

OSFS Statement 512.

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Speculative cube-shaped-object-on-moon_625x300_06_December_2021

Photo returned from China's Yutu 2 lunar rover.

EVENT COORDINATOR – We have a monthly OSFS newsletter called The Statement. If you would like to be on the e-mail list contact the editor@ottawasfs.ca

EDITOR'S BLATHER: We have a comet and a meteor show in December but not much else until next year. The Chinese lunar rover has returned a few interesting photos one of which has set off the conspiricists again.

Here's how to see Leonard's Comet, the brightest comet of the year. By [Margo Milanowski](#) | Published Dec 3, 2021 8:00 PM
Update: 12/7/2021: Leonard's Comet will be closest to Earth at [21 million miles away](#) on December 12. The best viewing times currently are still in the morning, but the comet's brightness is unpredictable and it may have already had its brightest days. After the 17th, the comet will be best viewed in the evening, and come January the comet will [no longer be visible in North America](#). Check out a [few photos](#) of the comet from [this week](#).

Leonard's comet, expected to be the brightest comet this year, should be the next sky sighting on your bucket list. The moon has been keeping this comet washed out as it is much brighter than the space rock. It was bright enough to be seen on cameras and through telescopes on Thursday, and it should remain bright enough to be seen. It's expected to be the brightest comet of the year.

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[Related: Check out the first images of Mars from China's Tianwen-1 probe](#)

The Yutu 2 Rover launched with China's Chang'e 4 mission in 2018, and reached the moon in January 2019. The mission aimed to discover more about the far side of the moon, or as pop culture calls it, the "dark side" of the moon.

Our Space, associated with the Chinese National Space Administration which controls Yutu 2, first noted the object in a post on December 3rd; the story dubbed the object "mystery hut." Yutu 2 has since adjusted course to check out the cube, and will spend the next 2 to 3 lunar days (which takes up 2 to 3 months time on Earth) investigating this mysterious moon feature. Researchers expect the weirdly shaped structure to simply be a large boulder. The particularly geometric shape of this mysterious object may simply be from pixelation in the photo itself.

The rover, solar powered, goes into a kind of hibernation when the sun sets on the far side of the moon, and wakes up to work when the sun rises over the crater.

Yutu 2 has seen plenty of interesting moon features in its travels already, including a strange gel that turned out to be some rocks melted together, and some perplexing shards that were likely hurled from the impact of a meteor. The Chang'e 4 mission has also brought forth some fascinating new discoveries like what could be pieces of the moon's mantle.

Whatever this structure turns out to be, Yutu 2 will continue uncovering other secrets the "dark side" of the moon is holding.

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Dear OSFen:

It is Hallowe'en Day, and as always, it seems these days, there is nothing happening in my corner of Toronto, so time to get a little caught up with fanzines. I have here Statements 510 and 511.

510... It's been a long time since we were members of RASC Toronto Centre, and at one point, while they were having some problems with staffing, I worked as a data entry clerk in their offices. I had a good time...their offices for some years was a short drive away from our place, but now, they have their offices at the Ontario Science Centre.

My letter...I think I have made all the steampunk jewelry I can with what I have, although it's now time to scour my workbox of bits, and see what else I could create. This very weekend would have been Astronomicon 13 in Rochester, New York, but it has been postponed to the first weekend of November, 2022.

511... The destruction of Tall-el-Hammam might have given credence to the idea of God's wrath, the fist of God, etc. to have a huge meteorite sudden slam down onto a city. Whoever wasn't killed in that collision probably moved away, and left the area even more desolate than it was. Could those winds have knocked down the walls of Jericho?

I have not seen the Foundation series, but I did see a short bit of

one episode, enough to show me that DS9's Alexander Siddig has a role in it...IMDB tells me is it the role of Advocate Xylas.

Hope all are finding the convention list useful, especially in planning what life will be like post-pandemic. I have been chided a few times now that Smofcon 38 in Montreal December 2-4, 2022, is not a fanzine convention, but a conrunners' convention.

