

While the Association does not necessarily agree or disagree with everything on this page, we do respect the right of everyone to have their say.

Your Say

EMF'S – Friend or Foe?

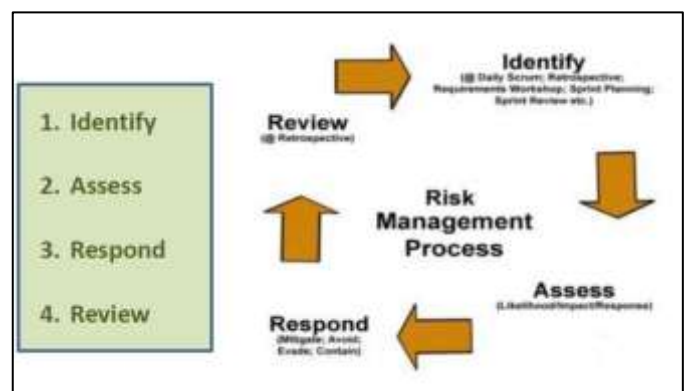
Les Ferris – 21 Instruments 67 – 76, sent us this, your thoughts??

A few years back I was getting what seemed like a constant buzzing in my ears. The source was obvious, but I couldn't make it go away or avoid.

Simple fault finding led me to my wife who was constantly telling me of the dangers of EMF's and we need to do something. Now being the mere male that I am I know to never dismiss what the wife is saying as the "I told you so" goes on forever if she happens to be right.

To stop the buzzing in my ears I made it an official project. Now we all know what that means. It did temporarily stop the buzzing. This project loop suited my purpose as I could go on forever making excuses.

While this was going on, I started to think differently about what was happening to me. The constant dry tickle in the throat causing a mild cough was the start, then it was the headaches, tiredness and sleep quality. My forehead – you know where the hair used to be, felt like it was sunburnt when I was in the shower, I also had prickly skin on my forehead.



Being in project mode I started some basic research and I found these symptoms were common with EMF exposure. I dismissed this because they could also be explained by a doctor using some sort of medical jargon.

Then the game changer symptom started. I was sitting at my desk and I could feel a portion of my brain getting warm. Difficult to explain this symptom but it was real and prompted me to act. To describe my home office. I have a Telstra WiFi Modem which has 4 WiFi channels, a WiFi



router and a WiFi printer, a cordless phone base station plus 2 Bluetooth channels. This totals 9 sources of EMF radiation. No wonder I was cooking inside out. I should point out my research to this point also highlighted some people are more sensitive to EMF's than others. I now categorise myself as being more sensitive.

My first attempt to find a solution was to try and shield the Telstra modem. A simple shield did stop the brain cooking so I knew I was on the right track and needed to implement more permanent solutions. First was to turn off the 4 WiFi channels on the Telstra WiFi modem. I did this by going into the modem setup software but then I find a well concealed switch on the modem to turn off all WiFi. Next I move the cordless phone base station out of the office and only switch on the printer when needed. I still use the WiFi router for the phones but it is a low power single channel el-cheapo from Target. I put a physical shield between myself and the modem. The cough, headaches and tiredness were gone. When you have these symptoms and they all go away after these basic steps were implemented indicates to me my original symptoms were a result of EMF exposure.

I was now hooked on understanding how this all works.

EMF's are organised on a spectrum, and classified according to their wavelength and frequency. On the low side of the EMF spectrum, you find long waves with short frequencies like the EMF'S created by a standard 50 Hz electrical outlet. On the opposite end, you find very short waves with very high frequencies like x-rays. These contain enough energy to destroy your DNA or pretty much instantly damage your body. Don't know where radar fits into this spectrum but I do know you never stood anywhere near the front of an F111 with its radar operating.

For the purpose of my exercise I concentrated on RF (radio frequency), Magnetic Fields, Electric

The infographic is titled "Radio Frequency (RF)" and includes a Wi-Fi symbol. It lists categories: AM/FM, TV, Wireless, and Satellite. A central box says "Radiofrequency (RF) and Microwaves". Below that, it says "Common Sources of RF Radiation⁶".

