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SANTA CRUZ, CALIFORNIA 95064

September 27, 1990

Dr. Gary P. Posner, M. D.
Tampa Bay Skeptics
6219 Palma Boulevard #210
St. Petersburg, Florida 33715

Dear Dr. Posner:

This is in reply to your inquiry of September 18 concerning the provenance of the design concepts associated with the Pioneer 10 plaque.

The origin of the design concepts, and the identity of the originators are exactly as described in the 1972 Science paper by Sagan, Sagan, and myself, and as described in Carl Sagan's letter to you of September 6. Neither Eric Burgess or Richard Hoagland contributed any ideas or even suggestions as to what should be on the Pioneer 10, and no suggestions as to any message content. They did point out that Pioneer 10 was going to leave the solar system and it would be nice to put some form of message on it. That was far as their involvement went. I am sure that Eric Burgess would be glad to confirm this. He now works for an electronics firm in Santa Rosa, California.

The idea that there should be an engraved plaque, and the type of information which should be engraved, was developed mutually by Carl and me in conversations which took place at a meeting of the American Astronomical Society in San Juan, Puerto Rico, in the winter of 1971-72. These conversations took place in what was then the San Jeronimo Hilton, on the second floor. Since the subject was so exciting, I remember them well, and could readily point out to anyone just where they occurred. I remember very clearly that we started with completely open minds as to what the message should be, and without any prior suggestions as to possible message content.

I hope this helps you.

Sincerely yours,

Frank D. Drake

cc: C. Sagan



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SANTA CRUZ, CALIFORNIA 95064

October 18, 1990

Dr. Gary P. Posner
Tampa Bay Skeptics
6219 Palma Boulevard #210
St. Petersburg, Florida 33715

Dear Dr. Posner:

The precise meaning of words, such as "conception", is unclear at times. In answer to your letter, my answer to your previous letter would not be any different had you asked a different question. The history of the origin of the Pioneer plaques, at least the parts of the history when I was present, is very clear:

1) Both Burgess and Hoagland did point out to Carl Sagan that the Pioneers 10 and 11 would leave the solar system, and they suggested that a "message" be carried on them. To the best of my recollection, after eighteen years to be sure, those were the very words Carl used when he first discussed the matter with me. Those are the words used in the acknowledgements in the Science paper describing the plaques. I enclose a reprint of that paper, although you probably have one. I think this acknowledgement gives credit extremely accurately and fairly.

2) That the message would be an engraved plaque of a certain construction and size is something Carl worked out with the Pioneer project managers at various NASA offices. I was not involved in those discussions.

3) The plan for the actual message content, in all respects, was worked out by Carl and me together. We worked this out without the benefit of any suggestions from anyone. The final, engraved, detailed message content was constructed entirely by the three authors of the Science paper.

I hope this will serve to clarify this matter.

Sincerely yours,

Frank D. Drake

cc: Carl Sagan

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6 November 1990

Professor Frank D. Drake
Board of Studies in
Astronomy and Astrophysics
Lick Observatory
University of California
Santa Cruz, California 95064

Dear Frank:

Your letter of October 18 to Gary Posner corresponds exactly
to my recollection of the events as well.

With best wishes,

Cordially,



Carl Sagan

CS/ey

cc: Gary P. Posner ✓