

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WASHINGTON, D.C. 20546

REPLY TO ATTN OF:

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JAN 2 4 1974

MEMORANDUM

TO:

MM/NASA Director for Life Sciences

FROM:

I/Director, International Program

Policy Office

SUBJECT: Possible Exchange of US and USSR Life Scientists

Attached is a letter from Harold Klein at Ames which proposes an exchange of US and USSR life scientists.

The idea is that Dr. Mikhail Kritsky, a biochemist, would work for up to six months at Ames sometime in 1974 or 1975 on primitive biochemical evolution (Academician A. I. Oparin has indicated to Klein that Kritsky could be available). In return, David Winter would work at Gazenko's Institute of Biomedical Problems on disorientation problems in manned space flight.

We would like to have your opinion on the desirability of such an exchange. If you view it positively, it could be taken up directly in the Joint Working Group on Space Biology and Medicine. You recall that you raised the possibility of exchanges during the first Working Group meeting in October 1971.

For your background, an exchange took place in 1969 under Academy-to-Academy auspices. Oparin spent seventeen days at Ames in seminars and individual discussions, while Sidney Fox of the University of Miami spent 24 days on a lecture tour in the Soviet Union which took him to institutes in Moscow, Leningrad, Kiev, Yerevan, and Tbilisi.

Oscar E. Anderson

Attachment

cc: SL/Dr. Young

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RECTARCH COUTER MOFFETT FIELD, CALIFORNIA (14335)

ATIN OF:L:200-7

January 8, 1974

TO:

NASA Headquarters

Attention: Dr. Richard S. Young, Code SL

FROM:

Harold P. Klein, Director of Life Sciences

Ames Research Center

SUBJECT:

Possible Exchange of Scientists between US and USSR

In accordance with our recent telephone conversation, I will review for you the status and background of a proposed scientist exchange between the Ames Research Center and the Bach Institute of Biochemistry (Moscow, USSR).

Several years ago, Professor A. I. Oparin, Director of the Bach Institute visited Ames for a few weeks on a scientist exchange with the Soviet Union. At that time, his presence here was a great stimulus to our research program in chemical evolution as you know. During his stay here, we discussed the possibility that one of the younger men in his institute (a person actually engaged in, rather than directing, research) might some day participate in such an exchange and come to Ames.

In Barcelona last June, at the 4th International Conference on the Origin of Life, this possibility was briefly discussed with Professor Oparin again. He indicated that he had an excellent biochemist, Dr. Mischa Kritsky, on his staff and that Kritsky could be available some time in 1974 or 1975 for a period of up to six months if an exchange could be worked out. I had previously met Kritsky, while I was in Moscow as a NASA representative on the US-USSR Working Group in Space Medicine and Biology, and was quite impressed with him. He has an excellent command of English; is doing exciting work on primitive biochemical evolution, and would complement - and extend - our own work in this area at Ames.

On the other side of such a potential exchange, we would be highly desirous of having Dr. David L. Winter (Deputy Director of Life Sciences, ARC) considered to represent the US. There are a number of benefits to be derived for our space program if this could be realized. First of all, Dr. Winter is a specialist in neurophysiology, having been Chief of the Department of Neurophysiology at the Walter Reed Army Institute of Research before joining Ames. This field, neurophysiology, is particularly highly developed in the USSR, where numerous excellent institutes are devoted to the field which the Soviets have pursued with unusual vigor and effectiveness. Since disorientation problems have been routinely and frankly acknowledged in USSR manned space flights, it would follow that intensive research on the nature and causes of these anomalies is being conducted on this matter in the USSR. It is highly likely that particular emphasis is being given to this problem in Gazenko's institute (Institute of Biomedical Problems, USSR Ministry of Public Health, Moscow D-7, Khoroshovskoye shosse, 78) in Moscow, and it would be of great usefulness to us if, for example, Dr. Winter could spend some time at that Institute.

This then is the general background. It is quite evident that if such an arrangement can be worked out, the advantages to Ames and to NASA would accrue in two widely separated, but important, areas of our work. Kritsky would work in the Planetary Biology Division on a problem involving primitive organisms, possibly with me or with Dr. Janos Lanyi, depending on detailed communication between us and Kritsky, if NASA can effect this exchange. Dr. Winter on the other hand, would work at one of the research institutes in the USSR where research on neurophysiology is being highlighted. Once again, the specifics would have to be worked out once we knew we were in a position to proceed in preparing for such an exchange.

Harold P. Klein

Harold P. Klein

cc:

NASA Headquarters, Code I