Cordless Phones	Smart Meters	Smart Phone (3G/4G/LTE)	Wifi	Microwave Oven	5G (next generation of networks) ⁷	Bluetooth Devices
900 MHz	900 MHz to 2.4 GHz	710 MHz to 2.7 GHz	2.4 or 5.8 GHz	2.45 GHz	3.85 to 71 GHz	2.4 to 2.485 GHz

Copied from Nick Pineault's Guide to EMF's

Fields and Dirty Electricity. I initially focussed on learning more about RF in my house. Mobile phones, cordless phones, Mobile phone towers, anything WiFi including baby monitors and any kind of Bluetooth all emit EMF radiation. We are surrounded by RF. Satellites focussing on Australia, Mobile phone towers, TV and radio transmitters and that is external to our homes. Go to your local shopping centre and check (using your phone) how many WiFi channels are in use. What I got out of this research is you cannot do much about what is external but within your home, and this is where it is most

important, you can make simple changes. Giving your body time to recover especially during sleep periods is most important. Minimise your exposure by:

- Reduce use.
 1. Minimal WiFi channels
 2. Less time on the Mobile phone and try not to have it close to the body
 3. Turn of WiFi at night



4. Buy low radiation cordless phones. (Siemens DECT Low Radiation phone only transmits when in use)
 - Hard wire your house with Ethernet cable
 - And most important – distance is your friend

To try and make sense of all this I researched and purchased a meter to measure EMF's. I purchased the Cornet Tri Meter for around \$360. This meter measures RF, electrical and magnetic fields so it pretty much covers my needs. It has 3 displays for measurement, Digital, histogram and visual led indicator. (See [HERE](#))



RF Power density measurement is defined as power per unit area and is expressed in units of micro watts per square metre ($\mu\text{W}/\text{m}^2$). The government agency (ARPANSA) has a 136 page document to read but with a warning it is not designed to be a simple and easy read. (See [HERE](#))

I should point out this meter is limited in its frequency range. It does not read the high Ghz range. To do this requires an investment of around \$20,000. Cyril Bourke made such an investment. Cyril was trained as an electronics and industrial engineer with IBM UK, British Army Royal Signals and served in the Special Air Service. As an EMF environmental consultant, Cyril provides professional testing, safety planning and mitigation technology. Nick Pineault a recognised researcher on EMF's met with Cyril recently. Here is a brief description of their findings.

I'm not easily surprised, but I was left speechless when top engineer Cyril Bourke showed me the numbers on a professional-level EMF meter that's worth well over \$20K. In the middle of the Australian countryside, Cyril measured a whopping 2,000 microwatts/m2. That's an incredibly high ambient amount of electrosmog, in an area where there are no cell phone towers or wifi routers nearby.

But what shocked me the most is that the bulk of all this radiation is above 10 GHz, which means that my Cornet, Trifield, RD10, Acousticom 2 or any other "cheap" meter I currently possess wouldn't read any of it. In fact, all of these meters would display a number near "0" in Cyril's area -- giving me a false sense of security.

The Baubiologie Maes / Institut für Baubiologie (www.hbelc.org) a German organisation has published their Building Biology Evaluation Guidelines for sleeping areas. They are incorporated in the visual display of the Cornet meter.

The Building Biology Evaluation Guidelines are based on the precautionary principle. They are specifically designed for sleeping areas associated with long-term risks and a most sensitive window of opportunity for regeneration. They are based on the experience and knowledge of the building biology community and focus on achievability. In this chart it recommends avoiding EMF's above 1 microwatt/m2. A hell of a contrast to the 2,000 microwatts/m2 above. So why am I not affected by this external constant RF radiation. I can only guess distance is my friend.



Totally confused now – I understand but I will say if I was to accept the government standards as normal and acceptable I would be in a lot of trouble. This is an ongoing argument and there won't be an outcome on acceptable safe levels for many years. In the U.S. FCC acceptable levels is 1000 micro watts per sq. metre over 30 minutes.

