

NORTH AMERICA

Change-over of Science Advisers

from our Special Correspondent, Washington, December 9

DR LEE DUBRIDGE, president of the California Institute of Technology, has been appointed the President's Science Adviser in the new Administration. This announcement was made by Mr Richard Nixon last week, the day after he announced that Professor Henry Kissinger would be his special assistant on Foreign Affairs. Even though Mr Nixon has broken with precedent in deciding to appoint the members of the White House staff before publicly announcing the names of the new Cabinet officers, the fact that the name of the new Science Adviser should have appeared so soon is regarded by many scientists as a sign that the new Administration intends to pay serious attention to science policy. (President Kennedy waited until March 1, 1961, six weeks after his inauguration, before appointing Dr J. Wiesner to this job.) The appointment of Dr DuBridge is also welcome because it seems to many people to be preferable to the much canvassed suggestion that Professor Willard Libby of the University of California, Los Angeles, would succeed Dr Donald Hornig on January 20 next year. Enthusiasm for the appointment is, however, moderated by the fact that Dr DuBridge is already 67 and by the fear that 22 years as president of a private university will lead him unrealistically to rely on the authority of his office for the kind of influence which, in Washington, can only come from nimble committee work.

Dr DuBridge is a physicist by training and by inclination. His graduate work was carried out at the University of Wisconsin where he obtained a PhD in 1926. He spent two years at the California Institute of Technology before moving to Washington University at St Louis (in 1928) and the University of Rochester (in 1934). His chief interest has been in photoelectricity and thermionic emission, but during the war he was director of the Radiation Laboratory at the Massachusetts Institute of Technology, then chiefly concerned with radar developments. He became president of the California Institute of Technology in 1946 and has since become a diligent collector of honorary degrees (25) and a member of public committees of all kinds. He has spent two spells of ten years altogether on the National Science Board, the governing council of the National Science Foundation, and has also played an important part in stimulating the use of educational television in the United States. He is a cheerful and articulate advocate in public of the social importance of scientific research.

One important innovation associated with the new appointment is the setting up of two study groups to deal respectively with scientific research and with space activities. The chairman of the first of these is Dr Guyford Stever, president of the Carnegie Mellon Institute at Pittsburgh. The chairman of the space committee will be Dr Charles Townes, who has recently moved from the Massachusetts Institute of Technology to the University of California. The second committee is probably to be taken as a sign that one of the most urgent questions to be decided by the new Administration will be the extent to which it will support the plans

of the National Aeronautics and Space Administration for developments after a successful landing on the Moon (see page 1071).

The first reactions of the scientific community to these appointments are cheerful if necessarily tentative. Both Professor George Kistiakowski, who occupied the post of Science Adviser during the Eisenhower Administration, and Dr Howard Johnson, president of MIT, have welcomed the appointment. It is not clear how far the President-elect had gone in his discussions with Professor Libby, who is (like Dr DuBridge) a personal friend of Mr Nixon, but in the days toward the end of November a great many people were suffi-



Dr L. A. DuBridge.

ciently exercised to spend a great deal of money on telegrams to one another and to the President-elect. Dr DuBridge seems to have been a common ingredient of the lists of acceptable candidates submitted by various groups of scientists.

Apart from the urgent need of a decision about future plans for space, it is clear that Dr DuBridge will be from the start concerned with the problems of how best to administer the Federal Government's support for scientific research and development, particularly in the universities. One way and another, the part played by the National Science Foundation is likely to receive close attention. Most probably it

will welcome a more important agency. This is not merely Dr DuBridge's own inclination but the way the wind is blowing.

The retiring Science Adviser, Mr Donald Hornig, does, however, emphasize that the office is such that nobody can predict in advance just how his preconceived notions will work out in practice. To this extent it is like the presidency itself. He said today that it would have been impossible to predict the events of the five years during which he has been a member of the White House staff from his public statements before taking the job.

