



Safe ICT NZ

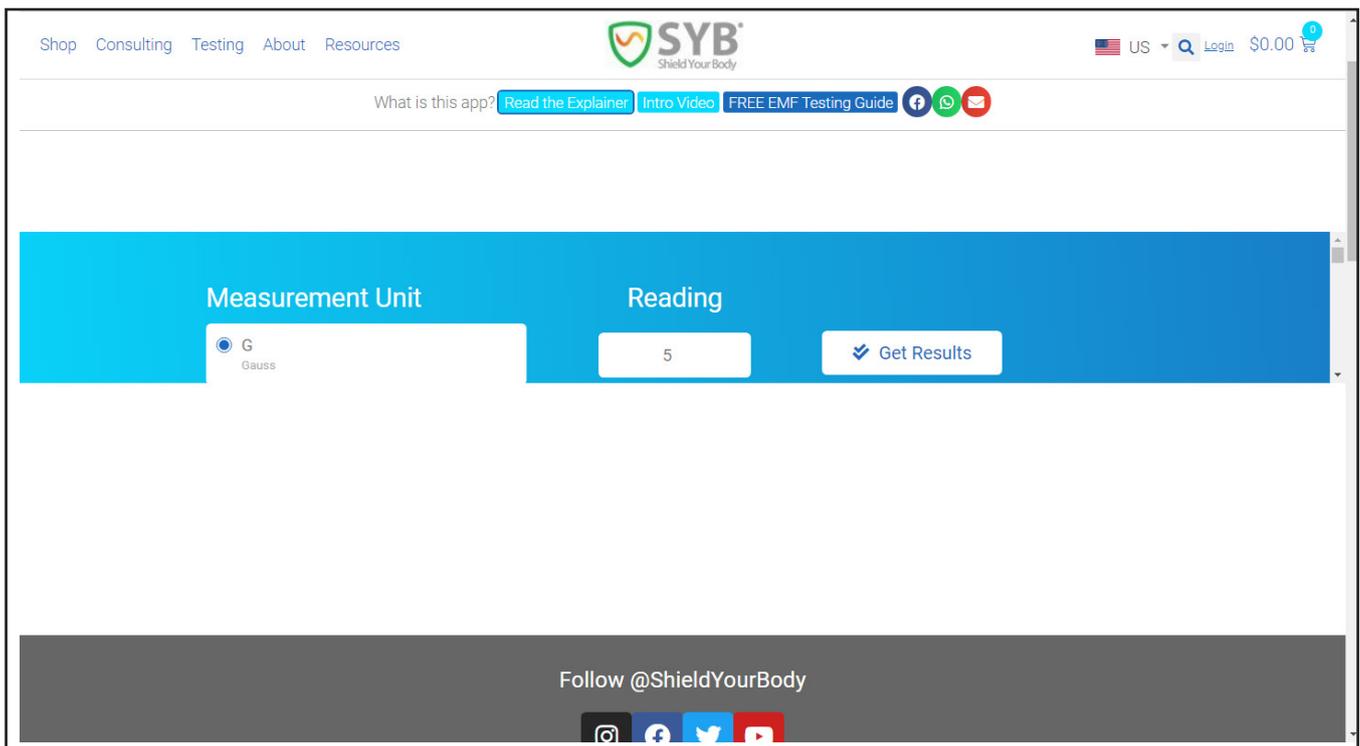
Safe Information and Communication Technology for New Zealand

Newsletter March 2022

We are excited about this new app—that makes the meaning of your EMF meter readings really simple

You turn on the meter, and instantly you get a bunch of readings, The measurements are in units we do not use in our everyday lives. so most probably these will mean zilch to you. A red light on your meter then flickers, which is obviously alarming, but what does it really mean? How does this info translate into knowing when to be concerned, and to try and shield from or otherwise miti-

gate harm from excessive EMFs? Well, last year R Blank (son of the renowned EMF researcher Martin Blank) created an app to fix exactly this problem, and it is beautifully simple to use. All you do is type in the numbers and units, on his web browser based app, and it will search a huge data base of studies to find the effects on that specific exposure level. The app can't tell you about long



term exposure problems because the lab science isn't there. For that you have to look at the rather imperfect science of epidemiology.

SYB Health Effects App (Beta): <https://www.shieldyourbody.com/fx/>

R Blank's website also has a great bunch of e books and short videos including "How to test EMF for yourself" which really does simplify what can be a confusing and complicated area, without lapsing into inaccuracy.

The legal right to ignore work emails after hours

France has enshrined in its laws: **the right to disconnect**. As new information and communication technologies continue to be developed, employees are increasingly connected to their business phones or computers outside their working hours. As such, the line between employees' private and professional lives has become blurred. Within this context, the Luxembourg courts recently rec-

ognised, for the first time, the existence of employees' right to disconnect.