Meter readings in my office were very high according to my meter. With the WiFi and phones switched off at night I have achieved the ideal measurement (green LED) for the most important daily recovery period – sleeping. My overall recovery period was short (about 2 weeks) and this was encouraging but I will say I think my body is now more sensitive than before. To explain:

Wireless (Radio Frequency) Radiation Intensity Guidelines

Wireless Radiation Intensity Ratings (Radio-Frequency Electromagnetic Fields) Background/24-hr Averaged Readings (Inside Home/Office)		
Ideal	0.001mW/m ² or less Target for sleeping areas (see point 1 below)	Typical Home & Office Levels
Low	0.001mW/m ² - 0.01mW/m ² Low exposure levels	
Elevated	0.01mW/m ² - 0.17mW/m ² Some people may show symptoms of ill health	
High	0.17mW/m ² - 1mW/m ² (see point 2 below) Increased symptoms of ill health	Seek to Reduce Levels
Avoid	Above 1mW/m ² Avoid for extended periods	

1) Bau-Biologie (www.hbelc.org) exposure standard for sleeping areas inc. detector meter accuracy factor
2) Seletun Scientific Declaration (authored by leading EMF scientists) exposure guideline is 0.17mW/m²

For some strange reason I decided to replace my single band low power WiFi router with a dual band WiFi router. All those nasty symptoms started to return. My exposure was for about 3 hours each morning in my office. Switch back to the old WiFi router and all is OK. The doctor called the red sensitive spots appearing on my face as mosquito bites and prescribed some sort of ointment. Funny how they never went away until I changed WiFi routers.

During my learning and testing period I did a walk around a mobile phone tower and took some measurements. Measurements were taken from the base out to about 400 metres down the nearest street with houses. At about 300 – 400 metres the reading was at its highest.

Now to put things into perspective. The readings 300 metres from the tower were about the same as being next (<1m) to my old cordless phone. So why are we concerned about mobile phone towers you are all thinking. Well the answer is simple. I replaced my cordless phone to a zero RF emission phone when not in use, I switch off the WiFi router at night, I put distance from any other source wherever possible. What I cannot do is switch off the phone tower, it operates 24/7 and the exposure is constant for those close by 24/7.



Now is a good time to clarify an earlier statement – distance is your friend. When I was taking readings the further from the source the less the RF radiation. For the cordless phone the RF radiation readings reduces within a short distance like 2-3 metres, but it is still there so if you put distance between yourself and the source you are minimising your exposure. My blood boils when I see ads on TV where they position a WiFi router on the bedside table. This is absolute madness and unnecessary.



As mentioned earlier there are other sources of EMF's in the household. These being electrical and magnetic fields. Sources of electrical EMF's include household wiring, Power strips, ungrounded electronics, cords and chargers, lamps and lighting. Sources for magnetic fields include Charges for electronics, high voltage power lines, electrical switchboards and faulty wiring.

When researching I found most of the horror stories were from the U.S. where their electrical distribution for many of the early houses was just active out and earth return (no neutral and unbalanced). I couldn't find any sources which I could describe as being unhealthy in my house. Unlike the U.S. our meter boxes are metal and earthed. This shields the point of highest concentration.

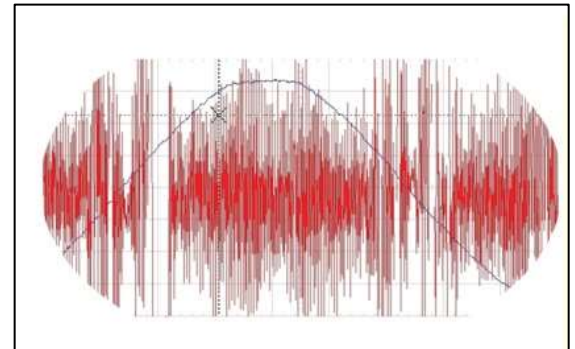
Electrical (Power Frequency) Radiation Intensity Guidelines		
Electrical Radiation Intensity Ratings (Power-Frequency Magnetic Fields) Background/24-hr Averaged Readings (Inside Home/Office)		
Ideal	0.5mG or less Target for sleeping areas (see point 1 below)	Typical Home & Office Levels
Low	0.5-1mG Average living and office levels	
Elevated	1-2mG (see point 2 below) May affect those that are sensitive	Seek to Reduce Levels
High	2-5mG (see point 3 below) Increased risks of serious health problems	
Avoid	Above 5mG Avoid for extended periods	

1) Bau-Biologie (www.hbelc.org) exposure standard for sleeping areas inc. detector meter accuracy factor
 2) Seletun Scientific Declaration (authored by leading EMF scientists) exposure guideline for habitable spaces is 1mG
 3) Increased risk of childhood leukaemia based on globally recognised studies

At this time my neighbour was also researching following an over the fence conversation. Her sleeping position was on the other side of their meter box and this worried her. I tested with my meter and it was all OK. She still made her husband sleep on that side of the bed.

