the principal scientific institutions in the United States, however, and the chances that it will filter down to the less prestigious institutions, to which many of its recommendations are addressed, are slim.

CONGRESS

Electoral Fallout

by our Washington Correspondent

ALTHOUGH the Democrats will retain control of the Senate and the House of Representatives when Congress convenes in January, last week's elections left their mark on scientific activities in Congress. The newly created board of the Office of Technology Assessment is particularly affected; two of its members were not re-elected to Congress, and the House Committee on Science and Astronautics, not only lost its chairman, George P. Miller, because a primary election went against him earlier this year, but also lost a senior Democrat in last week's election. Changes will also take place at the top of the Senate Committee on Science and Astronautics, whose chairman, Clinton P. Anderson, has retired.

The OTA board will lose the services of Senator Gordon Allott, a conservative Republican who was surprisingly beaten in Colorado by his Democratic challenger Floyd K. Haskell—a former Republican who changed sides after the Cambodia invasion. Also missing from the OTA board will be Earle Cabell, a Democrat who was defeated in Texas. Cabell is also the second ranking member of the Subcommittee on Science, Research and Development of the House Committee on Science and Astronautics.

The electoral winds did, however, blow more favourably for some members of Congress who are concerned with scientific affairs. John W. Davis, Chairman of the House Subcommittee on Science, Research and Development, successfully fought off a conservative challenger in Georgia, and Mike McCormack, the only former scientist in Congress, won re-election in Washington State. His chances were considered to hang in the balance, particularly since his election to Congress two years ago depended partly on the long coat-tails of Senator Jackson who was then running for re-election as Senator from Washington.

Committee assignments will be sorted out in the next few weeks, before Congress reconvenes in January, but at present the odds seem in favour of Olin E. Teague of Texas assuming control of the House Committee on Science and Astronautics and of Senator Stuart Symington taking the chairmanship of the companion committee in

the Senate. It is also likely that Senator Proxmire and Edward P. Boland of Massachusetts will keep control of the Appropriations subcommittees which decide the budgets of NASA and the National Science Foundation. Between now and January, however, several defections from the House Committee on Science and Astronautics are likely—the committee is no longer the showplace it once was, and some members have not shown their faces at meetings this year.

OCEANOGRAPHY

Diving Off Azores

by our Washington Correspondent

THE National Oceanic and Atmospheric Administration announced this week that a major study of part of the Mid-Atlantic Ridge is to be undertaken with submersibles from France and the United States. The study will consist of some forty dives in a three-year period beginning in the summer of 1974, the object being to map a region of the ridge 200 miles south of the Azores, collect bottom samples and place instruments on the ocean floor. The announcement is a sign that manned undersea research, after a period of quiescence in the United States during which a number of costly submersibles have been mothballed, is being revived.

The submersible study of the Mid-Atlantic Ridge, called the French-American Mid-Ocean Undersea Study (which just happens to have the acronym FAMOUS), is part of a plan recommended by an international group of scientists which met at Princeton in January this year under the sponsorship of the National Academy of Sciences and the US office of the International Decade of Ocean Exploration. The site south of the Azores was chosen, according to Dr George Keller, Director of NOAA's Marine Geology and Geophysics Laboratory in Miami and joint leader of the American part of the study, because it is an area of major spreading which is also cut by a large fracture zone. The location also meets the criteria of good weather and closeness of land for refurbishing.

After further site survey by a research vessel from Woods Hole and by *Discovery*, the British oceanographic research vessel, submersibles will start diving in the summer of 1974. The French submersibles *Archimede* and *SP-3000* and the US vessel *Alvin* will be used. The chief advantage of taking samples by submersibles rather than by coring is that it is possible to record exactly where they come from. Samples will be taken sequentially along the fracture zone, and the chief objective will be to gain a better understanding of the process of ocean floor generation.

Short Notes

Cementing the Link

THE close but informal relationship that has been built up between the Smithsonian Astrophysical Observatory and the Harvard College Observatory during the past two decades will become a little more formal next year. Dr Fred L. Whipple, Director of the Smithsonian observatory since it moved to Massachusetts in 1955, is to retire on July 1, 1973, and he will be succeeded by Dr George B. Field. Dr Field is also Director of the Harvard College Observatory. Dr Whipple will devote his time to research after his retirement, and he will become a Smithsonian Senior Scientist. He will also continue as Phillips Professor of Astronomy at Harvard.

New Thermonuclear Research Chief

DR ROBERT L. HIRSCH has been appointed director of the Atomic Energy Commission's Division of Controlled Thermonuclear Research to succeed Dr Roy W. Gould, who returned to the California Institute of Technology in August. Dr Hirsch was previously senior scientist in the division, which has a budget of about \$40 million in the present financial year. Dr Hirsch, 37, received his PhD from Illinois and has worked in industry on thermal and fast fission reactors, space nuclear propulsion and plasma physics.

Bowel Cancer

THE National Cancer Institute will award grants totalling \$2.50 million for 1973 for a research programme on the prevention, diagnosis and treatment of cancer of the large bowel. The grants will also include spending commitments for four more years of research. The programme is being directed by Dr Murray M. Copeland, professor of surgery at the M. D. Anderson Hospital and Tumor Institute, who is chairman of a group of working scientists who will solicit proposals from the scientific community, review them and make recommendations to the National Cancer Institute. Cancers of the rectum and large bowel are the second most common cause of cancer death in the United States.

Noise Control

THE Environmental Protection Agency has launched a major study of airport noise and is looking at the effects of establishing noise standards for trains and motor vehicles. The study will be the first action taken by the EPA under the powers given it by the Noise Control Act of 1972 (see *Nature*, 239, 483; 1972), which was signed by President Nixon late last month.