DEPARTMENT OF CHEMISTRY

Sterling Chemistry Laboratory 225 Prospect Street

26th January 1970.

Professor Joshua Lederberg, The Medical School, Stanford University, Stanford, CALIFORNIA.

Dear Professor Lederberg,

Although I have not finally heard from NASA, it now appears clear that my proposal to look for CO-metabolism on Mars was not accepted. This in itself neither surprises nor dismays me, since in that proposal I had stated quite clearly that it was not necessary for myself personally to be involved in any such experiment. I do feel strongly, however, that a search for this type of metabolism should be seriously considered. I will not be involved in the mission, I write to appraise you of the situation in the expectation that you will be similarly interested in seeing that this idea is not lost.

Also in the hope of making sure that CO-metabolism will be taken seriously, I am publishing a brief critique which examines the factors favouring COmetabolism on primitive planets in general. This publication is similar in content to my proposal, and includes a reference to your relevant remarks in a recent issue of Applied Optics.

> Sincerely yours, Richard Holfgory

Richard Wolfgang.

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As you probably have heard, the Viking program has been rescheduled to 1975; however, I have also just been appointed to the operational time, team and we have been told to proceed, for the time being, per previous This may actually mean that even the 1975 plan is in fiscal proposals. jeopardy.

At any rate: CO is definitely being taken very seriously. However, if it is introduced as C\*O together with C\*O, at the ambient ratio and pressures of CO/CO, which is the present proposition (weight limitations making it hard to kill the bird with separate stones), we are in trouble with calculated sensitivity to what can be expected from uptake of CO at that level. modifying the environment. If we boost CO, we are "unrealistically"

(1) would be useful.

Sincerely Four Four CC: Hard Klein, Ames Res. Efr., Team leader

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