Dave Egger's book "The Every," cleverly satirises the way big tech gets its foot in the door then exploits new habits, dependencies, and beliefs.

"The Every" shows how socially destructive technology is normalised using clever satire. When the World's largest search engine/social media company The Circle, merges with the planets dominant e commerce site, it creates the richest and most dangerous—and oddly enough, most beloved—monopoly ever known: The Every. For all those who believe that there is nothing to care about, as we loose privacy and autonomy, since we are not doing anything wrong, this is the antidote. But even critics can, little by little, be drawn in. Tech philosopher and critic professor Evan Selinger says "Fiction like Egger's can show the transformation of a critic into a believer." The book is reviewed as hilarity and horror in equal measure. Dave Eggers walks the talk, and because of this the book is only available to purchase at independent book stores.

5G Roll-out has halted flights to the US

You may have heard that the installation of 5G antenna near airports has caused several airline companies to halt flights into the US. It is an incredibly serious problem. Pilots use an altimeter to know how high they are above sea level. Some of

these meters that measure altitude are radio-based, which means that—they bounce a radio beam down from the plane and the time it takes to reflect back again gives them their height. There are several kinds of altimeters (pressure sensitive, laser, infra-red), but radio altimeters are the quickest and most precise and are widely used in high-speed long-haul aeroplanes such as Boeing 777s, as well as commercial transport aeroplanes, business and general aviation aeroplanes, and helicopters. Altimeters readings are also fed into automatic systems for computer-assisted landings and tell pilots about wind shear and turbulence. 787s, 777s, and 737s all use them.

Too close for comfort. The US Verizon and AT&T networks are using a segment of the radio spectrum at 3.7 GHz and 3.98 GHz in the 'C band', for their 5G technology. The 4.2-4.4 GHz section in the same band is used by aeroplane and helicopter altitude meters.

New Zealand's auction of this part of the spectrum is due in November this year. Spark intends to use this 'C band' part of the spectrum for further developments of 5G.

In October 2020, the non-profit Radio Technical Commission for Aeronautics (RTCA) issued a report stating that 5G in C band causes harmful interference on some of the radio altimeters that aircraft use to land during conditions with poor visibility. Despite this the US Federal Communications Commission auction went ahead. In his article "Will 5G mean airplanes falling out of the sky?" former FCC Chairman Tom Wheeler claims 5G is built to tight specifications and it isn't his industrys fault if altimeters aren't. So, like the problems with mobile phones interfering with hearing aids, pacemakers and electric wheel chairs, Wheeler states that this is a evolving environment and the avionics industry will have to adjust. He goes on to write "...Yet clear heads are needed to separate what is only hypothetical possibility based on worst-case assumptions from what is highly probable based on real-world use". <https://www.brookings.edu/blog/techtank/2021/11/22/will-5g-mean-airplanes-falling-from-the-sky/>

However 10 million 5G subscribers being able to have faster data on their new phones versus people possibly being killed has meant

a delayed roll-out of 5G in a two-mile buffer zone near dozens of airports. Implementation was delayed until January, and activation of the upper section of the airwaves spectrum, closer to radio altimeters, is delayed until 2023.

Right now the Federal Aviation Authority (FAA) is assessing which aircraft are safe to fly near the new 5G

frequencies. The FAA have found some altimeters filter out the 5G frequencies and some don't, so those planes will need new altimeters. The US Verizon and AT&T networks use a segment of the radio spectrum known as

the C band (the 3.7GHz and 3.98GHz millimetre waves of this band) which is a band that is close to the one used by radio altimeters 4.2–4.4 GHz. This band used to be reserved for military use and aeroplane use, and the carriers paid 4.6 billion dollars when the spectrum was auctioned.

<https://twitter.com/AjitPai/status/1298376651735207942/photo/1>

So far, 5G C band frequencies (beyond 3.8 GHz) are only allocated for the United States and Japan.

New Zealand's 5G roll-out is currently on the 250MHz spectrum. You can check the current 5G coverage on this interactive website app. <https://www.nperf.com/en/map/5g>

The New Zealand C band spectrum auction for 3.5GHz is scheduled for November of this year. Spark is expecting that the primary spectrum band for mass deployment of 5G, will be the C band.

Spark plans to provide mass deployment of 5G coverage to approximately 90% of the popula-

tion by the end of 2023.

