

fiscal year was \$259.1 million compared with a surplus for the same period a year ago of \$387.6 million.

Operations of the old age security fund, which are not included in budgetary transactions, resulted in a deficit of \$17.2 million for November 1957 and an accumulated deficit of \$47.3 million for the eight months to November 30, 1957. Last year for the eight months to November 30, 1956 there was an accumulated deficit of \$18 million. The deficits were covered by temporary loans by the Minister under the terms of the Old Age Security Act.

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SIGNAL IMPROVEMENT AT GANDER

With its newly-installed air-ground radio communication system now working on a round-the-clock basis, the Aeradio Signals Centre at Gander, Newfoundland, has been officially declared open by the Department of Transport.

Opening of the Signals Centre marks the final phase of an extensive programme of renovation of Gander as a key point in North Atlantic air-ground and point-to-point telecommunications. The air-ground facilities are being used in conjunction with the tape relay centre housed in the same premises, and which was put into use several months ago.

Transmissions from the centre are broadcast from a new and powerful remote transmitter station that rates among the world's best of its type.

The new Aeradio Signals Centre is staffed by eight radio operators at a time for air-ground communications and has been designed to permit further expansion when necessary.

Briefly described, the air-ground operations do in from two to three minutes an operation that formerly required about 15 minutes. An airline office, for instance, sends a message to a pilot over the Atlantic. It reaches the Signals Centre via a punched tape. This is fed into a machine that produces it as a type-written message. In this form it is given to a supervisor whose charts tell him which operator is "working" each of the planes over the ocean and he sends the message to the right operator via a belt-operated conveyor. Within seconds the pilot has the message.

The process is reversed for a message coming from aircraft.

The operator types it on a machine that sends it via teletype to Air Traffic Control, "Met" office and to the tape relay that connects the pilot with his home office.

In the transmitter station, Transport department-developed equipment provides for the use of more than 50 frequencies and links the station with Shannon, Ireland; Birdlip, England; Reykjavik, Iceland, and Goose Bay, Labrador. A new 40-Kilowatt transmitter has been added to connect the centre with Birdlip. Its tremendous power has made these communications operative 98.2 per cent of the time.

RECORD MINERAL PRODUCTION

Continuing a series of uninterrupted annual increases since 1944, Canada's mineral production broke all previous records again in 1957 when the value rose to \$2,133,941,000 from \$2,084,906,000 in the preceding year, according to the preliminary annual estimate released by the Dominion Bureau of Statistics. The year's increase of 2.5 per cent was modest by comparison with the increases of 15 per cent in 1956 and 20 per cent in 1955 and below the rate of gain since 1946. This year's value was more than double 1950's \$1,045,450,000 and more than triple 1947's total of \$644,870,000.

Among major minerals, a large increase in the production of uranium, coupled with lesser gains in nickel, platinum, silver, asbestos, salt, crude petroleum and natural gas, cement, lime, and sand and gravel, more than counter-balanced declines in copper, gold, iron ore, lead, zinc, coal, clay products, and stone.

The value of all metallics declined to \$1,136,411,000 from the preceding year's \$1,146,350,000. Nickel topped the other metals by a wide margin with a substantial rise to \$261,253,000 from \$222,205,000 in 1956, but copper, second in value size, dropped sharply to \$199,543,000 from \$292,958,000. Iron ore declined to \$155,549,000 from \$160,362,000 and gold to \$148,787,000 from \$151,024,000, while uranium rose sharply to \$130,911,000 from \$45,732,000. Zinc dropped to \$99,696,000 from \$125,437,000 and lead to \$52,464,000 from \$58,583,000 but silver rose to \$26,320,000 from \$25,498,000, and platinum to \$17,490,000 from \$15,726,000.

Boosted by a substantial increase in crude petroleum, now by far Canada's leading mineral product from a value standpoint, coupled with a large increase in natural gas, the mineral fuels group jumped to a record total of \$555,500,000 from \$518,761,000. Crude petroleum rose to \$444,785,000 from \$406,562,000 in the preceding year and natural gas to \$20,823,000 from \$16,850,000. Coal dropped to \$89,893,000 from \$95,350,000.

Non-metallics as a group also rose in value to \$167,290,000 from \$160,342,000. Asbestos rose in value to \$106,395,000 from \$99,860,000, salt to \$15,074,000 from \$12,144,000, and pyrrhotite pyrite to \$5,019,000 from \$4,539,000. Value of gypsum fell to \$6,256,000 from \$7,260,000, and titanium dioxide to \$7,528,000 from \$7,683,000.

Structural materials as a group also rose to a record total of \$274,740,000, substantially above the preceding year's \$259,453,000. Cement rose to \$93,765,000 from \$75,233,000, sand and gravel to \$84,052,000 from \$81,957,000, and lime to \$16,563,000 from \$15,668,000. Stone production was down to \$45,662,000 from \$48,810,000, and clay products to \$34,698,000 from \$37,785,000.

Ontario again led the provinces with a total value of \$739,219,000 or 34.6 per cent of the national total in 1957, up from \$650,823,000 or 31.2 per cent in 1956. Alberta took