



Smithsonian Institution

Smithsonian National Air and Space Museum Archives

Knabenshue Collection - Newspaper articles, 1939-1965

Extracted on Apr-23-2024 05:47:19

The Smithsonian Institution thanks all digital volunteers that transcribed and reviewed this material. Your work enriches Smithsonian collections, making them available to anyone with an interest in using them.

The Smithsonian Institution (the "Smithsonian") provides the content on this website (transcription.si.edu), other Smithsonian websites, and third-party sites on which it maintains a presence ("SI Websites") in support of its mission for the "increase and diffusion of knowledge." The Smithsonian invites visitors to use its online content for personal, educational and other non-commercial purposes. By using this website, you accept and agree to abide by the [following terms](#).

- If sharing the material in personal and educational contexts, please cite the Smithsonian National Air and Space Museum Archives as source of the content and the project title as provided at the top of the document. Include the accession number or collection name; when possible, link to the Smithsonian National Air and Space Museum Archives website.
- If you wish to use this material in a for-profit publication, exhibition, or online project, please contact Smithsonian National Air and Space Museum Archives or transcribe@si.edu

For more information on this project and related material, contact the Smithsonian National Air and Space Museum Archives. [See this project](#) and other collections in the Smithsonian Transcription Center.

"BUY A BOMBER" PARADE

[photo]

[[start caption]] On January 25th, a neighborhood parade was held for the purpose of raising funds for the Philadelphia Inquirer's "Buy-a-Bomber" campaign. Featured was the Kellett float above, displaying bomber parts. On the truck are Louise Frost and Virginia Carabin dressed in coveralls. Other units participating were Reddy Bell's String Band (1st prize band in Mummers Parade) and the American Legion Drum and Bugle Corps. Collections were made by the girls from Fay's chorus. [[end caption]]

TEXT OF COL. JOUET'S ADDRESS

(Continued from page 2)

it impossible. We then were producing at an annual rate of less than 6,000 planes. Well, under that old program we would have reached the rate of 50,000 planes a year before next December. So you will understand that the President was justified in raising the requirements.

All this, of course, has created radical changes in the economy of the aircraft industry, as well as other industries. Under the impact of the defense program, we have been going through continuous reorganization of the plants. We have been fortunate in our management. It is not new. Indeed, most of our company heads and departmental managers are veterans of the last war, either as aviators, aircraft engineers or other executives in this or allied industries. But the rapid expansion has forced the creation of new departments and in many cases entirely new auxiliary plans in other locations. As a result, management and trained supervisory personnel have been spread rather thin. These conditions have prevailed to greater or lesser degree throughout the industry and in the subcontracting field where the pressure of sudden and unprecedented demand has caught thousands of firms unprepared and in most cases unfamiliar with the exacting requirements of airplane manufacture. That it did not plunge us into confusion and chaos during 1940 and the early months of 1941 is part of the industrial miracle that has been accomplished. The annual report of the Secretary of Commerce published two days ago places aircraft far ahead in the indices of production for the fiscal year 1941 over 1940. Aircraft indices give 664 in 1941 over 263 in 1940, a 152 per cent increase, as compared to 99 per cent for the next highest—locomotives, including tanks, with an index of 199 last year and 100 for 1940.

There are other results of this effort, more thrilling, perhaps, than production. The United States has been turning out good airplanes. Many of our types are the best in the world. In the effort to speed up production, there has been no relaxation of constant improvement in performance as dictated by the lessons of the war. You undoubtedly know this, but I cannot resist repeating that every plane, every type and model must be designed for a specific kind of operation in warfare. It must also perform to specifications. Second best is not good enough in aerial warfare. Armor once was kept off planes to save weight. With more guns and high speed it became easier to shoot down unarmed machines. With fast bombers flying far beyond the range of protective escort fighters there came a need for armor protection. All air forces have it now. Fire power has increased to tremendous proportions. Our relatively small pursuit planes carry 37 millimeter cannon and whole batteries of heavy calibre machine guns. Our dive bombers make those



used in Europe only a year ago appear like relics of the past. We are not at all amazed when we read of the havoc wrought by our combat planes. The only trouble at present is that we do not have enough of them in the right places. That is being remedied, I can tell you!

Without trespassing on the censor's forbidden ground, I may also say that the aviation which we have heard about thus far during this war is nothing when compared to what we should see in the near future. You have heard it said that no new inventions have appeared in the war to date. I will not debate the point. I know there are some technical developments of great magnitude. I know that we are not lagging in that respect. There are better airplanes even now going into mass production. There are many new devices of distribution, not for some problematical date in the distant future, but now! They are being produced in quantity now. The Germans and the Japs have some frightful surprises in store for them.

