

Hunt satellites like the pros do

If someone asked you to remember the year 1957, what would come to your mind? Tailfins on the '57 Chevy, car hops that took your order at A&W how about hula-hoops? For those who can't count that far back, maybe the TV show "Happy Days"? Okay, let's get specific, how about Oct. 4, 1957 19:28:34 Coordinated Universal Time (UTC)? That's the date the Russians launched the world's first satellite Sputnik 1. While the U.S. was a year later, the "space race" was officially on. The first fictional depiction of a satellite being launched into orbit was in a short story by Edward Everett Hale, *The Brick Moon* later serialized in the 1869 *The Atlantic Monthly* resurfacing again in Jules Verne's *The Begum's Fortune* 10 years later. From conception to the middle of the space race, these artificial earth hoverers where practically impossible to track unless you saw it on TV or had access to extreme



Neel Roberts
The Sky's the Limit

technology like they do at NASA — until today's "information age."

With the simple use of your computer or smartphone, getting real time satellite data is almost as easy as pushing a button while the automatic pilot takes over the rest of the evening. The websites n2yo.com and spaceweather.com/flybys are excellent and pretty straight forward to start satellite hunting. For the iPhone, there are several apps you can get from the iStore but two I use are "Prosat" and "Satellite Tracker," which enable you to be outside and see the sky synch with your wireless device. The favourite celebrity is the International Space Station (ISS), which rotates the

Earth every 90 minutes at a speed of more than 26,000 kilometres per hour and even though it is 350 kilometres above us, it is very easy to spot with the naked eye. The above programs almost guarantee you can see it almost daily no matter where you are. If you can follow it with your scope (especially a Dobsonian) you can actually see the solar panels that power it. While sci-fi authors of Jules Verne's day had fantastic imaginations, they would never have dreamed how technology evolved their concept. Not only can an amateur have the power to track these man made asteroids, but these methodological planetoids coincidentally run our world today.

Sky watch for the next month

Mars will hide behind the moon at dawn on July 27 from 6 a.m. to full sunrise. Look at the east horizon as the moon will occult Mars before the day starts.

Mercury will follow the Beehive down at dusk on July 6 at 9 p.m. Look to the northwest-west and Mercury will be right next to the Beehive (M44) as they disappear into the horizon before nightfall.

The Delta Aquarids meteor shower will peak July 29. Look in the south-southeast at around 4-5 a.m. just before dawn, as it is expected meteors will fall at a rate of 15-20 per hour.

There will be a partial solar eclipse on Canada Day taking place mostly over the ocean near Antarctica from 5:33-11:30 am. If you want to watch it live, check out NASA's eclipse page at <http://eclipse.gsfc.nasa.gov/eclipse.html>.

Happy long days of summer and keep reaching for the sky!

Neel Roberts is a member of the Calgary chapter of the Royal Astronomical Society of Canada. Neel welcomes your questions and comments at (403) 485-2683 and Neel_Roberts@ptccanada.com.