DISCUSSION OF THE TRUMAN COMMITTEE REPORT, EXCERPTS OF WHICH WERE PRINTED IN THE AMERICAN AVIATION DAILY FOR APRIL 3, 1942

In the following discussion the paragraphs quoted from the American Aviation Daily head each paragraph herein so as to make possible a direct connection between the charge and the reply. 1. "That the WPB set up a section charged with over-all planning for aircraft production, such section to be headed by a trained aircraft production executive drafted from the industry."

The present organization of the Aircraft Branch covers exeactly the type of planning that is mentioned. The enclosed organizationchart indicates the extent to which all phases of aircraft production are planned and followed up. This includes such items as production planning, manufacturing, priorities, standardization, engineering, and project expediters. It would, therefore, seem unnecessary and, in fact, undesirable that any new organization within the War Production Board or elsewhere be established.

It is further submitted that the present Aircraft Branch of the War Production Board is headed by a trained aircraft production executive. It is interesting to note that of the sixteen top executives of the Aircraft Branch listed below, thirteen have had direct experience in the aircraft industry, their average time spent in this field having been seventeen years. A brief statement of the experience of these executives is given below:

<u>Mr. T. P. Wright</u>, Assistant Chief, has been in aviation activities his entire business life. He served for four years in the U. S. Naval Reserve Flying Corps, resigning in 1921 to join Curtiss Airplane and Motor Company as executive engineer. In 1931 he became Vice President and General Manager of the Company, then the Curtiss-Wright Corporation. He is the author of many papers dealing with various aspects of aeronautics, several of which have won outstanding awards. These, together with his success in the aircraft industry, have gained him an international reputation as a design and production executive. He has been with the Aircraft Branch since June 1940. A more detailed account of his carper is attached hereto, as well as photostats of two editorials about him appearing in the December 1938 issue of Aircraft Engineering.

Dr. A. E. Lombard has been actively engaged in aircraft work, engineering, and production for 14 years, including a period with a manufacturing company and with the California Institute of Technology, where he received his Doctor's Degree, in addition to the time spent in Government service with the National Defense Advisory Commission, the Office of Production Management, and the War Production Board since June, 1940. <u>Mr. A. O. Pierrot</u>, assistant to Dr. Lombard, has been actively engaged in aircraft work for ten years. Mr. Pierrot's experience covers a wide field not only in the sale of airplanes in foreign countries but in the planning of distribution of parts and the supply of accessories to many different locales. His background follows: Graduated Georgetown University in 1922 -majored in economics and received degree of B.F.S. from Georgetown Foreign Service School. Post graduate work: George Washington University.

Appointed officer in the Foreign Service in 1923 but resigned in May, 1934 to handle the representation in South American countries, with headquarters in Buenos Aires, of several leading American manufacturers of aircraft (Curtiss-Wright, Glenn L. Martin, Grumman, Fairchild, and various equipment manufacturers).

Granted indefinite leave of absence by aircraft manufacturers represented in order to serve as Foreign Contact Officer for Latin American Aviation Affairs of the Production Plans Division in the Office of Production Management.

<u>Mr. H. R. Boyer</u> has been with the Aircraft Branch for 15 months in charge of the Manufacturing Section and before that time was actively engaged in flying as a private pilot. In business he started out with a predecessor company of Chrysler, then spent seven years with General Motors in manufacturing divisions and subsequently conducted his own manufacturing business (Allen Corporation - makers of fans) prior to coming to the Office of Production Management. In the carrying out of manufacturing, the preparations and expediting, Mr. Boyer has under him a staff well-grounded through both educational and practical experience: (Graduate of M.I.T.)

<u>Mr. Fred Ayers</u> is probably one of the outstanding men over a p riod of years in production planning and production control. His abilities have been used in rebuilding and extending plants in all parts of the world. A brief explanation of his qualifications is: Director, Bentonstone, Ltd., England; Managing Director, Daimler Motor Car Company, England; Member, Aircraft Advisory Committee, Shadow Factory, England; Managing Director, Chairman of Board, James Booth & Son, England; Adviser to Board, Wilmot-Breeden, Ltd., England; and numerous other English companies. His work in England was preceded by extensive experience in the United States which has always been his home. He was Works Manager of the Pontiac Motor Car Company and of the Betts Machine Tool Company; also Special Assignment Man for General Motors Corporation.

Mr. Joseph Salzman, Another member of the manufacturing and expediting staff with wide experience is Mr. Joseph Salzman, who has spent 25 years in aviation. Mr. Salzman, in the pioneering days of larger aircraft, was known as the top test and experimental pilot, and has close to 20 years to his credit in the manufacturing of aviation motors.