For future planning I would avoid having any electrical wiring in the wall behind my bed.

Dirty Electricity – this was a new one for me. Normally, the electricity inside the wires running through the house – oscillates at 50Hz. The problem is that modern electrical equipment like switch mode power supplies have been specifically designed to operate by interrupting the current flow many times per second. This has the effect of corrupting the electricity creating “dirty electricity”. When the electricity in your house is “dirty”, it constantly irradiates these spikes of intermediate frequency electric fields. A building biologist would explain this is not ideal for the household environment.



Main sources which create dirty electricity include compact fluorescent bulbs, devices with switch mode power supplies (charges), Solar panel inverters and dimmer switches. Faulty wiring also causes dirty electricity. My research led me to the Stetzerizer micro surge meter. ([HERE](#)). This is a proprietary device with a proprietary reference scale (\$AU250). This meter is designed to separate the power line frequency to detect and respond to low level high frequency voltages caused by transients and harmonics on power lines. The level of these voltages is measured in GS (Graham-Stetzer) units and will vary with electrical equipment and loads. According to the experts the ideal measurement using this meter is 50. My house ranged from 250 to several thousand depending on the circuit. With the desire to have the sleeping area as best as is achievable I purchased a Stetzerizer filter (\$AU100) for the bedroom circuit. This reduced the reading to below 50. This means a happy wife so was worth it even if I don't understand the technology. The effectiveness of the filter [HERE](#)



Beside the regular "I told you so" from you know who, I found this an interesting process. The question will always remain for others as to whether EMF's are harmful to our health or not. I raised this many times with my wife her response was always the same – remember tobacco. The question for me is how long before we get to the stage where it is recognised as a health hazard. Because of the reliance of this technology I fear this will always be squashed. This means your only option is to make your home and where you sleep as safe as possible.

Mobile phones are also a fixed part of our lives today. I used my RF meter to try and understand a little more. My iPhone 5 emitted very little RF in idle mode possibly because I have Bluetooth turned off and in airplane mode all the time. I did confirm the antenna is at the back and regularly pings the closest tower. This is a spike about every 5 seconds. This spike did not register when I put the meter next to the screen. I do carry a phone with me in my pocket but the screen is always facing my body. I was very surprised by the RF coming out of a more modern phone with everything on. The very obvious red LED's lighting up on my meter when placed next to the phone did surprise me. Once again – distance is your friend and is the only option available. Leaving the phone on and next to where you sleep is not good and should be avoided.



- Safe homes:
- Minimise WiFi
- Turn off every RF transmitter at night – phones, modems etc.
- Minimise dirty electricity

(In fairness, [THIS](#) article should also be read – tb.)

Ross Robert Burrows

Neil Burrows got in touch, he says: Hi, I'm trying to find out more about Ross Burrows' (my deceased father) service with RAAF 3 Telecomm Unit. He was a Telegraphist with the unit from about 1948-1954 and was involved with the Totem tests, I think, as a radio operator on a Lincoln and he also served in Labuan in 1951/2. (Ross is on the right in the photo at right) There is a brief history on the Unit's Association website, which seems defunct? I think at the time some of the Unit's operations,



such as in Labuan (then British North Borneo), may have been 'classified' because dad was reluctant to talk about it, apart from saying he spent long shifts taking down Morse code, mostly transmitted by the Indonesian and Malay? military and I know his letters home were 'censored'.



He was an amateur photographer and used the dark room at the 'base' to develop and print his pics. a pic given to dad after the Totem 1 and 2 program at Emu Field, SA. Scribbled in the bottom right hand corner (difficult to see) is "In appreciation of your efforts" signed by a high ranking officer. He didn't speak much about what he did - so I'm keen to learn more now that more than 60 years has passed since he served with 3TU.



