



only 900 feet to take off — even less to land.

To test STOL, Air Canada, a Crown Corporation, bought six Twin Otters and formed Air-transit Canada, a subsidiary, which has leased the planes, built Stolports with 2,000-foot runways and started an experimental shuttle between Ottawa and Montreal.

Although the planes themselves are small — limited to eleven passengers, eleven suitcases and one lavatory — they have the latest safety equipment and are quiet, powerful and fast, covering the 120 miles between the two city centres in only forty-five minutes. Public reactions have been good. A one-way ticket costs \$20, which includes a minibus ride from the door of a downtown hotel to the door of STOL. Twin Otters may be ordered from DeHaviland at a cost of \$625,000, with delivery in 1975. This year's production has been sold.

Bull Semen

Last year Americans bought 75 per cent of all the bull semen Canada exported — which is a lot of bull semen. It amounted to a \$6.5 million investment for farmers, ranchers and breeders who wanted to improve their beef and dairy cattle with fine strains from the north. The frozen semen came south in little aluminum containers which were picked up at the post office. Many of the containers were filled by Western Breeders, Ltd., a five-year-old firm, which has more than 120 studs at their stations in Calgary and Regina. Three to eight c.c.'s of semen are drawn from each bull twice a week, a process which requires an attendant with a portable catcher and a certain amount of nerve. The semen is microscopically examined to make sure it has at least 300 million sperm per c.c. If it qualifies it's diluted and quickly

frozen in liquid nitrogen. Before shipping it's tested to make sure that from 12 to 15 million sperm still live, more than enough to impregnate a cow. The price of each ampule varies according to breed, beginning at about \$2.50 for a dairy or beef semen and going as high as \$150 for the more exotic breeds. Most orders run between \$8 and \$25, depending on the popularity of the stud. The seventeen-inch tubes needed to insert the ampules cost \$2 a hundred. The techniques involved are taught to technicians at the Alberta ranch. For a catalogue, write the company in Calgary.

The Yeast that Eats Up Oil Spills

Oil spills — a threat to any environment — are especially dangerous to the Arctic because permafrost is too delicate to be