Mr. Mark Jefferson  
12 Meadow View Drive  
Poughkeepsie, NY  12603

Dear Mr. Jefferson:

This is in answer to your letter of November 15 to the Director of the Langley Research Center. The answers to your questions are in the enclosed paper by the undersigned entitled, "Review of NASA Supercritical Airfoils."

If you have any further questions, please contact me at Mail Stop 359 at this Center or telephone Area Code (804) 827-2631.

Sincerely,

(RTW)  

Richard T. Whitcomb  
Aerospace Engineer  

Enclosure  

cc (w/o Encl.):  
101/General Files  
106/Director  
116/Director for Aeronautics  
285/STAD  
359/TsAB  

359/RTWhitcomb:jal 11-29-78 (2631)  
285/MOM  
285/PJB
Dear Mr. Hearth,

I am working on a science fair project dealing with the dynamics of the supercritical wing. I have been researching the topic for some time now. The most information I have come up with is:

1. general description of the profile of the supercritical wing;
2. flight characteristics of the cambered wing in the transonic zone;
3. flight characteristics of the supercritical wing in the transonic zone.

I feel that with any or all of the following information I should be able to construct a good science fair project:

1. the supercritical wing's flight characteristics as compared to that of the conventional wing;
2. the formation of shock waves on the supercritical wing;
3. the boundary layers and its affects;
4. the transonic speed zone.

In my research I found that back in 1969 tests were taken at Langley on the supercritical wing. If the tests results are available I would appreciate it if you would send me a copy or tell me where I can locate a copy.

Any assistance will be gratefully appreciated.

Sincerely,
Mark Jefferson