Further to my last email - he was in Labuan 1951/2. The pic at right (poor quality) was taken I believe at Ballarat.

Dr Neil Burrows AFSM



ATR2A

Steve Beveridge (VK2LW) wrote, he says: "Hi - I'm a ham about to start a major rebuild of an ATR2A. I believe it was used by the RAAF in 1941/42, mainly for mobile use (with a genemotor), though a 240V supply was available. It is a low powered unit, about 25W, CW and AM..I have been able to get the manual for the ATR2B, but would prefer to get the 2A manual if possible.



Any assistance you can provide would be most appreciated."



Frank Hodges.

Frank was a TelsTech and served with 2 Sqn in Vietnam from Mar 1970 to Mar 1971. He says:

“I email you Australians as you swore allegiance to this country as I did and served and still serve the Australian people without fear or favour. I am a 73 year old vet, past businessman and employer, father and grandfather and someone who has worked 16 hour days building this country and I am pissed. My grandfather and father who spilled blood for this country would be pissed also if they were alive today. How have we let it get to this? Where do I start?

First and foremost. The majority of our politicians federal, state and local lack integrity, loyalty to Australia, qualifications for the job with none of life’s experiences nor experience running a business or organisation, or competence and yet we expect them to run the largest business in Australia. Parliament is a shambles with time spent trying to make cheap political points rather than plan for our future and run the country. If a company’s board was run like that it would fail dismally and be wound up but the taxpayer’s money keeps rolling in and the party continues. Mark Webber got it right when interviewed at the F1 in Melbourne when he said he no longer lives here as Australia is a Nanny State. Look at the quality of our state premiers. They totally just don’t get it business wise and





our very freedoms are at stake. I never thought so before, but we definitely need a Bill of Rights now. We are over-represented by lawyers and political hacks.

How can it be that our politicians do not even have to pass security checks as do our military, police and doctors and nurses etc? How can it be that politicians do not have to pass selection criteria as fit for purpose nor have a job description and key performance indicators (KPI) as do all other private and public sector employees? How can it be that the Australian taxpayer continues to fund the ABC which is anti Australia, anti-government, sympathetic to terrorists and continually abuse President Trump and the USA who are our strongest ally, yet openly support foreign powers prejudicial to Australia's interest?

Covid 19 : We blew it! Australians aren't in this all together! The private sector has taken all the pain and the public sector and our politicians will come through unscathed financially. Although I am aware that some have made salary sacrifices, I do believe you know where I'm coming from. There is serious pain out there in the private sector. If politicians and the public service had taken a haircut in solidarity, the private sector would not feel so disenfranchised and betrayed. The governments arbitrarily shut the private sector down while the public sector was largely left untouched.

How can the federal government let the States close the State borders when it is not warranted medically and further damage the economy when it is questionable as regards the constitution and yet leave it to Pauline Hansen to challenge?



I have lived through the polio epidemic, TB, SARS, Swine etc and we panicked then. Even the modelled loss of life will be insignificant compared to the loss of life due financial losses and security in the years ahead. Politics and the media called the tune and it's still happening. Governments are responsible for having counter disaster plans in place for world wars, natural disasters or pandemics but they refused to listen to advice to do so and place into storage obsolete equipment for defence and medical such as ventilators. They destroyed thousands of them against my advice and others. The states and their various boards run on politics not the interests of the tax payer. The federal government have a health department of thousands but don't run a single hospital.....hello!

I built and ran a Biomedical engineering Company responsible for all biomed in the 42 hospitals in North Australia for 30 years without a single death or injury on our watch. We designed, manufactured, supplied and taught clinical staff how to use ventilators and other critical life support equipment. Are you aware that some 18,000 patients die P.A. by what is termed "misadventure" in Australia's health care system and we listen as though it is gospel from medical experts when they can't even clean up their own industry. We should take on board medical advice as to how best treat the disease but then the logistics decision should be left to our elected decision makers with input from business but not un-elected bureaucrats. I was the first whistle blower against Qld health advising the minister of corruption. In retaliation I was investigated by The CJC for corruption myself but in the washup, the minister Gordon Nuttle went to jail and not Me. It was character building though. It was a lesson on how the state can turn on its citizens and they're doing it again and I thought us fellas fought for democracy. And look what the establishment is doing to Ben Roberts Smith VC and our military in general. We have neutered our military. Soldiers will revolt and down arms shortly. Many have already spoken with their feet.



