

## Airship of the future

An Ottawa-based high technology development firm has unveiled a new type of airship that some say may revolutionize the air industry (see *Canada Weekly*, dated May 14, 1980).

The LTA (lighter-than-air) model was developed by Van Dusen Development Corporation. While airships are usually cigar-shaped, Van Dusen's design uses a rotating sphere. It is expected to lift up to 45 tons, travel at more than 50 knots an hour and operate at about one-tenth the cost of helicopters.

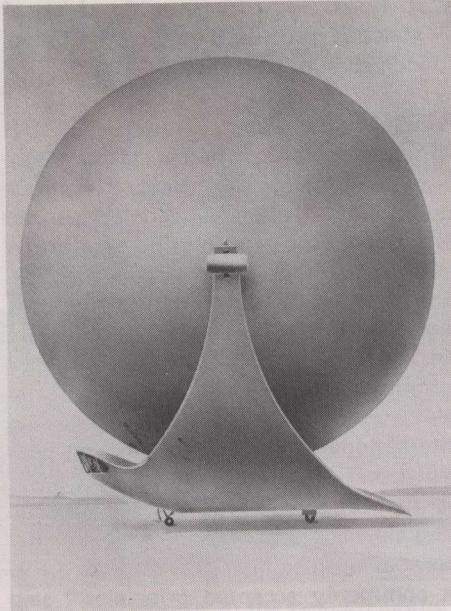
Looking like a giant balloon perched on the back of a manta ray, the airship glides through the air on the same aerodynamic principle that makes a golf ball fly through the air.

The company has been testing a six-metre model of the airship and Van Dusen's president Frederick Ferguson said the successful results are expected to lead to the manufacture of one of two possible full-size prototypes.

A sphere with a diameter of 27 metres could be used by the military, for example he said, for relatively silent observation purposes.

A larger 48-metre model would be capable of lifting up to 45 tons, said Mr. Ferguson, and could be used to transport long or heavy equipment, lay pipeline or erect transmission towers. By comparison, the largest helicopter can vertically lift about 15 tons.

The LTA was developed on the basis



*A side view of the new airship which looks like a balloon on a manta ray.*

of an aerodynamic principle known as the "Magnus effect". As the large sphere rotates on a horizontal axis, the pressure varies at the top and bottom of the sphere, causing lift. It is the same principle that causes a spinning golf ball, baseball or tennis ball to lift. The craft is powered by twin turbo-prop engines.

Although the scale model still has many months of wind tunnel testing to complete, Mr. Ferguson said he is confident of commercial production of his craft within three-and-a-half years.

## Agricultural pact with the EEC

The European Economic Community (EEC) has agreed to two requests made by the Canadian government which will have a favourable impact on the Canadian agricultural industry, Minister of Trade Ed Lumley and Agriculture Minister Eugene Whelan have announced.

The EEC has agreed to accept an additional 500 metric tons of aged Canadian cheddar cheese in 1981 and again in 1982. The Community has also agreed to allow Italy to import Canadian seed potatoes until December 31, 1982, when the decision will be reviewed. The potatoes will be exported from New Brunswick and Prince Edward Island, and the cheese decision will benefit primarily Quebec and Ontario.

Imports of Canadian seed potatoes by Italy had been prohibited in March 1980, following the introduction of common EEC-wide plant health standards. In

1979, Canada exported \$1.7 million worth of seed potatoes to Italy. Access will be limited to seed potatoes certified by the seed potato division of Agriculture Canada's Food Production and Inspection Branch as meeting the new EEC plant health requirements.

Agriculture Canada has intensified its control program including more rigorous field inspection to detect disease, and compulsory post-harvest testing.

The EEC's cheese action arose from the fact that there was a shortfall in Canadian shipments in 1980 under the Canada-EEC cheese agreement. This shortfall was due to the late signing of that arrangement which did not leave enough time for Canadian cheese manufacturers to age sufficient supplies for shipment by the end of the year.

These exports are in addition to the annual 2,750-metric ton fixed levy quota provided for under the arrangement and are subject to the same terms, including certification by the Canadian Dairy Commission.

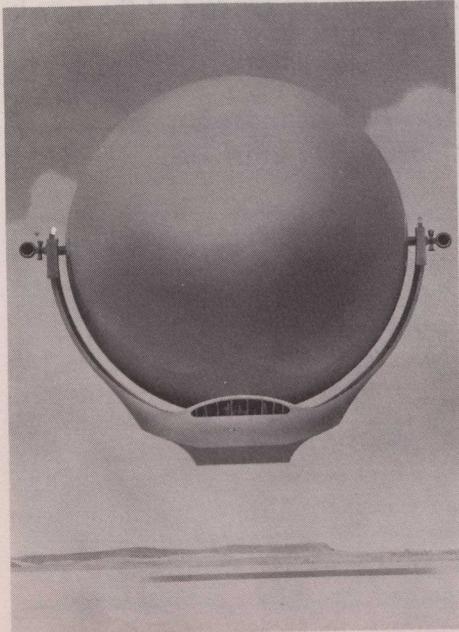
## Fountain to honour disabled

A water fountain, commemorating the International Year of Disabled Persons, and in particular Terry Fox and his "Marathon of Hope" is being built near the entrance to the Governor General's residence, in Ottawa.

Governor General Edward Schreyer and Mrs. Schreyer thought of the idea for the fountain and the design was done by Public Works Canada and the National Capital Commission and the Canadian Football League. The CFL is financing the \$199,000 "Fountain of Hope".

The fountain will be octagon-shaped with a circumference of about nine metres. There will be three intersecting squares within the pool which create four different levels. The visual and sound effects of a brook will be produced by 16 cascades falling from one level to another. A "dancing-water" effect, which will be the fountain's main attraction, will be created by fluctuating water jets at the centre while at night, lights shining from underneath will give the effect of sparkling water. The fountain, constructed of Queenston limestone, will be erected on the driveway to the main entrance to Rideau Hall.

Excavation work has begun on the fountain and it is hoped that it will be completed by next spring, at which time a public dedication ceremony will be held



*The 27-metre LTA could be used for military purposes.*