We have been kept at home in trying to sell our old bedroom chest of drawers, going for a good rate. The first sale of it seems to be going badly, with the interested party suddenly going quiet. We keep hoping they will call, but they don't. If they don't speak up, we will be forced to go to the second interested party, and see if they are still interested.

Coming up...more work with BBW International, working trade shows and conferences, and more work with PAL Communication and their magazines. The paycheques aren't enough to live on, but they do help pay a few bills.

All done, and many thanks! See you with the next.

Yours, Lloyd Penney.

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Launch Satellites Into Orbit Using a Giant Spinning Slingshot?

It's cheaper and safer than burning rocket fuel, but satellites have to be built Tonka-tough.

[Tonka - the almost kid-proof toy trucks.]

By [Andrew Liszewski](#), Gif: [SpinLaunch](#)

As impressive as it is to watch a rocket blast off into space, harnessing fossil fuels and explosions to pursue our dreams of space exploration is ironically primitive. A company called [SpinLaunch](#) thinks it has a better idea: It wants to launch small objects into space [using a giant spinning centrifuge instead](#).

[This is a one-third-scale working model of the OLS system with a 30 metre arm v/s the 100 of the proposed launcher that is currently under development . It has been tested and didn't self destruct as many critics predicted. There are a fair lot of web comments, some quite sane, analyzing the stresses and speculating on which payloads could survive the wind-up-and-fling. (google SpinLaunch) Editor.

Like the OLS, the Suborbital Accelerator uses a vacuum-sealed centrifuge to spin a rocket and then catapult it to space at up to 8,000 km/h (5,000 mph). The rotational kinetic energy comes from ground-based electricity provided by solar and wind (which would eliminate the carbon footprint of rocket launches).

Once the rocket reaches an altitude of roughly 61,000 m (200,000 ft), the rocket ignites its engines to reach a speed of 28,200 km/h (17,500 mph) and reach Low Earth Orbit (LEO). If successful, this system will vastly reduce the associated cost and energy of sending payloads to space while increasing the frequency of launches. According to projections, the OLS will reduce the cost of individual



space launched by a factor of 20 (less than \$500,000).

There's a reason space exploration has, to date, been limited to federally-funded government agencies or companies backed by billionaires desperately trying to change how history remembers them. Using the tried and true methodologies of cargo strapped to rockets is a very expensive endeavor, even when those launch systems can be reliably recovered, refurbished, and reused.

Alternatives to launching rockets haven't exactly been runaway successes, however. In the 1960s, the United States Department of Defense and Canada's Department of National Defence formed a joint partnership called Project HARP (High Altitude Research Project) to essentially develop giant Earth-based guns that could blast objects into space. HARP successfully fired a projectile 180 KM into the atmosphere using a 16-inch cannon built at the U.S. Army Research Laboratory's Yuma Proving Ground, but by the late '60s both governments had withdrawn funding for the research project, and it was officially shut down before it came to fruition.

[The “big gun”, there were a few smaller on , was located on Barbados and in it's final form was two ex-naval 16 inch cannon barrels 60 foot long welded end to end . The project was mired in political enmity from the start. Not least, many nervous mid- east countries equated HARP with BIG BERTHA, the German rail guns from past wars.

Gerald Vincent Bull (March 9, 1928 – March 22, 1990[1]) was a Canadian engineer who developed long-range artillery. He moved from project to project in his quest to economically launch a satellite using a huge artillery piece, to which end he designed the Project Babylon "supergun" for the Iraqi government.

Bull was assassinated outside his apartment in Brussels, Belgium,

in March 1990. His assassination is believed to be the work of the Mossad over his work for the Iraqi government.

HARP worked ; it could launch ten foot long atmospheric research probes to 120 Km at a rate of one every hour. The big disadvantage vs. sounding rockets eg. the contemporary Black Brant, was its fixed location.] Editor

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