

Coronavirus And Location: Is There A Line?

No, I'm not talking about the line at the grocery store to buy toilet paper and hand sanitiser. Or the line at the doctor's office. I'm talking about that grey privacy line invisible to the naked eye, but all too accessible on our mobile devices.

On March 16, Israeli Prime Minister Benjamin Netanyahu and his cabinet approved using citizens' smartphones to track the locations of people infected with the novel coronavirus (COVID-19), as well as anyone they might have had contact with.

Such a strategy might work — some citizens reported receiving smartphone alerts when they were near an infected person. However, it does raise the ubiquitous privacy concerns of allowing your government to know your every move.

Some may think this an acceptable use of tracking, except that the Israeli Knesset — the citizenry's representative legislature — was not involved in the decision. The tracking didn't require a court order, and records were to be kept until the new regulation expired.

A few days later, Israel's top court put a stop to the program, saying there would be no tracking of Israelis by the Shin Bet without Knesset oversight.

Of course, Israel is a democracy, and Netanyahu's move is nowhere near the draconian measures undertaken by the Chinese government in response to the virus. Those actions included forcibly removing people from their homes and placing them in quarantine.

Yet China's actions worked.

Read more in *GPS World* article. https://www.gpsworld.com/coronavirus-and-location-is-there-a-line/?utm_source=Navigate%21+Weekly+GNSS+News&utm_medium=Newsletter&utm_campaign=NCMCD200318003&oly_enc_id=1784A2382467C6V

2020-03-23



US Coast Guard Protests GPS Disruption to UN Body: ‘Urgent Issue’

Responding to a plea from 14 maritime organisations in the fall of 2019, the U.S. Coast Guard has protested disruption of GPS and GNSS signals to the International Maritime Organization (IMO) IMO is the United Nations body that coordinates and sets standards for international maritime operations and safety.

In a paper dated March 10, the service said that GNSS signals are “essential to safe and efficient navigation and an integral component of all maritime operations.” Interfering with them “jeopardizes the safety of life at sea.” Deliberate disruptions in the eastern Mediterranean and the Black Sea, the paper says, affect vessels operating in international waters and engaged in innocent passage through territorial seas.

While nations typically have a right to do as they wish in their sovereign territory, they are also obliged to not have that intrude into other nations’ territory or international waters. This is also true for vessels passing through their waters but not calling at their ports, known as “innocent passage.”

The International Law of the Sea Treaty stipulates that, in the absence of some clear wrongdoing such as piracy, drug smuggling or discharging oil, vessels be allowed to pass through territorial seas unmolested by the coastal state. The Coast Guard paper also points out that nations have other treaty obligations that prohibit this kind of activity. International Telecommunication Union Radio Regulations prohibits “All transmissions with false or misleading identification...”

Read more in *GPS World* article. <https://www.gpsworld.com/us-coast-guard-protests-gps-disruption-to-un-body-urgent-issue/>

2020-03-26



DOT Holds First GPS Backup Technology Demonstration

Government officials, advisors and congressional staff gathered at NASA’s Langley Research Center on March 13. They were there to discuss the Department of

Transportation's (DoT's) [GPS Backup Technology Demonstration program](#) and view the offerings of six different companies.

The day began with remarks by Karen Van Dyke from the U.S. Department of Transportation, as well as remarks prepared by Colonel Joseph Frankino, deputy director of the [National Coordination Office](#), a multi-agency staff that supports the National Space-Based Positioning, Navigation, and Timing (PNT) Executive Committee, whose members were unable to attend. Van Dyke provided an overview of the program and pointed out the increasing importance of resilient PNT. As just one example, improvements in autonomy and self-driving cars are entirely dependent upon consumers having confidence in the entire system, much of which is underpinned by PNT.

Read more in *GPS World* article. https://www.gpsworld.com/dot-holds-first-gps-backup-technology-demonstration/?utm_source=Navigate%21+Weekly+GNSS+News&utm_medium=Newsletter&utm_campaign=NCMCD200311004&oly_enc_id=1784A2382467C6V

2020-03-16



GLONASS-M Satellite Launched Into Orbit

Russia has launched another GLONASS-M satellite, [according to Roscosmos](#), the Russian State Space Corporation. A Soyuz-2.1b launch vehicle successfully carried the satellite to its planned orbit from the Plesetsk cosmodrome. The launch took place on schedule on March 16.

Ground-based facilities of the G.S. Titov Space Forces VKS immediately took control of the satellite. A stable telemetry connection has been established and maintained with the satellite. The onboard systems of the spacecraft are operating normally.

Read more in *GPS World* article. https://www.gpsworld.com/glonass-m-satellite-launched-into-orbit/?utm_source=Professional+OEM+%2B+UAV&utm_medium=Newsletter&utm_campaign=NCMCD200312002&oly_enc_id=1784A2382467C6V

2020-03-17



American Spy Plane Pilots Use China's Satellite Navigation System BeiDou As Backup To GPS

American spy plane pilots use China's satellite navigation system as a backup to GPS on their missions, according to a US Air Force general. The second generation of the Chinese system, known as BeiDou, began providing global services at the end of 2018 and a third phase, with more satellites, is expected to be fully functional later this year. While the Global Positioning System (GPS) is the first choice for pilots of U-2 "Dragon Lady" reconnaissance aircraft, BeiDou, along with Russia's Glonass and Europe's Galileo, serves as an alternative if GPS becomes unavailable.

