

From: [Anne Wilder](#)
To: [5GChallengeNOI](#)
Subject: 5G Comments
Date: Friday, February 5, 2021 1:50:30 PM
Attachments: [5G Satellites A Firstenberg.docx](#)

Dear Office of the DoD:

Thank you for the opportunity to comment. There are two subjects that are important to consider. One is security, and the other is safety.

Security: We should not be doing business with ANY Chinese or other foreign telecommunications companies. That makes no sense. The security of our internet systems must be of utmost importance.

Safety: Keeping our nation secure will not help us if the method we use to do so kills off our migratory birds and the insects that fertilize our produce. The usage of tens of thousands of low orbiting satellites for internet has not been tested to determine the adverse effects it has on our most important wildlife, let alone people. In the 1940s and 1950s atomic weapons were tested with military personnel close enough to feel the heat and energy generated by the explosions. After the fact, we learned how dangerous that was for those soldiers. They all were debilitated by it, and many died early deaths.

However, you know that wireless RF-EMR is harmful to people's health. You have been documenting it for decades. It is a bad idea to blanket our planet with satellites that transmit this radiation 24/7.

Cornell University graduate and scientist, Arthur Firstenberg, author of *The Invisible Rainbow, A History of Electricity and Life*, stated (entire article attached):

"The Earth's electromagnetic envelope — the magnetosphere — will be massively polluted [by these satellites]. Millions of pulsed, modulated digital signals covering 80 GHz of spectrum will be emitted day and night into the magnetosphere by tens of thousands of satellites, each emitting multiple laser-like beams directed at the surface of the Earth. This will have several kinds of effects:

- (a) the direct radiation arriving at the ground;
- (b) pollution of the global electrical circuit; and
- (c) alteration of the magnetosphere itself.

"Direct radiation: In 2001, Ukrainian scientists warned against the use of millimeter waves by low-orbit communication satellites using phased array antennas. "Observed higher resonance frequencies of a living cell coincide with [these] frequencies," they wrote. "The power densities and duration of radiation created by these satellites will significantly exceed (by ten or more orders of magnitude — such irradiation is possible over the course of a whole lifetime) the energetic doses inducing change in living cells . . . Negative consequences of this may be changes in cell structures and physiological processes, genetic changes, and alteration of psycho-physiological conditions and behavior.

"Effects on the magnetosphere: The Earth's magnetosphere already bears the imprint of 50 and 60 Hz and their harmonics from power lines. This phenomenon, known as power-line harmonic radiation (PLHR), has been extensively studied.²) When power line radiation reaches the magnetosphere, it is amplified thousands of times and interacts with the Van Allen belts, draining them of electrons, which rain down over the earth, modifying the electrical properties of the atmosphere.³ Not only may this increase the frequency of thunderstorms,⁴ but it may shift the values of the Schumann resonances to which all living things are attuned.⁵

“Continued expansion of the electrical power system threatens the viability of all life on earth,” wrote Dr. Robert O. Becker in 1985.⁶ Tens of thousands of satellites, located *in* the lower magnetosphere, will be an even greater threat to all life.

"Effects on the global electrical circuit: A current of electricity flows at all times through the ionosphere, down to the Earth in fair weather, through the Earth, and back up to the ionosphere in thunderstorms. This global circuit, studied today by atmospheric physicists, was first described in the fourth century B.C. in the *Yellow Emperor's Classic of Internal Medicine*: “The pure Yang forms the heaven, and the turbid Yin forms the earth. The Qi of the earth ascends and turns into clouds, while the Qi of the heaven descends and turns into rain.” At National Central University in Taiwan, and at Shanghai University of Traditional Chinese Medicine, Fujian Institute of Traditional Chinese Medicine, and elsewhere in China, scientists are confirming that the substance called Qi that flows from sky to Earth and circulates through our meridians, giving us life and health, is electricity. The ionosphere is charged to an average of 300,000 volts at all times and it provides the power for the global electrical circuit that flows through every one of us. Power line radiation is very weak by the time it travels from the surface of the Earth to the ionosphere. In contrast, the thousands of planned 5G satellites will be located in the ionosphere and will work the full power of their radiation upon it"

As I live near the 48th parallel, I reside in the testing area for SpaceX Starlink. My neighbor, up the hill, has one of the SpaceX transceivers on his house. As of October 8, 2020, two days after SpaceX began launching its most recent barrage of 180 satellites, all my chickens suddenly stopped laying. I have 13 layers, and normally they lay well into November. A neighbor who lives between my property and the SpaceX tester also had reduced eggs over the summer and virtually none after October 8. As a rancher, she also noticed it took about a third longer for her market livestock to finish this year - 6 months instead of 4 months. I have birds that still have not matured. This is an effect of only 858 satellites. What will happen when 42,000 of them are launched?

Please, put a moratorium on the roll-out of these satellites until such time as they can be determined to be safe for our planet and all life that lives upon it..

Sincerely,

Anne Wilder
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5G Satellites

by Arthur Firstenberg | Original article [here](#)

1. HOW MANY SATELLITES ARE BEING LAUNCHED INTO SPACE?

In 2019, at least eight companies and governments are competing to send up fleets of from 150 to 42,000 satellites each.

