Mr. Gallagher. Would you agree with the suggestion of this committee that while the results the proponents are seeking are quite desirable, nevertheless the state of the art is at such an early stage that further study of the problem should be had, or there should be a continued study of the problem before we embark on a Federal statistical

Mr. Baran. I agree wholeheartedly with that statement.

Mr. Gallagher. In your statement here, I would like to read this part, where you were "highly pleased" and yet "surprised by the rapidity with which Congress is addressing itself toward the examination of this subject—one that is not yet generally recognized as being a problem by most in the computer profession." Do you think that the computer profession itself should start addressing itself in a more meaningful way to the problem of privacy and safeguards and protection?

Mr. Baran. I do. I see a small but growing group in the computer profession beginning to become concerned about this range of prob-

Mr. Gallagher. Do you feel that before the Government would get committed on a course that we should allow the problem to develop and some ideas generate from the computer profession as to safeguards?

Mr. Baran. Yes, I think we have the time. The problem we are addressing is a future problem. It is not something where we need an immediate answer today. We could hold off a little. We have the time to think and consider alternative approaches to this question of providing safeguards. Since the details are going to have to be devised by the computer profession, I think it is well that they be encouraged to start working along this direction. They work very well We have good industry standards on things like data communication, formats, and coding arrangements, and I am sure that something can be developed along this line in the matter of safeguards.

Mr. Gallagher. In view of that statement, that there is time to develop our thinking on this, conversely do you feel that this is not the time to get into a statistical data bank?

Mr. Baran. If the report concluded that the need for such a center was sufficient, it might be well not to impede what they are trying to do. I think there are things to be done in parallel. I think that study of the data bank could proceed, but I would like to see a fair amount of parallel effort going into the safety aspects of the data bank.

Mr. Gallagher. I agree with you that the study should proceed. May I get back to this? Do you feel that it would be premature to embark on the construction of a data bank at this stage?

Mr. Baran. From what little I have heard about it, I would think it would be premature to start on actual construction, because many of the safeguards are hardware-type safeguards.

Mr. Gallagher. Do you know anything about an Air Force research study of how to use computers to call up derogatory information on individuals?

Mr. Baran. Not as such. I am aware of experimental information retrieval techniques that could allow you to ask questions such as, "What is the relationship between person A and person B?" "Have they ever worked at the same place?" "Have they ever coauthorized a paper?" and draw connections between people or organizations.