

atom. Up to now, the output of the cesium clock was adjusted to keep Mean Solar Time. However, beginning in 1972, the atomic clock will run at its own rate and be adjusted to Mean Solar Time only once a year. The atomic second is based on the frequency of the transition between two specific energy levels in atoms of cesium.

NRC has constructed one of the world's few laboratory-built cesium standards used to determine the length of the atomic second. It is used as the basis for Canada's official time-signal and is operated by scientists of the Time and Frequency Section of NRC's Division of Physics.

The slight time change will directly affect the NRC time-signal broadcast by the CBC at 1 p.m. Ottawa local time and also CHU, the official NRC radio station which transmits a pulse each second and broadcasts in French and English an announcement of the time every minute on the minute. The time-signal radio station operates 24 hours a day on frequencies of 3330, 7335 and 14670 kilohertz.

"In all of this, don't forget time is neither lost nor gained," says NRC's Malcolm Thomson, Head of the Time and Frequency Section. "It is simply a question of adjusting one clock with respect to another, an operation that every watch-owner knows so well. We are quite accustomed to a leap day once in four years and so a leap second should be easy to accept. And if the earth should speed up in its rate of rotation, provision for a negative leap second has been made."

CANADA COUNCIL REPORT

In its fourteenth annual report, the Canada Council says that, while many larger Canadian arts organizations are reaching financial stability, individual artists are generally an "economically depressed minority".

The report, tabled in Parliament recently by the Secretary of State, Mr. Gérard Pelletier, lists all grants made by the Council in 1970-71, shows comparative figures for previous years, and gives the Council's reasons for assisting the arts, humanities and social sciences.

The Council spent \$32.6 million in 1970-71, compared to \$30 million the year before; its budget for the current year is \$34.9 million. The largest expenditure for 1970-71 was \$19.4 million in support of the humanities and social sciences, and the arts program accounted for \$10.4 million, both of which marked a relatively small increase over the previous year's figure. The Council also finances the Canadian Commission for UNESCO and administers a program of cultural exchanges for the Government of Canada.

According to the report, Council and provincial

contributions have helped large performing arts organizations reduce their accumulated deficits. special Council grants of \$350,000 were made for this purpose during the year, and grants totalling more than \$1 million were made by three provincial governments, British Columbia, Nova Scotia and Ontario.

NEW PROGRAM

Also mentioned in the report are the reinstatement of Council awards for senior artists during the year and the inauguration for 1971-72 of a new program, called Project-Cost Grants, for individual artists. At the same time, the Council warns that many people do not recognize that artists "are professionals who are important to society and must work or study hard and long to reach professional status". The reports lists a number of grievances that had been aired publicly by artists during the year.

While recognizing that the large regional companies are still "the backbone of Canadian theatre", the Council states in the report that a new wave of small, urban theatre groups are challenging their dominance. The report points to both the problems of the Canadian playwright, and to a new interest in Canadian plays on the part of audiences and publishers.

During 1970-71, the Council spent \$1,133,000 in support of writing and publications, an increase of close to \$300,000 over that spent the year before. Grants for writing and publications in the arts accounted for \$637,000, and in the humanities and social sciences the Council made grants worth \$496,000 for learned publications. It is made clear in the report, however, that the Council cannot provide working capital or loans to publishers.

UNIVERSITY ENROLMENT

The rapid expansion of enrolment in Canadian universities and colleges has slowed to a modest growth. An estimated 326,870 full-time students are now registered in post-secondary courses which can, directly or indirectly, lead to degrees. This is an increase of only 3.1 per cent over the actual enrolment last year, compared with a 3.7 percent increase last year, and a 1960-69 average of 11 per cent.

Deceleration hit hardest in the West, where enrolment dropped 5.1 per cent in Saskatchewan and 1.5 per cent in Alberta. Gains in Quebec (3.0 per cent), Ontario (4.4 per cent) and Manitoba (4.8 per cent) were well below the 6 percent advances expected, while enrolment in the Maritimes grew by a more predictable 8.7 per cent.