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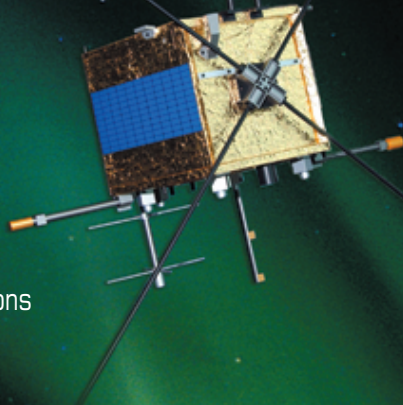
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ePOP

Chasing the solar wind

In the coming years, a new satellite named CASSIOPE, entirely designed and built in Canada, will conduct an exciting study on Sun-Earth relations. The scientific payload, called ePOP, will conduct research on the ionosphere to better understand solar storms and their harmful effects on space technologies such as those used in radio communications and satellite navigation.



The eight research instruments in the ePOP probe—particle detectors, radio wave receivers, magnetometers, and cameras—will examine the aurora borealis and other phenomena in the upper atmosphere, where the solar wind interacts with the Earth's magnetic field.

CASSIOPE will carry another experimental telecommunications payload, named Cascade that will demonstrate a new broadband digital courier service. It will also assist ePOP by providing an unprecedented capacity to store and deliver large amounts of data for use by Canadian scientists.

Dr. Andrew Yau of the University of Calgary and his team of scientists and engineers from seven Canadian universities are in charge of ePOP's design, construction and operation.

First in a series of small satellites to be developed by the Canadian Space Agency, CASSIOPE will be hexagonal, measuring just 180 cm long and 125 cm high. Other partners in the mission include the Communications Research Centre, Bristol Aerospace of Winnipeg, and MDA of Richmond, B.C., the prime contractor for the project.

Take part in the adventure at
www.space.gc.ca

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