

June 26, 1963

Mr. Maxwell W. Hunter II
National Aeronautics and Space Council
Executive Office of the President
Washington, D.C.

Dear Mr. Hunter:

It has been about three weeks since I talked to you at the Mars Symposium in Denver Colorado. I realize that you probably do not remember me so I think I shall try to recall our meeting.

On the last day of the symposium which was Friday, June 7, you participated in a panel discussion entitled "The When and What of the Mars Trip". Up until that time I did not think anyone of your high position and influence would have the courage to speak so favorably on early manned missions to Mars when there are many who feel that the moon mission is a waste of time and money. After the panel discussion many people, feeling a great admiration for you including myself came up to try to make your acquaintance. I, feeling it best to wait until most people left, introduced myself just before we started leaving the main banquet room. At first our conversation centered upon mans spirit for adventure and a sort of philosophic argument in favor of this countries space effort. I recall our thinking that a large scale space effort would not only lead to new engineering developments in totally unrelated fields and make profound contributions to problems concerning the nature of physical reality but also and even more importantly it would inject into humanity and particularly the people of our country a feeling of courage and strength not based on the distruction of mankind but on his ability to understand and reason. I recall also how important we thought it was to achieve sincere peace as soon as possible and how much great space efforts by various countries could help bring this about.

While we were talking outside the banquet room I said that I wrote a technical paper which was to be published and which among other things deals with early manned missions to Mars.

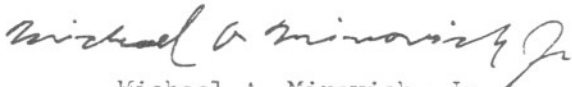
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You said you would like to see it when it is published. I have in the mean time made some rough calculations using some vehicle design parameters for small Mars excursion and mission modules which were presented at the symposium. My results indicate that it may be possible to carry out a manned Venus-Mars fly-by reconnaissance mission in 1970 and to begin an actual manned landing mission to Mars in 1972 without using new and massive launch vehicles. The calculations show that by employing an unconventional trajectory profile the Saturn 5 may have sufficient booster capability to carry out these missions. In view of these results which I hope will warrant more serious consideration I have decided to send you a rough manuscript of the paper. During the course of the symposium I also made the acquaintance of Dr. Harry Ruppe who works in the Future Projects Office at Marshall Space Flight Center. Dr. Ruppe also expressed interest in the paper and since he is probably in a better position to go over it with more detail I am also sending him a copy. Since the Jet Propulsion Laboratory is not working in this area I feel that these results should be made known as soon as possible. I feel that since the major obstacle in carrying out an ordinary Mars landing mission is the development of a sufficiently powerful launch vehicle, the possibility of using the Saturn 5 on an unconventional trajectory profile may save a great deal of time.

I shall send you a copy of the JPL Technical Report (No. 32-464) as soon as it becomes available. If you have any questions regarding the paper please feel free to contact me at any time. Since the findings regarding the use of the Saturn 5 launch vehicle concerns an immensely important and significant undertaking I am ready to assist you in any way I can.

Sincerely yours,

JET PROPULSION LABORATORY


Michael A. Minovich, Jr.

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