major oil firms. Petro-Canada's programs will cost in the order of \$20 million. Shell Oil Ltd. engaged in a \$24 to \$48 million exploration program on Sable Island, along with Mobil Oil Canada Ltd., Texas Eastern Exploration of Canada and Texaco Exploration Canada Ltd. While the prospects of the Scotian Shelf do not appear to be significant on a world basis, they may be sufficient to help the Atlantic provinces reduce dependence on imported oil.

12.5.3 Uranium

Canadian uranium shipments in 1976 totalled 6058 tonnes of uranium oxide, a 10% increase over 1975 (Table 12.16). Of these shipments 64% came from three operations in Ontario - those of Denison Mines Ltd., and Rio Algom Mines Ltd., both near Elliot Lake, and Madawaska Mines Ltd., which began production near Bancroft late in the year. The remainder came from two operations in Northern Saskatchewan, those of Eldorado Nuclear Ltd. near Uranium City and Gulf Minerals Canada Ltd. at Rabbit Lake, which began production late in 1975. Canadian production was higher due mainly to an increased number of producers. A lack of experienced miners continued to plague the industry despite substantial training and house-building programs established by most producers. Eldorado, Denison and Rio Algom continued with major programs to expand mining and milling operations. In addition, early in 1976 Agnew Lake Mines decided to proceed with full-scale production of its underground mining leaching program near Espanola, Ont., and Amok Ltd. made known its plans for the development of its Cluff Lake deposits in the Carswell Dome area of Saskatchewan.

In response to a rise in uranium prices, increased uranium exploration was evident in virtually all provinces and territories. A significant discovery was made in mid-1975 at Key Lake, Sask., as the result of a drilling program carried out by Uranerz Exploration and Mining Ltd. jointly with Inexco Mining Co. and the Saskatchewan Mining Development Corp. A joint federal-provincial uranium reconnaissance program continued in 1976. The main objective of the program is to provide high-quality data to indicate areas where there is the greatest probability of discovering new deposits. During 1976 the program covered 555000 square kilometres using airborne gamma spectrometry and regional geochemical surveys. In total this program is expected to take 10 years and cost some \$30 million.

Late in December 1976 the federal government announced further strengthening of the safeguard requirements which apply to the export of Canadian nuclear reactors and uranium. The Saskatchewan government modified its initial uranium royalty proposal made in November 1975, after hearing from the companies involved. A uranium resource group, established in the federal energy department to assess Canada's uranium resources, published its second annual report in June 1976. It projected that Canadian uranium production would increase to 10 000 tonnes in 1980 and 11 540 tonnes in 1984.

During 1976 the Atomic Energy Control Board (AECB) announced that it had approved only one uranium export contract - for delivery of some 230 tonnes by Agnew Lake Mines Ltd. to a South Korean utility. Agnew Lake also had sales to United States and Swedish utilities pending AECB approval at year end. Approved contract and export commitments totalled some 84 600 tonnes as of June 1976.

Manufactured metals

12.6

Aluminum

12.6.1

Canadian primary aluminum output decreased to 633 428 tonnes in 1976 from 887 023 tonnes produced in 1975. Labour strikes at the Quebec smelters of the Aluminum Company of Canada Ltd. (ALCAN) caused the decline. Canada produced 6.3% of the non-communist world's primary aluminum and ranks as the fifth largest producer. World production of primary aluminum increased marginally by less than 1.0%. Canadian exports of aluminum in 1976, mainly ingot form (including some fabricated materials), were 535 707 tonnes, a slight increase from 533 739 tonnes exported in 1975.