



Vennachar Night Sky To Be Elektrafied

By Jeff Green

The Buckshot Lake Road, which connects Plevna with Denbigh, and passes through the historic hamlet of Vennachar, can be a lonely, dark road at night.

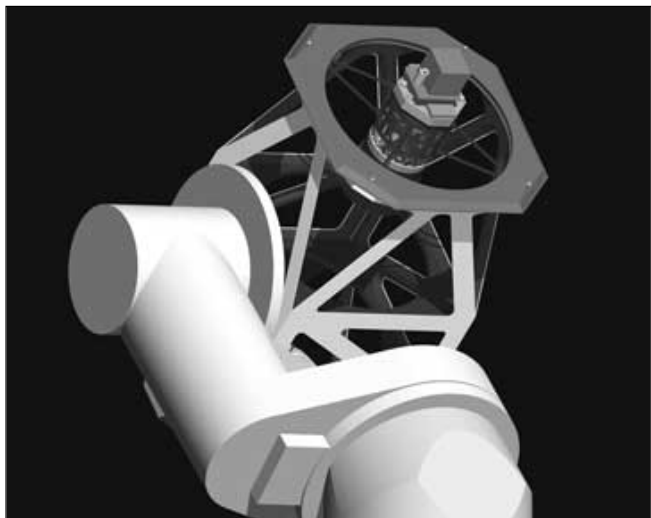
It turns out it is one of the darkest spots in southern Ontario, and this has made it a prime location for a high-tech telescope which will be one of the most powerful in North America.

Elektra Observatories, a not-for-profit corporation headed up by Frank Roy of Ottawa, an electronic engineer and astronomy enthusiast, is planning what they call the "One Metre Initiative", to be located on a bald mountain top known as Mallory Hill. The site, which is owned by Doug Whiteman, is located in North Frontenac, a stone's throw away from Addington Highlands.

Finding the site was the culmination of the initial phase of the project.

"We did an extensive topographical survey before we went there, obviously. We wanted a sky that was exceptionally dark, and we found the darkest night sky in all of southern Ontario. We also wanted it be at the top of a hill that wasn't forested, and we wanted access. Mallory Hill is located about 50 or 100 metres from the road," said Frank Roy.

The observatory will be composed of two buildings. One will be a control building, which will house computers and will include a reception centre.



But it is the other building that is so exciting for Frank Roy. It is called the OMI or One Metre Initiative, "a state of the art, one metre class instrument, which will use the largest CCD sensor in the world, 112 million pixels. The camera will be cooled to -100 degrees Celsius, and it will have an exceptionally wide field of vision, which will allow for a lot of science to

be done that cannot be done in Canada currently,” he said.

The wide field will allow the telescope to capture images of huge parts of the sky.

“It will be able to see 100,000 stars in one shot,” said Roy, “and for the first time will enable us to identify earth-sized planets from nearby stars, which is something that has never been done before.”

The telescope will also be able to identify asteroids very well, again because of the large field of vision.

When the OMI is up and running in two to three years’ time, Roy says it will be one of the four premiere telescopes in the world. Globally there are only three other telescopes that have this capacity.

The major academic partner for the project is the University of Western Ontario, which is where the information that is gathered at Mallory Hill will be stored, and other academic partners are coming forward. Private individuals and groups will be able to make use of the telescope as well, and Elektra is hoping to keep the price for non-profit groups and educational organizations to a minimum to encourage the dissemination of information to the public. Through a web application, images will be posted for public viewing.

“We estimate there will be around 1,000 hours of useable clear nights every year at the site, and even when the moon is at its brightest, as long as the telescope is aimed away from the moon it will be able to capture images with large amounts of information”.

If the sky is, literally, the only thing limiting the potential of the OMI observatory project, Frank Roy also thinks that North Frontenac or Addington Highlands Township, or both, would be able to make the exceptionally dark skies of the Buckshot Lake area the centre of a large-scale economic development initiative.

A major observatory in Quebec, at Mont Megantic, has become a tourist destination.

“There is an huge night skies festival in Mount Forest, near Toronto that draws thousands of people every year, but the skies are quite bright. You can see so much more outside of Plevna and Denbigh, that with enough work and the development of campsites, etc. people will come from thousands of miles away to this region.”

Roy said he is prepared to appear before North Frontenac or Addington Highlands Council to talk about his project and possible spin-offs. He made that offer in a letter he sent to both councils on October 14.

“The ball is in their court,” he said this week.

Further information is available at electraobservatories.org