ADDRESS REPLY TO
CHIEF OF THE AIR CORPS
WAR DEPARTMENT
WASHINGTON, D. C.

WAR DEPARTMENT

OFFICE OF THE CHIEF OF THE AIR CORPS

WASHINGTON

APR 29 1941

Dr. Vannevar Bush, Chairman,
National Advisory Committee for Aeronautics,
Navy Building,
Washington, D. C.

Dear Dr. Bush:

The Air Corps desires to clarify any thoughts that a duplication of functions may exist for the N.A.C.A. Cleveland Laboratory wind tunnel and the wind tunnel at Wright Field, Dayton, Ohio.

The primary functions of the Wright Field tunnel are to make quickly available to the Air Corps a check on the suitability of airplanes fulfilling their contractual requirements and on information concerning airplane accouterments, equipment, etc.

The Cleveland tunnel devotes itself to aircraft engine research and therefore does not duplicate the work done at Wright Field, but will be of unquestioned value in general engine development work.

Very truly yours,

Geo. H. Brett

Geo. H. Brett,
Major General, U. S. A.,
Acting Chief of the Air Corps.

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Cleveland, Ohio,
March 23, 1942.

MEMORANDUM For Construction Administrator.

Subject: Visit of Dr. Wattendorf and Mr. Williams of Wright Field.

1. Dr. Wattendorf and Mr. Williams of Wright Field were here on March 19, 1942 for a brief unauthorized visit.

2. Their purpose was to discuss their plans to test full-scale engines in the new Wright Field 20-foot tunnel (40,000 horsepower tunnel drive motor). The visitors explained that because of the urgent need for engine research the Wright Field group had been instructed to adapt their tunnel to that phase of work, though it was designed primarily for airplane model and aerodynamic research.

3. Dr. Wattendorf said that he would like to call upon us, in view of our experience, for assistance on the different problems to be considered, and which he may encounter, in preparing his tunnel for full-scale engine testing.

4. The Wright Field tunnel can be used only for sea-level operation of engines. Cooling of the tunnel will be by means of the existing tunnel air exchanger with an air handling capacity of 30 percent of the mass flow. However, the visitors had not given much thought to the problems of tunnel stabilization temperatures under full engine output or to the effects of engine exhaust gases on the tunnel atmosphere.

5. It was stated that their tunnel will be in operation shortly, but that about another six months would be required before engine tests could be undertaken.

Ernest G. Whitney

Ernest G. Whitney,
Head, Construction Division.

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