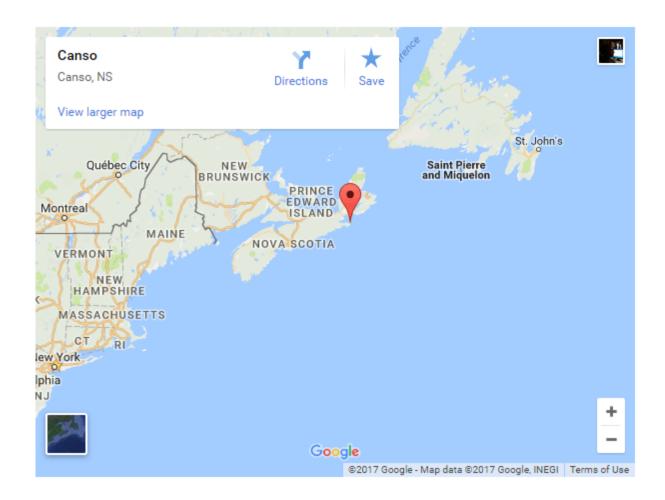


## Canada to get its own spaceport

## March 15 2017, by Evan Gough



The red marker in the map above shows the location of the Maritime Launch Services spaceport. Credit: Google

Canada is getting its own rocket-launching facility. Maritime Launch Services (MLS) has confirmed its plans to build and operate a



commercial launch facility in Nova Scotia, on Canada's east coast. The new spaceport should begin construction in 1 year, and should be in operation by 2022.

The facility will be built near Canso, in the province of Nova Scotia. Maritime Launch Services hopes to launch 8 rockets per year to place satellites in orbit. The Ukrainian Cyclone 4M medium-class rockets that will lift-off from Canso will have a payload of up to 3,350 kg.

Spaceports have certain requirements that make some locations more desirable. They need to be near transportation infrastructure so that rockets, payloads, and other materials can be transported to the site. They need to be away from major population centres in case of accidents. And they need to provide trajectories that give them access to desirable orbits.

The Nova Scotia site isn't the only location considered by MLS. They evaluated 14 sites in North America before settling on the Canso, NS site, including ones in Mexico and the US. But it appears that interest and support from local governments helped MLS settle on Canso.

The Ukrainian Cyclone M4 rockets have an excellent track record for safety. The company who builds it, Yuzhnoye, has been in operation for 62 years and has launched 875 vehicles and built and launched over 400 spacecraft. Cyclone rockets have launched successfully 221 times.





The Cyclone 4. The Cyclone family of rockets have over 200 successful launches to their credit. Credit: Yuzhnoye Design Office

MLS is a group of American aerospace experts including people who have worked with NASA. They are working with the makers of the Cyclone 4 rocket, who have wanted to open up operations in North America for some time.



The Cyclone rocket family first started operating in 1969. The Cyclone 4 is the newest and most powerful rocket in the Cyclone family. It's a 3-stage rocket that runs on UDMH fuel and uses nitrogen tetroxide for an oxidizer.

There have been other proposals for a Canadian spaceport. The Canadian Space Agency was interested in Cape Breton, also in Nova Scotia, as a launch site for small satellites in 2010. A Canadian-American consortium called PlanetSpace also looked at a Nova Scotia site for a launch facility, but they failed to get the necessary funding from NASA in 2008. Fort Churchill, in the Province of Manitoba, was the site of over 3,500 sub-orbital flights before being shut down in 1985.

The Canso launch facility is an entirely private business proposal. Neither the Canadian government nor the Canadian Space Agency are partners. It's not clear if having a launch facility on Canadian soil will impact the CSA's activities in any way.

But at least Canadians won't have to leave home to watch rocket launches.

Source: <u>Universe Today</u>

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