October 17, 1966

Dear Josh:

Thank you for your inquiry of recent date concerning the SST's sonic boom "pollution."

Let me first allay some of the apprehensions implied by your questions. The problems of SST development, including those associated with sonic booms, have been subject to continuing review by the government at several levels. A Presidential Advisory Committee on the SST, under the chairmanship of Secretary McNamara, has been active since its establishment by an Executive Order early in 1964. A National Academy of Sciences Committee on the Sonic Boom, under the chairmanship of John Dunning, was established about the middle of 1964 as a result of a request by President Johnson to the Academy for technical advice in this area. And, finally, for the last year and a half, I have been chairing an Interagency Coordinating Committee on Sonic Boom Studies (which includes Dunning and several members of his committee as participants and consultants) to insure that decisions concerning the SST development program which are importantly dependent on sonic boom considerations do have the benefit of timely and sound scientific advice. I believe this structure of advisory committees has been working well, has to date provided the kinds of basic guidance the SST development program has needed, and has tended to insure that the conduct of the program, as well as its final results, will indeed serve the public interest.

With respect to some of your specific questions, my personal views are as follows:

a. Both of the current competing designs for the U.S. SST are being evaluated by an interagency committee. No authoritative statements can be made about their sonic boom characteristics until after this evaluation has been completed and reviewed.

b. At daily repetition rates characteristic of expected commercial airline operations, we still do not know what levels of sonic booms will be acceptable as a part of the permanent environment. Accordingly, one
of our major technical problems (and we are working at it quite hard) in predicting the economics of future SST operations is whether (and how) commercially successful SST's can be built for overland and/or overseas routes. This was recognized by the President and his SST Advisory Committee when he requested the NAS study, and you are well aware of his concern for the non-economic factors in the quality of American life.

With respect to your general question, "what should I know to be able to write a thoughtful critique," a good start can be provided by a number of reports, including results of several community over-flight tests performed by and for the FAA and NASA. I have asked the Office of Supersonic Transport Development of the FAA to supply you with a bibliography, and I am told, they will do so shortly.

Please let me know if I can be of further help to you.

Sincerely,

Donald F. Hornig
Director

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