Mr. Benj. B. Jacobson on the Manufacturing Staff has spent over 15 years in the manufacturing of motor cars and aircraft. His experience extends through service with such companies as the Stinson Flying and Aircraft Company, Detroit; Universal Marine Aircraft Company, Detroit; Hammond Aircraft Company and the Briggs Manufacturing Company. Mr. Jacobson also served in the U. S. Army, Field Signal Corps, during the last war.

Mr. Christopher Heide has had mechanical experience in the automobile industry for the last 40 years. Mr. Heide's work during this long period of time has carried him from the hand-built automobile through the stages to where the greatest of all mass production was obtained. For many years he was General Superintendent for Nash-Kelvinator Motor Company.

Mr. R. R. Loes, Chief of the Priorities Section, has been in aircraft work for 15 years with three private manufacturing concerns; with the National Recovery Administration in charge of the Air Transportation Code, with the Works Projects Administration on airports work, and with the Maritime Commission, in addition to the time he has spent with the War Production Board and its predecessor organizations.

Mr. L. R. Inwood, Mr. Lees' assistant, has also been in aircraft work for 15 years in both private and Government capacities.

Mr. C. E. Stryker, in charge of Standardization, has been continuously engaged in aircraft work for over 25 years, including employment with the Curtiss Company, Bendix Company, and with the Society of Automotive Engineers on standardization work.

Mr. E. C. Welton, Project Expediter for 4-Engine Bombers, has been actively engaged in aircraft work for 14 years for the Curtiss-Wright Corporation and for nearly a year with the Aircraft Branch. In aviation work, after graduating from MIT, he was an airplane stress analyzer and designer, project engineer and technical adviser to the Export Sales Division of the Curtiss-Wright Corporation. During his time on the staff of the Aircraft Branch Mr. Walton has devoted his entire time to the heavy bomber program. His duties carry him into all of the planning of production and supervising of same.

Mr. R. E. Palmer, who is in charge of Propellers and who is also serving as 2-Engine Bomber Project Expediter, has been engaged in aircraft activities for 14 years, working with Curtiss-Wright, Stinson, and Lycoming. He is considered one of the outstanding authorities on propellers in this country.

Mr. Thomas Carroll has been engaged in aircraft work for over 25 years, including time spent with the Air Corps, with the National Advisory Committee for Aeronautics, and with private industry.

Mr. V. C. Lawrence has been 10 years in aircraft work, during most of which time he was engaged by American Airlines on maintenance problems.

Mr. W. J. Augustine, who is Executive in the office of the Assistant Chief of the Aircraft Branch, has been engaged in aircraft work for 14 years with Curtiss-Wright, Bell Aircraft, and Republic Aircraft. He has been with the Aircraft Branch, WPB, for 12 months.

It is thus ascertained that the leading personnel in the Aircraft Branch have long experience with manufacturing and engineering problems in the aircraft industry.

2. "That instead of wasting its energies on a generalized plea for 'allout production' which has confused management, labor & public, the WPB concentrate its efforts on breaking those bottlenecks which are, in the aircraft industry to the subcommittee's certain knowledge & probably in other fields, really holding up peak production."

> The Aircraft Branch has recognized the many technical problems involved in properly expanding the aircraft industry and has never devoted its time to making generalized pleas for all-out production, but rather has concentrated its efforts on immediate bottlenecks but more specifically on planning ahead so that new bottlenecks would not occur nor existing ones recur. It is appreciated that this is a gigantic task and that a complete record of eliminating bottlenecks cannot be expected; nevertheless, the fact that production has steadily increased since

the out-set of the defense effort is an indication that in the main the planning has been effective. This point is discussed below under another heading in greater detail.

3. "The subcommittee has been told that the WPB still does not have a single top notch aircraft production man in its organization."

In reply to this charge, the record of the Assistant Chief of the Aircraft Branch is submitted. This is shown on the enclosed description of his aircraft activities and photostat copy of an editorial from a leading British publication concerning a lecture given before the Royal Aeronautic Society on "American Methods of Aircraft Production;" together with a copy of recent articles published in Aviation Magazine, for which an award was made in connection with the outstanding character of these publications printed in a trade journal. It is believed that the industry in general, as well as the Government officials involved in aircraft matters, would testify as to the character of the work of the Assistant Chief of the Aircraft Branch.

4. "Aircraft production in West Coast Plants is now several times greater than it was a year ago, & is increasing every month."

> This statement is correct and could be emphasized to a far greater extent both for the work of the West Coast Plants, as well as those located elsewhere in the country. The record is outstanding.

5. "The big aircraft factories are primarily assembly plants, doing only a small part of their own manufacturing, & depending on anywhere from 1,000 to 4,000 suppliers of parts 7 subassemblies to keep their main assembly lines going."

