Canada produces West's first 'flying saucer'

OTTAWA — Behind tarpaulin screens in Avro Canada's experimental hangar at Malton, near Toronto, top Canadian defence scientists are reported to have a mock-up of a "flying saucer" which, experts say, may "make everything now in the air obsolete."

Inquiries here—and in Britain—indicate that the craft is designed to take off vertically, fly horizontally at around 1500 mph, and make use of the gyroscopic effect of a revolving power plant to acquire stability.

No project of this kind is known to be under development elsewhere in the western world. But reports have been so persistent and apparently authentic concerning the Canadian craft that western scientists must consider the possibility that Soviet Russia has carried similar development to a more advanced stage.

Blueprints of the Canadian craft, which apparently remains in the category of pure research, were reported from London this week to have been studied by the British Air Ministry. An engineer identified as "chief of an Avro Canada design team," was stated to have submitted plans some weeks ago.

Secret mission

SUCH an engineer, a young Englishman working now at Malton on original aircraft design, flew to Britain recently on a top secret mission.

But officials at the A. V. Roe plant to-day disclaimed any knowledge of the project. (Similar official denials accompanied early reports of the Avro Canada *CF-104*, a delta-wing fighter now known to await Government approval.)

"This craft is so revolutionary," one Air Ministry official admitted in London, "that if it flies, everything now in the air becomes obsolete."

A top British aviation authority described the craft as "coming closest to what everyone is looking for—a warplane independent of runways or

Secret mission

pendent of runways or carriers because is takes off vertically, and is still able to fly at terrific speed. This could be it."

Revolutionary

TWO years will be needed to put a prototype "saucer" in the air, a Canadian Government scientist reported. He said: "The RAF is very keen on the project and suggested Canada should see it through to final development.

"It contains so many revolutionary features that the cost may be very high —but it would clinch Canadian prestige in the scientific world.

So much secrecy surrounds the project that Canadian Defence Research Board officials consider it "much too hot to handle."

But it is known that Dr. O. M. Solandt, chairman of the board, is urging the Government to finance construction of a prototype model.

This description of the project has been obtained from reliable British sources. The pilot sits in a plastic "bubble"; a gas-turbine engine of unconventional design revolves around him several hundred times a minute; the "saucer's rim" remains stationary.

Gyroscopic

AIR is sucked through inlets on the rim's forward surfaces, and blasts of hot air are ejected through combustion chambers along the remaining perimeter and out of the "tail", a flat surface to the rear which is the craft's only control.

This swiftly revolving engine gives the craft a gyroscopic stability so great that, according to reports, the design team had difficulty devising control methods.

Because of its almost circular shape the craft is described as having diameter rather than wing - span, measuring some 40 feet across. Few other details are available, though the principle is described as "So darn simple, it sounds silly—that if you use 25 pounds of force to move a ten-pound object, you can make even a brick fly."

Another report adds that the craft would be capable of making 180deg turns without changing altitude.

Descriptions so far available suggest that the Canadian craft would display in flight the characteristics credited to "flying saucers," reports on which have been under investigation by the U.S. Air

vestigation by the U.S. Air Force.

Maj.-Gen. Roger Ramey, USAF operations chief, said in Washington: "But the Canadian project apparently has 'mass.' In other words it has substance—and our investigations so far show that whatever caused "saucer' reports was insubstantial, like electronic phenomena."

The Canadian project clearly offers a possible answer to the growing problem of bases for high-speed jet planes. All over the free world, designers have been seeking a method of leaving the ground vertically as in a helicopter, but without the helicopter's speed limitations.

Stanley Hiller, brilliant young U.S. designer of helicopters, come up with blueprints for a rocket-plane which would use a tripod of auxiliary rocket units to force itself into the air vertically, and would then turn through 90 degrees and gain forward speed on its main jet engines.