There is every urge for us to accomplish these objectives as quickly as possible; because while we are preparing surprises for them, it is not too much of an assumption to consider the possibility of their finding some surprises for us.

In order to speed up production, our industry is accomplishing much in the way of standardization of parts and installations. In this very successful movement we have the active cooperation of the War and Navy Departments and other interested branches. There once were thousands of parts of different shape and size for every model of plane. That required more time, more plant space and vastly more labor in every shop that handled a part, from the place where it was made to the factory where it went into the plane or engine. We have been at work on standardization throughout the industry for some years. Now it is aiding materially in speeding up production.

It is most gratifying to know that past planning has resulted in a well-balanced use of the aircraft industry. All our plants, large and small, are producing to the limit of their facilities and the supplies obtainable. In 1939, when increased production appeared essential, Lieutenant General H. H. Arnold, then Chief of the Air Corps and now Chief of the Army Air Forces, succeeded in changing procurement procedures so that practically all existing manufacturing units would share in the expansion, to the end that the whole industry would be ready for the full-out effort when that time arrived. This was highly commendable foresight.

Another fact is of importance. We hear at intervals that the nation was unprepared and had no plan for industrial mobilization in the war. That is not the case. The aircraft industry, as well as the other key defense industries, have been the subject of considerable planning by the War and Navy Departments for about 20 years. The principle of not forcing the established old line aircraft companies to undertake all war production has been part of the Government's war mobilization plan for at least two decades. It is a very sound policy.

Our people and many of you here tonight will remember what happened to our industry after the last war. It was characteristic of our American way of doing things that we should plan for a maximum effort, as we are doing today. In 1917, our aircraft companies were given a program of twenty-five hundred planes. Then the Allied missions arrived, and they

convinced us that not twenty-five hundred but twenty-five thousand planes would be needed from the United States. The industry had to expand tenfold. The program was again expanded, this time to 20,000 combat and 9,000 training planes. Thus far, in all respects, history has been repeating itself.

At the time of the armistice in November, 1918, the aircraft industry, including war baby plants and some companies in the motor car industry, were producing at the rate of 21,000 planes a year. Within three days after the armistice the war contracts were cancelled and nearly all of the employees laid off. Within three months the industry had been liquidated to within 10 per cent of its wartime size. It stifled the development of aviation for years. Most of the companies went out of business. The others had no money for the promotion of flying or anything new. As late as 1924, the entire aviation plant of this country had a net worth of less than seven million dollars. The few companies that remained struggled along on a hand-to-mouth basis with precariously small orders from the air services. Fortunately the Government now agrees that there shall not be any more expansion than is absolutely necessary. We hope to avoid paying the price of over-production after this war. It is why some of the other industries are now contributing to our production.

Transition to full-war effort has been accomplished as quickly as it has, because long-range thinking has been the rule. For example, certain reserve officers were groomed during peacetime to perform liaison work between the aircraft industry and the automobile companies in Detroit.

Aircraft experts have been training automobile artisans and supervisory personnel for many months. They have been in our shops and we have been able to assist materially in converting the motor car plants into adequate factories for aircraft parts. The result of more than a score of years of design, engineering research and development, as well as manufacturing "know-how", without reservation, are being turned over to the motor car and allied industries for their use. This will continue to be the practice of the aircraft industry throughout the war period. All this has speeded up the program.

Another factor which has placed the aircraft industry far ahead of the point which all industries occupied when we entered the first World War in 1917 has been the training programs which our companies have been carrying on since the first orders commenced arriving from Europe. While Government educational projects have done much in pre-employment training of mechanics, our companies have trained tens of thousands at their own expense, paying new employees during the learning period. This has lightened the burden of expansion as much as any one thing.

There are manifold problems of the present which we must solve before we are satisfied with our production progress. In fact, they are legion; far too many for me to dwell upon here. You are familiar with shortages of rubber and tin. We also must deal with limited supplies of aluminum, copper, magnesium, and steel. There is the question of machine tools and dies. There is a very long list of essential materials now critical. It is not a question of there being enough for the aircraft industry. Other defense industries need the same things in quantity. Their needs, like ours, grow with the expansion of the program in ordnance, shipping, everything as a matter of fact. It becomes a question of priorities, a question which only the Government can answer, whether aircraft will be

allocated certain quantities or tanks or ships will get the materials. Decision in each case will probably rest on what is considered to be the most urgent at the time.

