

September 12, 1989

Prof. James Van Allen  
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University of Iowa  
Iowa City, Iowa 52240

Dear Prof. Van Allen,

Yesterday I was called by a staffer working for Senator Glenn who asked me to come down and talk with them (off the record) about "NASA priorities". I guess I will do it, in a few weeks. Perhaps you may have a word of advice on the subject.

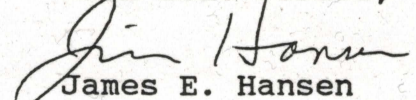
One thing that bothers me is the absence of the brainpower needed to carry out any "mission to planet Earth" or a significant effort to develop that. It seems to me that there should be a major program in college scholarships and post-doctoral fellowships. I'm trying to make an analogy with space sciences in the 1960's, though I'm only vaguely familiar with how the programs worked then. I enclose a copy of a letter which I gave to Senator Wirth a few weeks ago, on which I indicated that you may be one of the persons who could give advice on such programs. I also enclose a letter written earlier to NASA on this subject.

When I gave a talk this summer (to International Platform Association, copy enclosed) I tried to recall some details about my graduate studies at Iowa --- I believe that I had to make a written or oral proposition to the committee you chaired before I began my thesis research. Everything then and over the next number of years was so unfamiliar that it just flew by without me realizing what remarkable opportunities I had. My wife Anniek, who I met in Holland when I was on an NSF post-doc, has been reminding me for years about the need to have "antennae" out to be aware of what is going on around me --- hopefully it is finally beginning to sink in.

Finally, I enclose an article by Sagdeev, which I think you may appreciate.

P.S. I should mention one thing involving you which I have thought about a number of times. Once in the 1970's you were trying to get an instrument on a Jupiter mission, Galileo I believe, and, according to Rasool essentially offering it "for free", but NASA didn't include it. I asked if that may be a result of HQ annoyance at your position on manned spaceflight - he responded "shh - we don't talk about that". Anyhow it was an inspiration that you said what you believed & went about your business without regret.

With best wishes,

  
James E. Hansen

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Iowa City, Iowa 52242

Department of Physics and Astronomy

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20 September 1989



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Dr. James E. Hansen  
33 North Pleasant  
Ridgewood, NJ 07450

Dear Jim:

Thanks for your recent packet of material. I can assure you of my complete support in your efforts to put some sagacity and real science into the global warming issue. Also I join in your assessment of the shortage of scientific talent in NASA's now rather grandiose hardware program for Mission to Planet Earth.

You may be interested in the following verbatim excerpt from a letter that I wrote on your behalf in May 1988:

"I am moderately familiar with Jim's recent work on long-term trends in the Earth's climate and on the atmospheres of Venus and Jupiter. Also, in my service as a member of the Galileo project group, I have been favorably impressed by his leadership in developing one of the major Galileo investigations. However, I would not represent myself as competent to give an expert and independent assessment of these matters.

"My most significant knowledge of Hansen is based on my clear recollections of him as an undergraduate and graduate student at the University of Iowa in the 1960's. He was one of our outstanding students of that epoch. With the guidance of Professor Satoshi Matsushima, then a member of our astronomy faculty and subsequently at Pennsylvania State University, he did a publishable quality M.S. thesis entitled 'Theoretical Study of the Density and Color Distribution of Light in the Earth's Shadow' -- a problem of scattering, absorption, and transmission of sunlight in the atmosphere.

"Soon thereafter, I served as chairman of his Ph.D. comprehensive examination committee and called his attention to the then rather new radio-astronomical evidence (Mayer, Barrett, Staehlin, Drake, and others) on the high temperature of Venus' surface and the conjectures on a greenhouse effect in its atmosphere. He adopted this problem as the subject of an 'original proposition' for a Ph.D. investigation and presented it ably to the committee. He then proceeded, under Matsushima's general guidance but largely independently, to develop this into his February 1967 Ph.D. dissertation 'The Atmosphere of Venus: A Dust Insulation Model'. I was



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a member of his final examination committee and recall the occasion as a memorable one in my academic experience. Indeed, much of his subsequent work has had its roots in this comprehensive study."

Sincerely yours,

*Jim V.A.*

James A. Van Allen

P.S. I do understand that my criticism of NASA's emphasis on the shuttle, on manned space flight, and on the space station has not endeared me to NASA management but I have taken the position that I am dealing with honorable individuals, who understand that there is room for differences of opinion on these basic matters. I have never detected any clear case of a reprisal but there may be such on a subtle level.