Dutch revive Canadian flying saucer

European team sees design as airliner of future

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European engineers working on the passenger plane of the future are reaching back into Canada's aviation history and focusing on an aircraft reminiscent of a flying saucer-style design tested in the 1950s by a Toronto-area firm.

Next month, the Delft University of Technology in the Netherlands, one of the largest aerospace engineering schools in Europe, will launch an international project to design the passenger plane for 2025 and beyond.

Engineers are concentrating on making the futuristic aircraft the most environmentally friendly airliner that can be conceived.

The research project will continue until 2011 and look at designs capable of reducing noise and greenhouse gas emissions by at least 50 per cent.

The initiative has been dubbed CleanEra, which stands for cost-effective, low emissions and noise efficient regional aircraft. The medium-sized plane would be capable of carrying 125 passengers.

Although the design is not final, it's expected the researchers will shelve the traditional cylinder-style fuselage, outfitted with wings, in favour of a flying disc-type aircraft.

An artist's impression of the future airliner, forwarded to CanWest News Service by university researchers, will look familiar to Canadian aerospace historians. It is reminiscent of the flying disc the Avro aerospace firm of Malton, Ont., built in the 1950s. Canada's Defence Department had funded some of the work on that project and the U.S. air force and army later became involved.

The Avrocar, as it was called, was flown in tests, but a lack of funding led to abandonment of the project.

The flying disc design has been popular over the decades with aerospace designers. U.S. and German researchers worked on such aircraft in the 1940s. In 1956, the U.S. magazine Mechanix Illustrated took the Avro design one step further when it featured an artist's impression of the U.S. air force's "flying saucer" on its cover.

Ron Kane, vice-president of the Aerospace Industries Association of Canada, said future aircraft will likely abandon the traditional-style fuselage and wing structure.

"Some of these other shapes are more efficient in regards to aerodynamics than the cylinder design," he explained. "Certainly, the initiative out of the Netherlands is the wave of the future."

Kane said the aerospace industry, particularly in Europe, is changing to deal with concerns that aircraft aren't environmentally friendly.

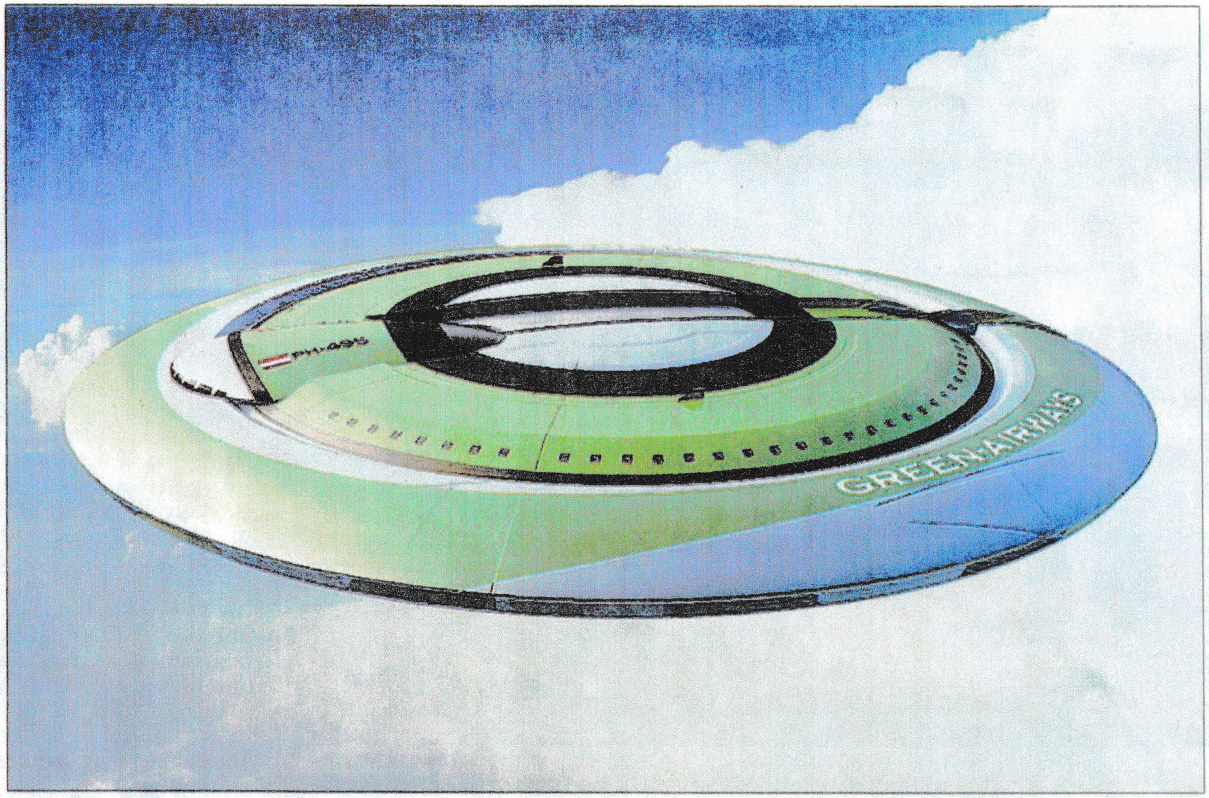
That includes putting additional research into the development of more efficient engines and lighter-weight composite materials to cut down on fuel consumption.

The Delft University of Technology is labelling its project as a revolution in aerospace design.

Eight international PhD researchers will be involved in the program, which will tap into the knowledge of the university's faculty of aerospace engineering.

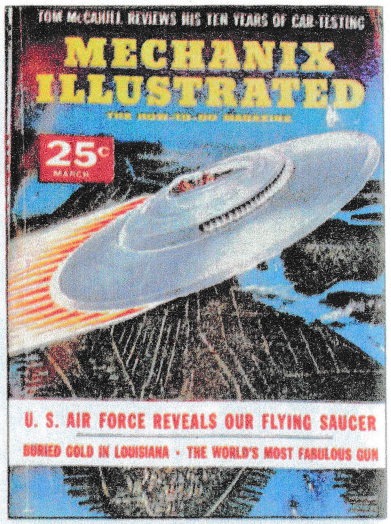
That faculty has 400 staff and 1,600 students, making it one of Europe's leading engineering facilities. Universities in England, the United States and France will also be involved.

There are no Canadian universities contributing to the project, but the school has Canadian students who could become involved, said Meine Oosten, Delft's business manager.



Courtesy, Delft University of Technology

An environmentally friendly flying disc is one of the ideas being considered by researchers at Delft University in the Netherlands as they design an airliner for 2025 and beyond. The concept was first tested in Canada in the '50s.



The U.S. air force took Canada's saucer design one step further with its own flying saucer, shown here on the cover of the March 1956 Mechanix Illustrated.