Visits of General Electric Company representatives to the 5-Foot Tunnels Branch

1. During the period from May to the present, a number of visits were made by General Electric representatives to the 5-Foot Tunnels Branch and numerous telephone calls were made by General Electric representatives or 5-Foot Tunnels Branch personnel with regard to the investigation of a powered nacelle in combination with a simulated cargo-type airplane in the 5-foot transonic pressure tunnel. Mr. John T. Kutney of the General Electric Company visited the 5-Foot Tunnels Branch on May 10, June 1, August 20, October 1, and 2. Mr. Eugene L. Vinogran visited on August 20, August 31, September 2, and September 23. Mr. Gene K. Howar visited on August 20.

2. The General Electric Company is proposing a radically different fan engine with a front fan of very high bypass to the Air Force for the CX airplane. During his first visit to the 5-Foot Tunnels Branch, Mr. Kutney explained the extreme need for obtaining information on the aerodynamic interference between this new engine and the wing-fuselage of the CX airplane. Mr. Kutney emphasized the need for obtaining this information before December 31, 1964, the end of the Air Force study contract period. During this initial visit, it was agreed that a powered model of the CX engine would be investigated in combination with a representative configuration of the CX in the 5-foot transonic pressure tunnel pending a request from the Air Force for such a test. (The Air Force request for the investigation was received at Langley on July 1, 1964.) It was also agreed at that first meeting that the G. E. Company would provide the powered nacelle which would incorporate a compressed air turbine driving a fan. The G. E. Company would also provide the pylons to mount the nacelle with respect to the wing. It was further agreed that the NASA would provide the representative wing-fuselage combination to be investigated with the nacelle. The NASA would also provide the wind-tunnel balance and the model support system required for the investigation.

3. During the several visits of the General Electric representatives and telephone calls, the numerous details with regard to this investigation have been discussed with the undersigned, James C. Patterson, Jr., of the 5-Foot Tunnels Branch, and members of the Research Projects and Models Section of the Research Models and Facilities Division.

4. At the present time, it is anticipated that this investigation will be initiated in the 5-Foot transonic pressure tunnel on approximately December 1, 1964.

Richard T. Whitecomb