- **SpaceX**, based in the United States, has plans for 42,000 satellites, is already launching 60 at a time, twice a month, and is developing a larger rocket that can launch 120 at a time. As soon as 420 satellites are in orbit, it plans to turn them on. That could be as early as February 2020.
- **OneWeb**, based in the United Kingdom, has plans for 5,260 satellites and intends to launch 30 at a time every three to four weeks beginning in January 2020. As soon as 300 satellites are in orbit, in late 2020, it plans to turn them on.
- **Telesat**, based in Canada, has plans for 512 satellites, and intends to begin service in 2021.
- **Amazon** has plans for 3,236 satellites and intends to begin service as soon as **578 are in orbit**.
- **Lynk** has plans for “several thousand” satellites and intends to begin service in 2023.
- **Facebook** has plans for thousands of satellites but has not disclosed its plans to the public.
- **Roscosmos**, the Russian Space Agency, has plans for 640 satellites, to be deployed between 2022 and 2026.
- **Aerospace Science and Industry Corp.**, a Chinese state-owned company, has plans for 156 satellites, to be in place by 2022.

In addition to these satellite plans, Loon, a subsidiary of Google, has a contract to provide Internet to remote areas of the Amazon rainforest in Peru from stratospheric balloons.

2. WHERE WILL THE SATELLITES BE LOCATED?

Most will be located in the ionosphere, which is the lower part of the Earth’s magnetosphere. SpaceX’s satellites will orbit as low as 340 kilometers or **210 miles from earth**.

3. WHAT ARE ALL THESE SATELLITES FOR?

They are for 5G, the Internet of Things, and to provide high speed Internet to every square inch of the Earth. Because data travels faster in space than in fiber, all cell towers will transmit their signals to satellites, to be routed through space to their destinations.

The satellites will also be used to populate all remote areas on Earth with cell towers. Every satellite customer will purchase a small “user terminal” they they will mount on their house or

their car, where it will function as a small cell or mobile base station for use by the public. SpaceX has already applied to the Federal Communications Commission for permission to sell 1,000,000 user terminals in the United States, and OneWeb has applied for 1,900,000.

The only exception is Lynk, whose satellites will be able to connect directly to cell phones, and will turn every cell phone on Earth into a satellite phone. “The artificial divide between satellites and terrestrial systems is about to end,” says Lynk

4. WILL THESE SATELLITES USE 5G TECHNOLOGY?***

Yes. They will use phased arrays, beam-forming technologies, and millimeter waves with frequencies from 10 GHz to 80 GHz, just like 5G antennas on earth.

5. WHAT WILL THIS DO TO THE EARTH?

The Earth’s electromagnetic envelope — the magnetosphere — will be massively polluted. Millions of pulsed, modulated digital signals covering 80 GHz of spectrum will be emitted day and night into the magnetosphere by tens of thousands of satellites, each emitting multiple laser-like beams directed at the surface of the Earth. This will have several kinds of effects:

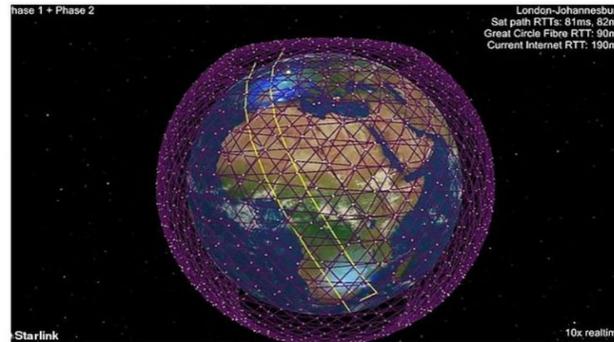
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If Starlink Succeeds Then SpaceX Revenue Will Be More Than Double NASA's Budget

Brian Wang | December 13, 2018



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6. WHAT HAVE SATELLITES DONE TO THE EARTH ALREADY?

- When the 66 satellites of the Iridium Corporation began providing cell phone service on September 23, 1998, people all over the Earth reported headaches, dizziness, nausea, insomnia, nosebleeds, heart palpitations, asthma attacks, and ringing in the ears that began that morning. Birds were not out flying. Hawks were not out hunting. Thousands of homing pigeons lost their way.⁸
- Widespread illness was repeated when Globalstar, with just 48 satellites, began providing cell phone service on February 28, 2000, and again when Iridium, which had gone bankrupt, resumed service on March 30, 2001, and again when Iridium added data and Internet to its phone service on June 5, 2001. The March 30, 2001 event apparently caused widespread losses of race horse foals in many countries.⁹
- Even the first fleet of satellites ever launched — the 28 U.S. military satellites of the Initial Defense Communication Satellites Program—were associated with disease on Earth. They began operation on June 13, 1968. The “Hong Kong” flu pandemic began in July 1968 and lasted until March 1970

<https://scientists4wiredtech.com/what-are-4g-5g/5g-satellites/>