assigned to the World Health Organization an epidemiologist from our staff to assist it in getting data from various countries that would be of interest to us and to other countries. The Organization for Economic Cooperation and Development, to which the United States is a party, has a group which is fostering cooperative projects in the air pollution control field in which members of our staff participate.

We have collaborated with the Economic Commission for Europe

which is engaged in the development of certain types of standards

relating to the control of air pollution.

We have a bilateral arrangement with West Germany in connection with studies relating to the control of air pollution, particularly from automobiles and from fuel combustion. This is being developed further.

We have a bilateral agreement with the Japanese through the Science Board which has a specific Committee on Air Pollution. There is a severe air pollution problem in certain parts of Japan and there are cooperative research projects that have been inaugurated under these auspices. We have assigned an epidemiologist to the Tokyo-Yokohama area for collaborative work in studies of the socalled Yokohama asthma which has been very bothersome to military personnel assigned in this area and is a troublesome problem also in the local population.

Mr. Roush. I would like to be exposed to it for about a week. I

think it might be very helpful right now. Go ahead.

Mr. Mackenzie. Well, I cite these as examples of our activities in the international field. They provide opportunities, in my opinion, that we should take advantage of in order to keep fully abreast of what is going on elsewhere in the world.

Mr. Roush. Thank you, Mr. Chairman. Mr. Daddario. Mr. Vivian?

Mr. VIVIAN. On the subject of automobiles and pollution from automobiles, I get the impression from the Secretary's testimony that you see no solution on the problem of automobiles and air pollution therefrom except by replacement of the power system of automobiles by something other than an internal combustion engine. Is that a cor-

rect statement, sir?

Mr. Stern. I don't know as I would subscribe to that. I think there are opportunities for improvement in the internal combustion engine that we haven't fully explored. We really don't know the limits to which the present powerplant can be improved. We have some doubts as to whether it can be improved to the extent that we can double the number of automobiles without putting devices such as afterburners on cars. I wouldn't say at this time that we have written off the present form of engine as an impossible one for further improvement.

Mr. VIVIAN. You regard the fuel cell as a possible alternative

source of power?

Mr. STERN. Yes.

Mr. VIVIAN. And if you have fuel cells will you not almost totally eliminate the problem except in the generating plants which generate the power in the first place?

Mr. Stern. We don't have enough experience with the exhaust products from fuel cells to know whether they might have objectionable