

NAVAL CHANGES: Three senior officers of the Royal Canadian Navy will take up new appointments in mid-summer, and a fourth will proceed on retirement leave.

Rear-Admiral R.E.S. Bidwell, 56, of Lennoxville, P.Q., Brockville, Ont., and Halifax, will begin retirement leave on September 20, after 42 years of service with the Royal Canadian Navy. He has been the Flag Officer Atlantic Coast since November 1951, and has held the additional appointment of Commander Canadian Atlantic Sub-Area in the North Atlantic Treaty Organization since April, 1952.

Succeeding Rear-Admiral Bidwell in these appointments will be Rear-Admiral H.F. Pullen, 52, of Oakville, Ont., and Victoria, the present Flag Officer Pacific Coast.

Rear-Admiral H.S. Rayner, 46, of St. Catharines, Ont., and Ottawa, now Chief of Naval Personnel and member of the Naval Board at Naval Headquarters, Ottawa, will become Flag Officer Pacific Coast on August 17.

He will be succeeded as Chief of Naval Personnel and member of the Naval Board by Commodore K.L. Dyer, 41, of Grand Pré, N.S., and Ottawa, who will be promoted to the rank of rear-admiral when he takes up this appointment on July 30.

* * * *

TO CONFER IN TORONTO: More than 1,500 experts in the earth sciences will gather at Toronto, September 3-14, 1957 to hold the XIth General Assembly of the International Union of Geodesy and Geophysics (IUGG). Their main topic will be the International Geophysical Year (IGY), to be launched previously in July. Delegates will come from 50 countries in all parts of the world to review the IGY opening and lay final plans for the vast joint enterprise.

The International Geophysical Year, an 18-month concerted effort by more than 50 nations and 5,000 scientists, is expected to cost well over \$300 million. From July 1957 to January 1959, experts in 14 fields of research will investigate the earth from pole to pole, from ocean floor to outer space. All over the world simultaneous measurements will be taken on such phenomena as the aurora, cosmic rays, meteors, the upper atmosphere, glaciers, oceans, gravity, magnetism, earth tremors, solar flares and sunspots.

The IGY will climax the efforts of many centuries to solve mysteries of the sun and the earth, to form a unified picture of our physical environment. In human affairs it is heralded as a new promise of good will among nations.

Each member country of the IGY is making a specific contribution. Largest programmes are those of the United States, Britain and the Commonwealth, and Soviet Russia. Several countries will employ rockets to probe the upper atmosphere. Twelve nations will explore and investigate the Antarctic. Both the United States and Russia are planning to launch man-

made satellites which will encircle the earth in outer space.

Canadian scientists are playing a creditable role in the IGY, with programmes operating in nearly all departments, omitting only the rocketry and satellite studies.

The XIth General Assembly of the IUGG at Toronto will bring together its seven international associations, whose interests cover nearly all aspects of the IGY. The two weeks of the Assembly will feature lectures and papers by some of the world's outstanding scientists.

Typical subjects to be discussed are: the age of the earth (now estimated at 4.5 thousand million years); polar wandering (different locations of the tropical regions in past ages); the warming cycle (whether the earth's climate is getting warmer); measuring distances between continents by radar; the origin of cosmic rays and their immense energies; sun spots and solar flares; jet streams in the atmosphere; the true shape of the earth; magnetic storms and radio communications; how rockets explore the upper atmosphere; the northern lights; the record of the glaciers; the cause of airglow; the earth's interior; deep ocean currents; the man-made moons (artificial satellites); and methods of geophysical prospecting.

* * * *

UNIVERSITY ENROLMENT: Enrolment of full-time university-grade students in Canadian universities and colleges was estimated at 78,100 at December 1, 1956, some 9.1 per cent above the previous year's estimated total of 71,600, according to the Dominion Bureau of Statistics. While enrolment has fluctuated over the years the current 1956-57 figure is approaching 1947-48's peak of 83,150, and is well above 1952-53's post-war low of 63,041. The latest figure, however, is more than double that of the pre-war years.

All main geographical areas shared in the increased enrolment. Total enrolment rose to 25,700 in Quebec from 23,600 in the 1955-56 session, to 23,800 in Ontario from 22,500, to 20,200 in the Western Provinces from 17,800, and to 8,400 in the Atlantic Provinces from 7,700.

Enrolment in education showed a substantial 43.4 per cent increase over the previous session, due in part to the University of British Columbia entering the teacher-training field in that Province, formerly taught by the Province's normal schools. Enrolment increased 22.3 per cent in secretarial science, 11.6 per cent in commerce, 11.5 per cent in engineering and applied science, and 9.2 per cent in arts and science. Decreases were reported in fine and applied arts, physical and health education, library science, dentistry, nursing, occupational and physiotherapy, music and social service. For the fourth consecutive year, enrolment declined in pharmacy and for the third straight year in veterinary science.