research -- as expressed in new or unfamiliar materials, machines, products and processes. If the answer to a problem is already known to someone, somewhere, the Service endeavors to establish contact between the inquirer and the man or company with the answer. By investigating and cataloguing established sources of information and by searching out new ones, it endeavors to promote the voluntary circulation of useful, non-secret knowledge.

The Research Advisory Service does not engage in industrial research, and only encourages original research when all parties concerned agree that it is in their interests; but it does enjoy the voluntary cooperation of nine hundred research laboratories and many other sources of recognized competence.

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