

Jan 18, 2016

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C., 20554

Re: Informal Objection Under Section 5.95 to Application of Google, Inc., Application for Experimental License, File No. 0747-EX-PL-2015

Dear Ms. Dortch,

I strongly urge the FCC to do the right thing and immediately put a moratorium on all further Google loon deployments in this country. This project is a reckless experiment and overreach of power by industry and FCC, with the possibility of endangering the lives of humans and wildlife on multiple fronts. A project of this size should have full accountability and environmental review in the public arena, for it is reported this will be of-the the first of many forays by the wireless industry to achieve sky based WiFi and cellular transmission using the lower altitudes of space.

To those whose wireless addiction is insatiable this project no doubt represents the ultimate rush. For those of us have become sensitized by wireless microwave technologies and aware of its environmental and safety impact, Google loon project represents the ultimate environmental & public safety threat.

It is believed by Google and perhaps the wireless power brokers of this world, the only way to achieve total countrywide Internet coverage Sky based WIFI transmitters will need to be deployed. This is a total lack of political will. In the 30s and 40s we managed to electrify and extend telephone coverage to the whole country using wired technology. All the while the country was in the throes of the worst depression and World War of its history. If we found the funds to wire the country then, we can wire the whole country again with wired Internet.

Minority rights should be protected. For those of us who cannot tolerate the complex and growing envelope of wireless radiation technologies, the remote or rural areas of the country represent our last vestige of hope to attain some quality of life and relief from the symptoms and illnesses that plague us engulfed by wireless technology in our urban regional environments.

The earth, people , wildlife need areas of the world free from as much manmade wireless radiation technologies as possible. We are not gods or God. There are at ramifications to our actions that are not always evident at the onset. Too much evidence has accumulated in the last 50 years of [RF research](#) to dismiss the powerful biological effects manmade RF / microwaves signals have on living things.

If industry and other powerful interest groups wish to deny it, that is their privilege. Allow those of us who do not wish or find it difficult to be exposed to this form of radiation be offered some type of

sanctuary in more remote, rural areas of this country. This is not cry from a reactionary luddite who wants to do away with all modern communications, but one that is echoed by many in the [scientific and governmental community](#) asking us proceed with caution and find alternatives to our wireless mania.

It is calculated that the strength of the signal reaching earth by sky based Loon transmitter will be extremely low and hence the accompanying radiation will be miniscule, below most all far-field wireless transmitters such as cell towers, cell phones and current WiFi routers, therefore there should be no concern. However, what is not given in Google Loon application is how powerful the ground based wireless devices will need to be to communicate with the loon sky based WiFi transmitter 12 to 19 away in Space. It is said the closer a receiving RF transmitter has to be to the Main transmitting antenna, less power will be needed by the mobile device to transmit back to the tower or main antenna. If this concept holds true the ground base mobile or stationary devices communicating with the Loon balloon transmitter at least 12 miles away will have to use a lot of power hence in turn release a lot radiation in the neighboring area. What will be the impact of these stronger radiation signals on people, wildlife and plants residing nearby.

Even if the loon transmitter signal that reaches the ground is weak, the signal will be modulated and pulsed. Study after study shows it is not the wave itself but it's configuration that affects living tissue despite the weak signal.

What about aviation safety? How dangerous will flying become as these balloons descend and ascend every six months or so, the predicted lifespan of the loon transmitter according to several reports before they must be sent back to earth for retooling? These balloons will be partially steered by remote transmitters on earth but most important will need to be sensitive to wind and weather conditions in the lower atmosphere as they are launched and guided back to earth. In their ascents and descents they will be crossing aviation airspace. With the frequency of deployments and consideration that must be given to weather conditions, one mishap could be fatal to airline flight. **Already [five different landing mishaps have been reported in the two years Loon project has been under test conditions around the world.](#) How many have gone unreported?** Some of those mishaps were not so benign causing a loss of power to the whole community as a [balloon landed on some power lines](#). While others [landed on people's property](#) not only damaging vegetation, but it is speculated that transmitters were still running. How much radiation were those homeowners exposed to by these powerful transmitters?

What about wildlife? So many of our wildlife creatures, birds bees and certain mammals rely on earth's electromagnetic compass to guide them in their life cycles. We have seen in the research how the mating and directional [patterns of birds and bees](#) is compromised by exposure to wireless devices and infrastructure. Google Loon will eliminate one more sanctuary for these wildlife creatures to be free of interfering manmade electromagnetic signals.

Please do the right thing by calling for a moratorium on all future Google Loon projects and all other space based Wifi/Cellular Space projects waiting for approval. Proceed immediately with an open Environmental Review Process that will scrutinize the many ramifications of such a project in proper

forum and process. Secondly seek alternatives in providing remote and rural Internet access by launching a campaign to encourage more Wired technology in these areas, creating greater benefits to the environment, people's health and aviation safety.

Sincerely,
Evelyn Savarin