



JET PROPULSION LABORATORY *California Institute of Technology • 4800 Oak Grove Drive, Pasadena, California 91103*

July 22, 1974

Dr. Michael A. Minovitch
2832 St. George Street, Apt. 6
Los Angeles, CA 90027

Dear Dr. Minovitch:

I have received your letter of June 10, 1974 regarding Dr. Norris Hetherington's paper entitled "Gravitational Thrust: The Development and Application of an Idea." I have also received copies of your letters to Dr. Hetherington and to Mr. Victor Clarke, Jr. on the same subject.

With regard to the publication of Dr. Hetherington's paper, it would be improper and contrary to the principles of academic freedom for JPL to interfere with the publication of Dr. Hetherington's paper. Indeed, publication is the accepted and most effective method of subjecting ideas to objective and critical review. Dr. Hetherington is a scholar engaged in research, and he alone must decide on the content of his paper and whether to present it for publication.

I regret that this controversy has occurred, since we at JPL hold your pioneering work in high regard. You were the first to explore fully the gravity-thrust concept. With commendable foresight, you demonstrated that gravity-assisted flight dramatically expanded the range of available missions. The gravity thrust concept is now fundamental to many NASA planetary missions.

We want you to receive full and proper credit for your work. I recommended you for the NASA Exceptional Service Award, which you subsequently received. Also, authors at JPL and elsewhere have frequently referenced your work, which is perhaps the most meaningful and enduring type of recognition.

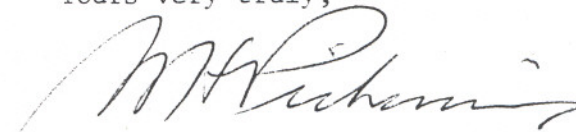
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You state that certain JPL employees provided information to Dr. Hetherington that was false and misleading. As is always the case with events which took place years ago, you and various JPL employees have somewhat differing recollections. Our review indicates that JPL employees attempted to give accurate and honest commentaries to Dr. Hetherington, and that, in general, they succeeded in doing so. We have further concluded that they did not deliberately provide false or misleading information. However, we find that, in a few instances, facts and recollections furnished by Mr. Victor C. Clarke, Jr. could be regarded as ambiguous or capable of misleading the reader. We want to take reasonable steps to clear up any such ambiguities and ensure that no one is inadvertently misled. For this purpose, Mr. Clarke has sent a letter of clarification to Dr. Hetherington, a copy of which is enclosed.

My staff has not undertaken an evaluation of all the statements and allegations you have made, nor a general review of Dr. Hetherington's paper. Therefore, I have limited my comments here to those matters related to the providing by JPL employees of information or comments to Dr. Hetherington. I believe that the review undertaken by my staff and the enclosed letter to Dr. Hetherington should set this matter to rest. However, if you feel that it remains unresolved and you have documentary evidence which we have not had an opportunity to consider, please make such evidence available to me, so that I can review the matter further, and take appropriate action.

Yours very truly,



W. H. Pickering

Enclosures

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