"My U-2 guys fly with a watch now that ties into GPS, but also BeiDou and the Russian system and the European system," US Air Combat Command Chief General James Holmes said at a conference in Washington on Wednesday 4 March.

Read more in *article...*

<https://www.scmp.com/news/china/military/article/3074154/american-spy-plane-pilots-use-chinas-satellite-navigation>

2020-03-08



China Launches New BeiDou Navigation Satellite

China launched a new satellite of the BeiDou Navigation Satellite System (BDS) from the Xichang Satellite Launch Center in southwest China's Sichuan Province at 7:55 p.m. Monday 9 March (Beijing Time), only one step away from completing the whole global system. The satellite, the 54th of the BeiDou family, was sent into a geostationary orbit as planned by a Long March-3B carrier rocket.

China began to construct its navigation system, named after the Chinese term for the Big Dipper constellation, in the 1990s and started serving the Asia-Pacific Region in 2012. At present, all the first generation BDS-1 satellites have ended operations, and a total of 54 BDS-2 and BDS-3 satellites have been sent into space.

Read more in *GPS Daily* article.

https://www.gpsdaily.com/reports/China_launches_new_BeiDou_navigation_satellite_999.html

2020-03-11



China Driverless Van Startup Sees Demand Surge Amid Virus Outbreak

The coronavirus has hurt many companies in China and around the world. Neolix, a driverless delivery business based in Beijing, is not among them -- in fact, it's seen a jump in demand.

The startup, which has attracted customers including Alibaba Group Holding, Meituan Dianping and JD.Com, has booked orders for more than 200 vehicles in the past two months; before then, it had only produced 125 units since manufacturing began last May, founder Yu Enyuan said in an interview.

Amid the virus anxiety that has disrupted businesses and supply chains, China's push into autonomous transport and the future of delivery is getting an unexpected boost. Neolix's small vans help customers reduce physical contact and address labour shortages caused by lingering quarantines and travel restrictions.

Neolix's inventories have been depleted during the epidemic with its vehicles being used to deliver medical supplies in hospitals, including in Wuhan, at the outbreak's epicenter. Its vans are also being used to help disinfect streets and move food to people who are working on the front lines to curb the spread of the virus, Yu said.

Read more in *article...*

<https://europe.autonews.com/automakers/china-driverless-van-startup-sees-demand-surge-amid-virus-outbreak>

2020-03-10



A New Partnership

Prime Minister the Hon Scott Morrison MP and Prime Minister Rt Hon Jacinda Ardern met in Sydney on 28 February 2020 for the annual Australia-New Zealand Leaders' Meeting. Australia and New Zealand have agreed to partner together to rollout new satellite technology that will be able to pinpoint a location on Earth to within 10 centimetres, unlocking more than \$7.5 billion in benefits for industries on both sides of the Tasman.

Prime Minister Scott Morrison and New Zealand's Prime Minister Jacinda Ardern committed to jointly implement a Satellite-Based Augmentation System (SBAS), to operate across Australia and New Zealand, at the Australia-New Zealand Leaders' meeting today.

This world-leading system will improve the accuracy of GPS and other positioning services from the current five to 10 metres to as little as 10 centimetres across Australia and New Zealand without the need for mobile or internet coverage.

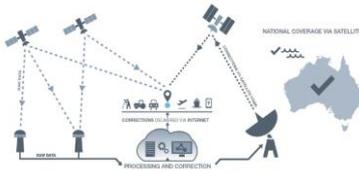
Minister for Resources, Water and Northern Australia Keith Pitt said the project, to be operating by 2023, will have significant benefits to a range of industry sectors including mining, agriculture and transport.

"We welcome New Zealand's commitment to join Australia in rolling out this exciting new technology, which will deliver substantial economic benefits for both countries," Minister Pitt said.

Read more in *article...*

<https://www.pm.gov.au/media/joint-statement-prime-ministers-hon-scott-morrison-mp-and-rt-hon-jacinda-ardern>

2020-02-28



NASA JPL, DARPA Partnership Demonstrates Autonomous Navigation Capabilities

The Subterranean Challenge, or SubT, is testing this kind of cutting-edge technology for space exploration – sponsored by the US Defense Advanced Research Projects Agency (DARPA) and NASA Jet Propulsion Laboratory (JPL) to develop key autonomous capabilities.

SubT is divided into four circuits spread over three years. With each, teams program their robots to navigate a complex underground course. The first contest, held last August, took place in a mine. For the most recent, called the Urban Circuit, teams raced against one another in an unfinished power plant in Elma, Washington.

Each team's robots searched for a set of 20 predetermined objects, earning a point for each find. For the Urban Circuit, CoSTAR earned 16 points; the number two team, with 11 points, was Explorer, led by Carnegie Mellon University.

CoSTAR's team lead, Ali Agha of JPL, said, "The goal is to develop software for our robots that lets them decide how to proceed as they face new surprises. These robots are highly autonomous and for the most part make decisions without human intervention."

CoSTAR, which stands for Collaborative SubTerraanean Autonomous Robots, brought machines that can roll, walk or fly, depending on what they encounter.

Along the way, the bots have to map the environment and find objects like a warm mannequin that simulates a disaster survivor or a lost cellphone with a Wi-Fi signal.

Read more in *article*...

https://www.spaceconnectonline.com.au/r-d/4212-nasa-jpl-darpa-partnership-demonstrate-autonomous-navigation-capabilities?utm_source=spaceconnect&utm_campaign=04_03_20&utm_medium=email&utm_content=4&utm_emailID=

2020-03-04

