Volume 12 No. 14 April 4, 1984

## Trade surplus hits record

<sup>Canada's</sup> trade surplus climbed to a <sup>monthly</sup> record of \$2.1 billion in January <sup>from</sup> \$1.65 billion in December.

The surplus widened as exports rose by 3.4 per cent to a seasonally-adjusted \$8.9 billion in the latest month, while imports dropped 2.2 per cent to \$6.8 billion, reported Statistics Canada.

Most of the increase in exports was provided by increased sales of new cars to the United States. Transport equipment sales were worth \$1.2 billion, on an unadjusted basis, compared with \$1.3 billion a year earlier.

Along with the increase in exports, however, imports fell back. The drop was interpreted as an unfavourable sign by economists who saw it as further evidence that Canada's economic recovery is weakening. Anselm London, an economist with the Conference Board of Canada, described the import decline as "rather ominous", especially if it continues for several months.



Oil imports were cut back, following the trend of recent months, but there was also a decline in purchasing of machine tools and industrial equipment.

Generally, Canada's large trade surplus — which amounted to \$18 billion last year — has been caused by a stronger recovery in the United States that has pulled in imports, particularly of cars.

Some economists pointed out that the quickening pace of US economic growth should continue to help Canada, pushing up prices and improving the market for metals and other resources. In the latest month, the United states took 75.5 per cent of total Canadian exports and supplied 74.8 per cent of imports.

## Canada's computer industry featured in Hanover

Nineteen Canadian companies will be exhibiting some of the world's finest integrated electronic office system products at CeBIT 84 to be held in Hanover, Federal Republic of Germany from April 4 to 11.

Canada is the world's eighth largest exporter of computing equipment, with over 125 companies, including some relatively small firms, competing and marketing products successfully on a worldwide basis.

In 1982, Canadian computer industry revenues were approximately \$4.5 billion retail for computers and office machines, and are growing at a rate of about 20 per cent a year. Computer services accounted for an additional \$1.2 billion revenue.

One of the models on display in Hanover is the ECP 1000, the first truly portable colour data-graphics projection monitor from Electrohome Ltd. of Kitchener, Ontario. It projects highresolution data and graphics from either a full colour computer graphics terminal, a video camera, or a video cassette recorder.



Electrohome's ECP 1000 weighs just 30 kilograms and has important applications in data processing, training and education, and teleconferencing.

## **Embryos on ice**

High technology has entered the Canadian livestock industry. A Calgary firm, Alberta Livestock Transplants Ltd., has developed methods of removing bovine embryos from breeding stock, freezing them for indefinite periods, then reimplanting them in surrogate mothers to complete the pregnancy.

Embryo transfer is already a common practice in livestock breeding, where risks remain high even in the 1980s. A good breeder does not necessarily produce prime offspring every time, and the long gestation period means a costly wait to see how successors will turn out.

Trying to produce the greatest number of good calves in the shortest possible time also means that the breeder cow could drop her calves at inconvenient times. To overcome some of these difficulties, embryos are removed from the uterus of the prime breeder cow and placed in the uterus of another cow. The surrogate need only be in the right condition and strong enough to bear the calf.

Adding the freezing step to the process offers the opportunity for increased yields, but timing is critical in the operation. Both the surrogate mother and the donor cow must be closely synchronized in their respective estrus cycles, and the transfer must come within seven days after the receptor comes into heat. Since such close timing is not always easily accomplished, the freezing process has been introduced to reduce the timing problems and, consequently, improve the conditions of transporting the embryos over long distances.

It also offers the breeder an opportunity to reduce the threat of undetected diseases which may be passed on to the new generations.

Alberta Livestock Transplants developed its non-surgical embryo removal techniques during the 1970s. Now it is taking embryo transplant technology a step further by embarking on a project to perfect the freezing process.

At the moment only one embryo in three achieves a successful pregnancy after removal from the original mother, but a National Research Council supported research effort expects to improve that to better than one-for-two. Perfection of the technology will lead to a world-wide market for Canadian cattle embryos as well as an improvement in livestock strains.

(Article from Science Dimension.)