> This statement is not correct as the general average of subcontracting work is about 25% for the large aircraft factories and excluding the four Government assembly plants. The large prime contractors do, of course, subcontract to hundreds or even thousands of suppliers for parts and assemblies in addition to the installation of Government furnished equipment. However, the amount of parts and sub-assemblies constructed by each of these in addition to the final assembly work forms a preponderance of the work done by these prime contractors.

6. "When the big expansion of aircraft plants was undertaken a year or more ago, no attention was paid to the necessity of expanding at the same time the facilities of the thousands of subcontractors who supply parts & subassemblies. As a result, in some vital airplane parts, production is not up to the capacity of the big assembly to absorb them." This statement is entirely inaccurate as can be shown by a study of the hundreds of facility expansions which have been processed and cerried through for subcontractors and GFE suppliers. The fact that bottlenecks constantly accur in such items is not the fault of the planning but is inherent in the problem itself.

It must be recognized that, when a new program is received by the Aircraft Branch, War Production Board, from the Services, such program is given in terms of airplanes. A specific manufacturer is indicated so that the expansion of the airframe builder can almost at once be undertaken. However, such a program insofar as equipment, materials, GFL, and so forth is concerned, will include similar parts or amounts required for each airplane type but only obtainable in total by making a complete cross check of the specifications of the basic airplane types. Once the program is received, this cross check is immediately started here by the Aircraft Branch itself or by its Scheduling Unit located in Dayton, Ohio. From such cross check the total new requirements added to those already existing are totaled up. These are then checked against a survey of the capacity of the supplying firms involved. Only after this double check is made, has it been possible to establish the extent of expansion of these suppliers. These papers are then immediately processed, and the necessary expansions gotten under way. It should be observed that there is inevitably a time lapse in performing the above operations so that these items of equipment needed first are actually only expanded subsequent to the expansion of the airframe and engine companies.

Coupled to the above difficulty is the further one that at the out-set of the defense effort the supplying companies, as well as the engine and propeller companies, were nearer to their capacities than were the airframe companies. This meant again that the airframe companies could absorb additional work to a greater extent than could equipment companies.

On top of both of the above items is the additional one that the extent of machine tools and the amount of time necessary for exapnsion is actually greater for companies building equipment, propellers, and engines, than for aircraft.

All of the above means that the planning has been properly carried out, and a longer period of time will show up more complete balance of the various companies involved in the program. In the interim, however, an unbalanced condition exists for many items, and it has been stated above that one of the prime objects of the Aircraft Branch is to sliminate these recurring bottlenecks as fast as they arrive. 7. "These shortages in critical items have made it impossible to operate assembly lines at full capacity. Rather than work trained crews at top speed until meterials are exhausted & then lay men off for a few days, with probably loss of morale & trained mechanics, the aircraft plants have simply refrained from turning on full pressure for peak production, which was their wisest course. However, individual workmen, unaware of all the facts but knowing the plant was not operating at full capacity, have charged a deliberate "slowdown" existed, & their stories have created public uneasiness. Actually, every effort is being made to break these "bottlenecks" & the subcommittee is hopeful that assembly lines will soon be able to operate at peak capacity."

The first sentence of the above statement is correct in a few instances, although not in general. There are instances where a full work week cannot be effectively worked by certain prime contractors because of shortage of items of equipment, which of necessity had to be allocated to firms building aircraft of higher priority. The effort which companies who found themselves in this position have exerted to balance their own production is noteworthy. Every effort is being made to supply sufficient equipment so that these few instances can be eliminated and the whole industry can proceed on an all-out basis.

8. "A poor job of over-all planning, from a luminum ingots to finished eircraft, by the armed services & the old OPM must be blaned for the present situation. The usual red tape & delays in making contracts also were partly responsible."

It is submitted that here again the charge is in general unwarranted. One of the greatest difficulties from the first has been failure to set up expanded programs and for the Congress to provide funds for them sufficiently in advance so that the long range planning job necessary can be carried out. Time and time again the Aircraft Branch has urged placing of orders with certain companies so as to prevent a lag in out-put which it has foreseen would exist nine months to a year thereafter. In almost every instance it has been found impracticable to place such orders because of the unavailability of funds to permit the procuring agencies to send out letters of intent or to sign contracts.

However, the problems involved in setting programs and securing funds for them are recognized as tremendous, and it is not the aim in this paragraph to criticize too heavily the failures that have occurred in this regard. It appears rather more important to show that, in spite of the many obstacles involved, the schedules which have been established in aircraft have been met in the past and are now being exceeded. These schedules have in no case been set so low as to make accomplishment an easy job; on the contrary, they have been in general set at a target well above what many experts thought was possible of attainment. It is believed that the morale of the country in general would be raised far more by reciting such actual accomplishments rather than confusing the public by criticism, the bulk of which are unfounded.