

nized to a fraction of a microsecond by means of an atomic clock. The tapes can then be brought to a central point for playback.

The Canadian team used the 150-foot radio telescope at Algonquin Park in Ontario and the 84-foot telescope of the Dominion Radio Astrophysical Observatory in Penticton, British Columbia, more than 2,000 miles to the west. A Defense Research 60-foot telescope at Shirley Bay, near Ottawa, was also used in the test.

With this equipment the scientists had a 2,000-mile line to determine the diameter of quasar 3C-273-B to less than 0.02 seconds of arc. They found its diameter to be about 100 light years, if the object is 1.5 billion light years away as determined optically, smaller than had been suspected.

The Canadian research team includes scientists from the National Research Council of Canada, the University of Toronto, Queen's University, Kingston, Ont., and members of the Dominion Radio Astrophysical Observatory.

FROM SWITZERLAND

## Babel at WHO

Doctors attending World Health Assemblies in the future will have to deal with more languages.

The United Nations' professional agency, as other U.N. bodies, officially recognizes English, French, Russian and Spanish. But in practice, all the tons of working documents at every conference are run only in English and French.

At the 20th annual Assembly in Geneva, after several years of protest, the Russian-speaking and Spanish-speaking doctor-delegates won their case.

The 128-nation organization voted a resolution to "extend the use" of the two languages. It will cost \$600,000 and will be accomplished "in progressive steps over a three-year period."

Many lengthy debates on medical and health questions are already confounded because the French-speaking delegates often question nuances of meanings in French working documents, as the English documents serve actually as the master copies.

Russian and Spanish will start being used in the first part of the next Assembly, then in the rest, and in the Executive Board.

Doctors from Taiwan, naturally, say they would like Chinese to be a working language, and the Arab League continues to fight for Arabic.

An African doctor-minister then says what about Swahili, "mother tongue of millions."

## Shift at Commerce

In the nation's capital, there are very few sure things as far as executive appointments go, but one that has been as close to certain as possible for nearly a year is that Dr. Chalmers W. Sherwin will replace Dr. J. Herbert Hollomon as Assistant Secretary of Commerce for Science and Technology.

Dr. Sherwin has been deputy Assistant Secretary since last July. Dr. Hollomon has been both Acting Undersecretary of Commerce and Science and Technology Assistant Secretary since last February. Dr. Hollomon, who aimed the science-oriented agencies within Commerce on an industry-oriented path during his five years, has been named president of the University of Oklahoma as of Sept. 1.

Until July 1966, when he became Dr. Hollomon's deputy, Dr. Sherwin had been director of defense research and engineering for research and technology since 1963, and had previously served as deputy chief scientist for the Air Force.

While at the Department of Defense, Dr. Sherwin suggested in 1964 that DOD investigate the kinds of research on which most of today's defense systems are based. One conclusion drawn by scientists on what came to be called Project Hindsight (SN:12/3/66) was that virtually all of the basic research on which the 20 major weapons systems selected for study were based was at least 20 years old, and much of it had been available for 30 years.

Basic science is defined in the Project Hindsight report as "undirected," from which the contributions appear "to have been small." This makes Dr. Sherwin a technology man, but he does not disregard the value of basic research.

Dr. Sherwin's Commerce appointment, generally considered a demotion, was believed at the time to be a prelude to naming him as a replacement for Dr. Hollomon. It was a long wait for both of them. Rumors that Dr. Hollomon was leaving Commerce had been circulating for several years.

Dr. Sherwin will direct the activities of such agencies as the Environmental Science Services Administration, the National Bureau of Standards, the Patent Office and the Office of State Technical Services, under the newly appointed Secretary of Commerce, Alexander B. Trowbridge.

Secretary Trowbridge has made it clear that he plans to make Commerce a Government department serving industry. Dr. Sherwin is expected to follow this same policy, established as far as the science agencies are concerned under Dr. Hollomon.

Dr. Sherwin is reluctant to discuss

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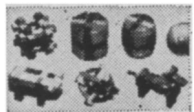
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his plans concerning science and technology within Commerce until his appointment is confirmed, but he is expected to continue efforts already underway to put today's industry on a better technological footing.

Finding the mechanisms by which known technology can be useful to industry on a sound economic basis is his first big project.

He believes that the civilian area is the logical arena for the expansion of scientific and technological efforts in the U.S., and will turn Commerce's scientific agencies even more sharply in that direction.

His appointment will come at a time when Commerce's science agencies are trying to live within budgets tightened by the Administration and screwed even tighter by Congress.

Anticipating the Spartan atmosphere in which he'll have to live, Dr. Sherwin commented last week, "It will be tough to operate when funds have been cut back from the requested level."

The Congress is likely to chop from the 1968 appropriations: \$1.75 million from a request for \$40 million by the Patent Office; \$19.4 million from ESSA's requested \$182.5 million; \$6.8 million for the university-based, industry-oriented research institutes of the State Technical Services program.

## Science Deferments

While graduate students wait out President Lyndon B. Johnson's announced intention to abolish post-graduate draft deferments, undergraduates can be sure of four uninterrupted years of college.

In action last week, the House of Representatives said what the Senate said not long before: undergraduate deferments should be continued.

But neither House of Congress had more than words of advice to the White House on the subject of graduate deferments. Graduate students, the House said simply, should be allowed to finish school. The Senate had been even less emphatic, suggesting deferments for medical and dental students be continued and that the President might have to consider the possibility of granting deferments to students in other critical areas of science.

The law under which doctors and dentists are deferred from military service while in school is separate from the Selective Service Act which applies to all others. Doctors and dentists automatically become draft-eligible when they finish school, regardless of age.

Senior scientists seem to be notably

opposed to drafting graduate science students. What is the point, they ask, of exempting medical and dental students, and then drafting the graduate science students who play an important role in teaching them?

In another development, the House last week gave in to pressure from the American Medical Association and Representative Durward G. Hall (R-Mo.), unsuccessful candidate for the AMA presidency, to end draft exemptions for doctors in the Public Health Service who have been assigned to other Federal agencies—notably the Food and Drug Administration and the Peace Corps. However, those working directly for PHS will be draft-exempt as always. FDA Commissioner James L. Goddard has been using young doctors, on loan from PHS, as a lever for upgrading FDA's scientific capability.

In a speech on the House floor, Representative L. H. Fountain (D-N.C.), chairman of the House Subcommittee on Intergovernmental Relations that oversees FDA, argued that the amendment would "set FDA back considerably" by taking away the task force of young doctors who were clearing out the enormous backlog of work the agency faces on new drug applications.

The AMA has long charged FDA with impeding medical progress by delaying the passage of new drug applications through its evaluating channels.

The amendment to draft these PHS doctors was not part of the Senate's draft proposal. The issue of new draft regulations is expected to be settled soon when the House and Senate meet in conference to go over the proposed laws. Graduate students must still wait for a decision from the White House.

### FROM NEW ZEALAND

## Antarctic Station

New Zealand is to open a year-round scientific station in Antarctica similar but smaller than its station at Scott Base.

The station will be in the Dry Valley region of McMurdo Sound about 50 miles from Scott Base. The area is free of ice and snow in summer and little is known about the area in winter.

In summer scientists of many nationalities examine the geology and physics of the area. Physicists are interested in the excessive salt content of the lakes and the abnormally warm areas below their ice cover where 77 degree temperatures have been noted.

The only life in the valleys is microscopic, collecting around the shores of the lakes and streams from the snouts of glaciers. Since New Zealand's Antarctic research started 10 years ago, parties from Victoria University of Wellington have worked in the valleys during the summer.