Looking back over this period, Dr Hornig said that one of the most striking developments had been the way in which "science has become a part of everything". In other words, he said, people and scientists had become more aware of the problems occasioned by scientific and technological developments—pollution and other environmental problems, for example. The result was "a new interaction between the scientists and social scientists" which does not, in his view, necessarily mean that "the physical scientists have to give way to the social scientists" but merely that they have to be prepared to conduct a continuing dialogue—the fashionable word—with them.

Dr Hornig also drew attention to the way in which the Office of Science and Technology "has gelled as part of the government structure". For one thing, this means that the office is now acknowledged to be a necessary partner in making decisions on all kinds of matters from defence to the distribution of funds for

scientific research at the universities. Dr Hornig said today that the office could do a valuable and creative job by bringing together officials in different agencies concerned with different aspects of the same essentially scientific problems. At the same time, its role as the routine examiner of the scientific components in the Federal budget has been established and accepted. In pace with the growth of its responsibilities the size of the office staff has increased from half a dozen in the mid-fifties to ten under Dr Wiesner, to 25 at present. Dr Hornig said today that he considered the essential part of the job was that of providing a nimble staff of scientists who could act on behalf of the President in all kinds of interdepartmental problems, which had led him to "get out of this office" any responsibilities which could be dealt with elsewhere. But, Dr Hornig said, there was pressure—particularly from Congress—to see that some arm of the Federal Government took a more deliberate and analytical view of the management of science within and outside the Federal Government, which in turn created "an incipient bureaucracy".

Dr Hornig, who will become an executive of the Eastman Kodak Company and a professor at the University of Rochester when he leaves Washington, says that at present he has only the vaguest plans for how he will carry out these two assignments. Like many other officials leaving before the new Administration comes in, he says that "it's going to be a terrible wrench" to leave the White House and that his job "has been one of the most stimulating things I have ever done".

Intellectuals of the World at Odds

from our Special Correspondent, Princeton, December

A REMARKABLE symposium held here from December 1-3 has left the eighty or so participants, and the somewhat larger number of journalists who hung fitfully on their words, with a sense of impending crisis but with no clear view of what kinds of solutions may be possible. The symposium was organized by the Association for Cultural Freedom, the organization which has evolved from that which publishes *Encounter*, *Minerva* and several others, and which ran into trouble a year ago when it turned out to be the recipient of money from the Central Intelligence Agency of the United States. (Even the association's enemies agree that the CIA could hardly have spent its money in a more enlightened way.) The main business of the symposium was the condition of the United States, internally and externally, and the likely course of events in the next few years. The participants included ex-ambassadors such as Professor John K. Galbraith, Mr George Ball and Mr (now Professor) George Kennan, as well as Mr Henry Kissinger, the newly appointed special assistant to the President-elect. The United States contingent also included several university professors, editors of journals, student leaders (some now graduated to the faculties of their universities) and the advocates of black power in various forms.

The confusion created by the discussion between this

group and the visitors from abroad is well illustrated by the discussion on the racial problem in the United States. Will there really be a period of separate development for the black and white communities in the United States? Outsiders were surprised to find that this seems now to be the goal not merely of the Black Power people but—reluctantly perhaps—of some white liberals as well. But in any case, is such a course practical, let alone safe? Nobody seems to know for sure. But there was similar doubt about the way in which the universities are developing in the United States and Europe. At the end of the symposium, there was an unresolved conflict between those who consider there has been a dangerous erosion of authority within the universities, coupled perhaps with an unwillingness to yield to reasonable demands by the students, and those who looked for a much more radical change than there has been so far between the faculties and the students. On external policy, for the United States, it is perhaps remarkable that the symposium paid comparatively less attention to problems such as aid to developing countries than to the military problems of western and central Europe. In general, the symposium seems to have been a vivid demonstration that abstract discussions among bright people are more effective as a means of identifying problems than of solving them.