mineral and other natural resources. The Field Survey Section is responsible for the field surveys that provide ground control for mapping from aerial photographs, and the Air Surveys Section plots and produces maps from these aerial photographs. The National Air Photographic Library indexes, preserves and distributes prints of all aerial photography done by or for the Federal Government.

The Legal Surveys and Aeronautical Charts Division makes and records legal surveys of federal Crown lands in the Yukon and Northwest Territories, the National Parks and Indian lands and reserves. This Division prepares aeronautical charts and electoral maps and prepares and distributes flight manuals.

The Map Compilation and Reproduction Division prepares, drafts and reproduces maps, charts and plans for lithographic printing in multi-colour. The work includes the preparation and photo-reproduction of air chart bases, the reproduction and printing of air information for aeronautical charts, the preparation and printing of topographic maps and the reproduction and printing of hydrographic charts.

Marine Sciences Branch.—On Apr. 1, 1962, the Department established a Marine Sciences Branch to combine hydrographic surveys and research in oceanography, marine geology and the geophysical sciences of the seas. The function of the new Branch is to carry out hydrographic and other oceanic surveys and to conduct oceanographic research in the nearby oceans, in Canada's coastal and inland waters, and on the underlying seabeds for the threefold purpose of assisting navigation, with particular reference to Arctic waters; of ascertaining the resource potential of the country's continental shelf; and of undertaking the extensive program of oceanographic research required for military and civilian purposes. The resultant information will also greatly assist the commercial fisheries.

The new Branch takes in the existing departmental personnel and facilities now engaged in hydrography and oceanography, and provides for the necessary expansion to meet new requirements. This will involve additional personnel, modern laboratory accommodation and ancillary facilities, and research ships. It comprises the Canadian Hydrographic Service, the Division of Oceanographic Research, the new Bedford Institute of Oceanography, and a new Ships Division. Headquarters of the Branch is in Ottawa and hydrographic and oceanographic activity on the Atlantic and Pacific Coasts will be centred in oceanographic institutes on those Coasts. On the Atlantic Coast, the new $4,500,000 Bedford Institute of Oceanography is scheduled for completion in mid-1962. Oceanographic research in the Arctic will also be carried on from this centre. A similar centre is planned for the Pacific Coast about 1965. Meanwhile, functions on the West Coast are centred in the present hydrographic establishment in Victoria, B.C. The Inland Waters Section of the Canadian Hydrographic Service works out of Ottawa.

The Bedford Institute consists of a modern office and laboratory building, equipment and ships' depot, machine woodworking and electrical shops for minor repairs to the ships and the construction of special equipment, and ships' berthing facilities which comprise a quay wall and a jetty. The docks are planned to accommodate ten ships.

The Marine Sciences Branch will be serviced by a fleet of multi-purpose ships which are designed to be used for either survey or research purposes. The ships are being provided under a long-range shipbuilding program. For the East Coast, three ships are in design or under construction and one ship, the *Maxwell*, was launched in 1961. The largest of the group, the *Hudson*, is expected to be commissioned in 1963. It will have a cruising range of 15,000 miles and has been designed for oceanographic studies anywhere in the world.

The Canadian Hydrographic Service is responsible for the charting of the coastal and inland navigable waters of Canada, the analyses of tides and tidal current phenomena and the investigation of water-surface elevations of the St. Lawrence–Great Lakes waterway. The resultant data are published in the form of official navigation charts, volumes of Sailing Directions, Tide Tables and Water Level Bulletins.