

NATIONAL AIR AND SPACE MUSEUM



SMITHSONIAN INSTITUTION

WASHINGTON, D. C. 20560

April 26, 1988

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

Dear Dr. Minovitch:

As I mentioned to you over the phone, I am the Curator of a new gallery at the Smithsonian on the application of computers to air and space flight. One of the most significant artifacts we will be putting in this gallery is a flight-qualified backup of Mariner 10, the first space craft to visit more than one planet. (Some publicity material and a photo of a scale model is enclosed).

In developing the labels for this artifact, I have been doing some research on the history of gravity-assist techniques, and I came across Norriss Hetherington's paper. I enclose a copy for your information, although I assume you have already seen this. I do not have any other information from JPL or NASA Headquarters, although time permitting I hope to visit those archives in the near future. (Being the curator of a 5,000 square-foot gallery that is opening in a year means that I have to be in the office full-time, so I cannot take too much time to do more thorough research. However I do plan to do this after the gallery opens next year.)

I wonder if you could recommend other source material that I could use. If you have written down your own remembrances of the development of gravity-assist techniques, that would be useful, too. (If you haven't, perhaps you might think of doing so and submitting it to an historical journal for publication.) Naturally I am especially interested in the role of the computers in all this, especially the extent to which the availability of large blocks of computer time affected your work.

One final matter--do you have any artifacts from that time frame? Artifacts could include program listings, punched cards, graphs of trajectories, etc. It is very difficult to exhibit these in a museum environment, especially since our public cannot be expected to understand the details of what these artifacts represent. Just the same, if you have such things they are of great historical value and should not be destroyed or lost. The Smithsonian is the logical place for such items, although there are other places that I am sure would also be interested, including the Computer Museum of Boston, and the Charles Babbage Institute of Minneapolis.

I am looking forward to hearing from you.

Sincerely,

Paul Ceruzzi
Associate Curator
National Air and Space Museum