Additional references: <https://www.rcwireless.com/2021/12/01/5g/2degrees-tests-5g-new-zealand-ahead-q1-2022-commercial-launch#:~:text=In%20April%20of%202021%2C%20degrees,by%20the%20end%20of%202023.https://www.cnet.com/tech/mobile/verizon-and-dish-score-big-in-midband-5g-wireless-auction/> <https://www. Kearney.com/communications-media-technology/article/?/a/air-travel-safety-versus-faster-5g-the-c-band-controversy.>

5G

The 2021 European Parliamentary report on 5G found that there are no adequate health and safety studies.

It concluded that EMF in the 5G frequencies is probably carcinogenic (in particular relating to acoustic neuromas and gliomas), that there is a clear effect on male fertility and possibly female fertility, and may have possible adverse effects on the development of embryos, fetuses and newborns.

[https://www.europarl.europa.eu/RegData/etudes/STUD/2021/690012/EPRS_STU\(2021\)690012_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/690012/EPRS_STU(2021)690012_EN.pdf)

Pre-eminent researcher Yuri G. Grigoriev warns us in his 5G book "Frequencies used in telecommunications—an integrated radiobiological assessment", that since millimetre waves are absorbed in body tissue at a depth of up-to-2 mm, the skin and the mucus membranes, such as sclera (the whites of the eyes), are particularly at risk. Since the 1950's the eye has been deemed to be a potentially radio-sensitive organ (shown by cataracts in radar workers).

Grigoriev warns that the current update in International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines, with an ability to average exposures, does not take into account the potential harm from a spike in exposure. This is concerning because the 5G beams' very nature means that they can constructively interfere or add-up, as well as subtract from, each other, creating a volatile mix of signals.

The European Parliamentary Report 2021 on 5G found there were NO ADEQUATE HEALTH AND SAFETY STUDIES either on humans or on experimental animals.

Regarding the skin, Gregoriev explains that the skin is not independent of the rest of the body. It interfaces with the immune system and it connects to the central nervous system and the brain. He refers to experimental work on frogs by Chernyakov et al. (1989), which demonstrate that the skin researchers were able to cause changes in the heart rate of frogs by irradiating distant skin areas with millimeter waves. Temuryants et al. (2012) proposed four stages of classical events that lead to the body's response to the stimulus of Millimeter waves on the skin:

1. Primary reception;
2. Signal transmission to the central nervous system (CNS);
3. Analysis of the received CNS information; and
4. Proportional systemic response

Studies showed on exposure to millimeter waves show an increase in cortisol levels and testosterone in the blood, with a corresponding adaptation of thyroid hormones (Adaskevich, 1995; Lisenkova et al., 1995).

Also, as Grigoriev states, it is difficult to predict what effect these waves will have on the course of skin diseases such as eczema and skin cancers.

What is more, clothing only absorbs no more than about a maximum of 10% of the radiation, so the protection from clothing is negligible.

Before he died Yuri Gregoriev was extremely keen to get his book translated into English, and the Oceania Radiofrequency Scientific Advisory Association Inc (ORSAA) was tasked to do this. The team spent six months with him working on the translation. You can read it here:

<https://www.orsaa.org/orsaa-research-papers---part-2.html>

Victor Leach and Steve Weller from ORSAA recently presented on EMF safety, including translated sections of Gregoriev's book in a 20 minute presentation, at the Australasian Radiation

Protection Society (ARPS) conference in Canberra.

In contrast to prior forms of wireless networks, 5G technology will require many more, and closer, sources of radiation; more power to use it, and the impossibility of escape from satellite networks. Plus more sources of EMF will be created.

EMF s above-natural frequencies are generally harmful to living organisms. The current level of human-made EMF already sits at a quintillion (10^{18}) times the earth's natural background levels.

As Robert C Kane put it, back in 2001 "Never in human history has there been such a practice as we now encounter with the marketing and distributing of products hostile to the human biological system by an industry with foreknowledge of those effects." Kane died of a brain tumor, a product of his exposure to the earliest cell phones, from his employment at Motorola.

Thank You

Organic New Zealand magazine has published articles about EMF in the past and received very negative feedback for doing so. We therefore thank you Organic New Zealand for publishing our advertisements, with eyes wide open. Our Society's advertisement (shown below) will appear in further issues. We hope that it will spark curiosity and lead to people asking for more information.

Wristband RF detector

Safe Living Technologies have a new Micro RF detector. The Safe and Sound Micro RF Detector is wristband wearable technology which vibrates when exposed to RF pollution. safelivingtechnologies.com

**Protect
yourself
and the
ecosystem**

Research shows that wireless technology of all types has effects on biological systems—cells, soil biota, insects, the water retention of the soil, leaves, trees, birds, other species including us.

www.safeictnz.org



Safe Information and Communications
Technology for New Zealand

Inform yourself on using tech wisely and safely, visit: www.safeictnz.org