Horstmann, should not be construed as evidence that the barrier strategy is mistaken, since for several diseases the progress of transmission in these conditions is known to be quite different from that among the civilian population.

The severer critics of the present campaign believe that the Division of Biologics Standards of the National Institutes of Health, which is responsible for recommending licences for the vaccine, should have allowed more research data to accumulate before giving the programme its blessing. As it happens the attenuated virus strain on which two of the three vaccines are based was developed by two scientists in the Division of Biologics Standards, Drs H. M. Meyer and Dr P. D. Parkman. In deciding to recommend licences for the rubella vaccines the director of the CAP D division, Dr Roderick Murray, took advice from all people concerned, not excluding Drs Meyer and Parkman. But to avoid any conflict of interest Dr Murray specifically requested that no member of the Biologics Standards Division should also have a voting position on the board responsible for developing the rubella vaccines, the Vaccine Development Committee of the National Institute of Allergy and Infectious Diseases. Dr Meyer was one of the non-voting liaison members of this committee but, with his exception, no member of the Division of Biologics Standards sat on this or either of the two other committees involved, the Surgeon General's Advisory Committee on Immunization Practices and the Immunization Committee of the American Academy of Pediatrics. The latter two committees issued a joint statement at the time the rubella vaccines were licensed recommending their routine use on children.

A more moderate view of the vaccination programme is taken by the Nobel laureate Dr John Enders of the Boston Children's Hospital. In a judiciously balanced editorial article in the *New England Journal of Medicine* he said that the "accumulating doubts" about the long term effectiveness of the programme "should not for the present be allowed to interfere with its continuation. But in the meantime they may usefully encourage a reconsideration of other, more direct procedures, such as the vaccination of susceptible parturient women or of adolescent girls".

Though it is far too early to assess how the vaccination is working, those involved with the programme have the impression that in areas where there has been heavy vaccination there is less rubella around than usual. Even should the campaign not succeed, there are many who will say it was worth the gamble.

AIR POLLUTION

Academy to Take on Detroit Oil Men

by our Washington Correspondent

THE National Academy of Sciences is a rarity among learned societies in that it is required by charter to tender practical advice, when requested by government, on the issues of the day. Unlike the British Royal Society, for example, whose only purpose in life is self-perpetuation, the National Academy dares to put the talents of its members to practical use, though with the ever present risk of offending powerful interest groups or agencies of government. The academy now seems likely to be charged with a task as awesome politically as any that it has yet faced, that

of monitoring progress in meeting Senator Muskie's clean air bill which states, among other things, that all cars manufactured after January 1, 1975, will emit 90 per cent less pollutants than present models. The academy may thus be brought into conflict with the automobile manufacturers, if it finds them dragging their feet, and maybe with the producers of gasoline as well, or with the Congress should it find the legislated standards technologically impossible to meet.

The standards demanded by the Senate for 1975 model cars have not yet reached the statute book but have every chance of doing so now that they have been agreed to at a meeting this month between Senate and House conferees. What the House and Senate have yet to agree upon is the precise role to be played by the National Academy in seeing that the legislation is fulfilled. It appears that the academy will not be asked, as at one time seemed likely, to say at this moment whether the 1975 deadline for reduced emissions is technologically feasible. At the meeting between Senate and House conferees on October 8, it was agreed that the academy should prepare reports at six-monthly intervals, the first being due next July, on the progress made by the manufacturers towards meeting the deadline. But the academy may also be required to comment in its six-monthly reports on the progress made in light of what is technologically feasible at the time—in other words, on whether the car-makers are trying hard enough. In assessing what is technologically feasible the academy will not be asked to consider price as a factor.

One point at which the academy's advice will clearly be crucial is in deciding the option, allowed for in the bill, of postponing the deadline by one year should the manufacturers be able to prove to a federal court that it is too harsh. The precise description of the Academy's role will be decided when the conferees from the Senate and House meet again next month. The Academy is said to have refused government requests for advice only half a dozen times in its existence and is unlikely to pass up this one, however great the temptation.

ANTARCTICA

NSF declared Sole Heir

by our Washington Correspondent

THE National Science Foundation will become the most puissant power in Antarctica, following President Nixon's decision last week that the foundation should be the sole channel for funding United States work in the continent. The budget of the NSF will be increased by \$25 million when the transfer of programmes from the Department of Defense and the Coast Guard is complete. But the changeover will not necessarily mean more money for Antarctic research, since the programmes to be transferred are concerned almost wholly with providing logistical support to existing research efforts.

This year the foundation is spending \$7.5 million on all forms of Antarctic research, which at the height of the season, during the austral summer, brings some 200 scientists and technicians to the four year-round bases the United States maintains at Byrd, McMurdo, Palmer and the Amundsen-Scott South Pole station. The eleven major projects being supported this year include a balloon study of cosmic rays under J. Barcus at the University of Denver, continued exploration by