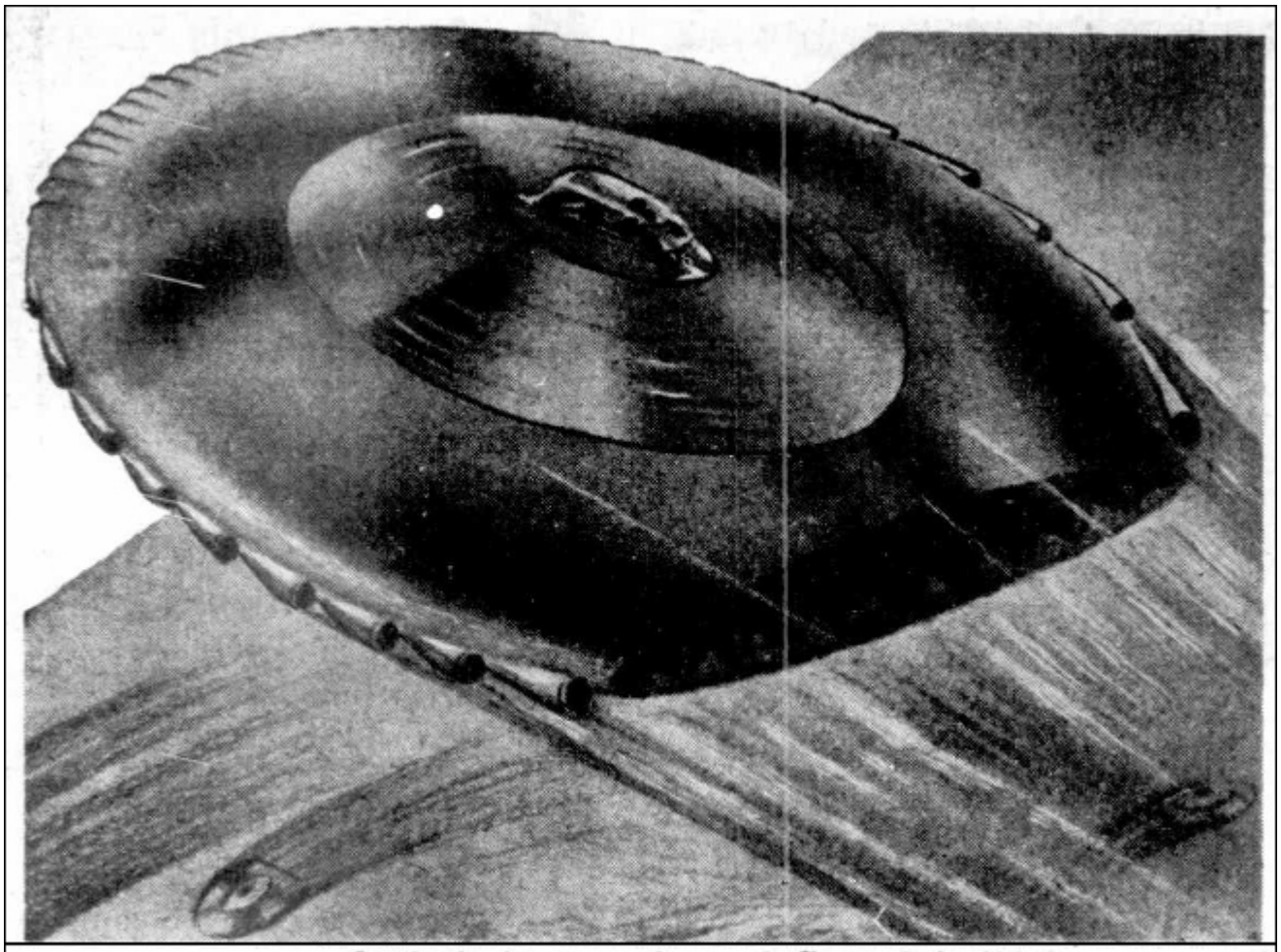
Scale-model

A MORE practical design is the Bell X-5, built at Buffalo (U.S.), and using adjustable wings, which, forward to take-off, make a shorter run possible, but when pulled back give the swept-wing effect necessary for supersonic speeds.

Nearest thing to the Canadian project is a scale-model "saucer" built by Dr. Eugene Kay, of Glendale, California. It is a 41-inch aluminium disc with slotted vanes like fan blades.

Difference here is that the vanes spin around the motor. The Canadian "saucer," instead of gaining flying speed by swiftly rotating "wing," would use sheer brute force to get off the ground. A tripod undercarriage assists the launching, but reportedly is left behind, so that the craft lands again on its "belly."

HIGHLY secret reports of a Canadian "flying saucer" are circulating among British and U.S. Defence scientists. To-day WEEK publishes an exclusive dispatch from William Stevenson, staff correspondent of the Toronto Star, in which he lifts some of the secrecy from a project now reported to be under study by the British Air Ministry.



Artist's impression of Canada's 'flying saucer.'