China (and other foreign nations) : A lot know more than me on this although I did spend a month in China self-funded on a Qld Gov led trade mission in 1997 and dined with the Polit Bureau (communist party) each night and got a bit of an insight where they were heading, meanwhile our politicians spent their time grovelling and apologising for Pauline Hanson and her other 10 elected members of the Qld Gov. The Chinese foreign minister said to me [very late one evening] through our interpreter "you Australians have an Achilles heel, in Pauline Hanson. Your politicians are very sensitive about her and we do not give a flying F... I then said 'how about Tiananmen Square and Wong said 'let's not mention that" I then ripped it up our politicians at breakfast for apologising to the Chinese for duly elected members of our government. And look at The Victorian and WA governments stance on China. China have infiltrated our universities and the Labor party and bought too many strategic assets in this country. Sam Dastyari should be in jail for treason.



My guess would be Mike Pompeo asked Marise Payne to call for the international inquiry as to the origin of C9 and America would have our back. More to see here in the coming weeks I'm sure. China feel they are now big enough and strong enough and are fast getting out of control. They accomplished this in 20 years. They hack our systems, steal our technologies, infiltrate and intimidate and intend to be the dominant power whatever it takes and we kid ourselves if we don't believe we are in their sights as a major prize. Large mass of land with huge natural resources virtually uninhabited by world standards and undefended by world standards. Maybe we should invite Israel to build a satellite country in Alice Springs!

People, we have to rebuild our military again very quickly. We need a major deterrent. I fear we will have a major conflict with China in the next 3 years. We could sustain a small war for maybe two weeks I believe. The submarine fiasco, fuel, bombs and bullets etc. You know what I mean. We need manufacturing back pronto as we do food production water and base load power. However the main stumbling block to this will be politics and bureaucrat approvals, (example : try and get any Australian manufactured medical equipment through TGA) the red green tape and don't I know it, I've been there. An example of what we can do and are capable of is the Wagner family built an international airport in Toowoomba in under 2 years from start to finish for around \$A900M as I remember. Successive governments are still talking Badgerys Creek some 40 years later at \$A8B and not a sod turned.

Anyway, my thoughts as a constituent and patriotic Australian. I don't profess to know it all but have seen and experienced a little in my 73 years and right now we need to do better. Many Australians I speak to feel as I do but our politicians and their unelected advisers just don't get it!

Does anyone know which page of the Bible explains how to turn water into wine.
Asking for a friend.



Living the US.

Bill Heussler says:- “Right now I’m waiting for summer, keeping a few bees and occasionally working on my son’s farm. I’ve been here off and on since 1982. My wife’s from here, but we never did agree where we’d live long term. Tried QLD, Minnesota, UK, Minnesota, Sydney, Minnesota, Germany, Minnesota, Brazil, Sydney, Minnesota. Two grandchildren here now, so I think our peregrinations are done.

I do enjoy the Radschool magazine. Good to see the photos proving that I’m not the only grey beard in the world. I was 43 RMT and 3 CRU and occasionally see John Mackie, John Russell and others in your pages”.

Yesterday my husband thought he saw a cockroach in the kitchen. He sprayed everything down and cleaned thoroughly. Today I'm putting the cockroach in the bathroom.



Ballarat in 1956.

Joy Comben writes, she says: "I had no idea there was a Radschool Association. I was on a Teleprinter Operator's course at Ballarat July 1956, don't remember the course number and was posted to Frognall about Xmas 1956 (our course was held back pending arrival of other members from rookies), then it was back to Ballarat in 1959 for a couple of months prior to discharge for marriage. My single name was Lorraine (Shane) Harrison, I would like to see if anyone else from that time is still about."

If you were, let us know and we'll put you in touch with Joy. tb