Here are some of our present problems in meeting the President's program for 60,000 planes this year and 125,000 next. We must find means of increasing factory floor space from the present 50 million to more than 80 million square feet this year and then boost it to more than 180 million square feet for the next year's program. A material increase in factory space will result when the subcontractors start operating new plants now nearing completion, when our companies get into production with the new assembly plants for which the subcontractors in the motor car industry are making parts, and finally, when the motor car manufacturers themselves achieve full production in the plants built for this purpose.

Labor is another item. It must be trained to work in aircraft plants. From about 400,000 at present in our own industry, the entire program demands an increase to more than 700,000 within the next few months and upward of two million, including the motor car people, to produce 125,000 planes next year. It means a dollar output jumping from one and a half billions last year to nearly four billions this year and nearly nine billions next year. I am not divulging any military secrets here, because none can use my remarks to break down the number of planes by each type. More of everything is required to make a four-engine bomber than a two-engine bomber, a pursuit ship or a trainer. All vary in weight, and the number of man hours required to build them.

I should like Hitler's hordes and the self-styled sons of Heaven to know this. We are under way toward a tenfold increase in our output of 4-engine bombers, by far the best of their type in the world. They are for long range, high altitude offensive warfare. They are the very symbols of destruction.

There is no precedent for us in gearing up this all-out production; think of all it demands, taking all types, 185,000 planes in two years means more than three engines per plane, average, a total of approximately 555,000 engines. Take the spark plug as one little item alone. It means spark plugs by the millions, possibly fifty million. And those fifty million spark plugs must not be wrong to the crew and flying machine worth up to a third of million dollars will fail in their mission and be on the casualty list.

We have realized the immensity of our task. Immediately after the President gave us his expanded program, we sat down with the Government procurement agencies and outline the questions which remain for the Government itself to answer before the new program gets under way. There is no log in present production on current orders, of course. Briefly, we put these questions up to the Government.

1. What do you want?

In other words, what kind of equipment do you want?

How much of each kind?

2. When do you want it?

Give us a detailed program, with orders, company by company, the details given in production terms, which will permit us to pass on to the thousands of sub-contractors a schedule of their tasks.

3. Will you give us the tools?

There we ask the Government to provide for distribution of the production materials and equipment necessary to carry out the program.

We have been assured that something like that is to be forthcoming soon.

I have outlined the present situation in our part of the war program. In closing, I want to leave another thought with you. It concerns the future. While intent on winning this war, we are building up the world's most comprehensive aviation plant. We are training millions of young men in this field. We should come out of the war with from one to two million pilots, millions of trained mechanics and other technicians and specialists. We will have airports throughout the Western Hemisphere ready for peacetime operations. Our aircraft engineering shall have made epochal progress. We will be able to produce aircraft vastly more economical to operate, faster and in all ways more efficient. We can ply the airways of the whole world with passenger, mail and cargo planes. New York and London will be less than 10 hours apart. Will we be able to preserve all this, or most of it for the airways of a world at peace? Will we maintain our aviation plant as a safeguard against future aggressors? Or will we conform to past history, and allow our defense industries to sink into complete inadequacy through economic attrition as time dims the horrors of the present conflict? That, I believe, is something we must be thinking about while we are winning this war.

Knabenshue Collection - Newspaper articles, 1939-1965
Transcribed and Reviewed by Digital Volunteers
Extracted Apr-23-2024 05:47:19



Smithsonian Institution

Smithsonian National Air and Space Museum Archives

The mission of the Smithsonian is the increase and diffusion of knowledge - shaping the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world. Founded in 1846, the Smithsonian is the world's largest museum and research complex, consisting of 19 museums and galleries, the National Zoological Park, and nine research facilities. Become an active part of our mission through the Transcription Center. Together, we are discovering secrets hidden deep inside our collections that illuminate our history and our world.

Join us!

The Transcription Center: <https://transcription.si.edu>

On Facebook: <https://www.facebook.com/SmithsonianTranscriptionCenter>

On Twitter: [@TranscribeSI](https://twitter.com/TranscribeSI)

Connect with the Smithsonian

Smithsonian Institution: www.si.edu

On Facebook: <https://www.facebook.com/Smithsonian>

On Twitter: [@smithsonian](https://twitter.com/smithsonian)