SHOALHAVEN PC USERS GROUP
NEWS   September 2020

'NORMAL' Club Meetings will resume
Friday, September 18 at 7.30pm

Special Interest Group Sunday 20 at 1.00pm

President's Piece.

Our recent committee meeting was the first personal gathering since Covid19 safety procedures were introduced.

A decision was made resume our monthly meeting on Friday 18 this month at the Bomaderry Bowling Club.

The club has been operating at reduced staff levels for several months but have generously agreed to make a room available for our use.

Committee meeting minutes will outline discussion of this and other items relating to our group   during 2020-21.

Friday meeting will be in the Mongolia room off the bistro if the room is not booked out to another group.

SUNSIG is planned for the usual room

Check with reception as you observe entry protocol for both meetings and note food/ beverage rules.

David, Russell and Gail are updating procedures including our Website.

Our rebirth as a place to gather and focus on our preferred media platforms and interests is about to begin.

Stay safe.
Richard.

What word in the English Language.
is always spelt incorrectly?

We'll meet again

We now know where

and we do know when.

(*Apologies to Vera Lynn*)

The loss of freedom to travel, associate with friends, and family or, to even leave our place of dwelling in some cases, is a stark reminder of a time when some of us were young and our parents were uplifted by these words and music.

We are not even free to listen without the ads, but it's a small price to pay. Remember this?

 https://www.youtube.com/watch?v=8Nzy1cfnKh4

Circumstances prevent several members engaging in our Digital Meetings but their interest and support is evident . We look forward to gathering as our freedom is gradually restored.

Russell's professional reporting of recent general and committee meetings enables us to stay in touch and David's   creative talents   are about to be demonstrated with our new website.

The Digital age has helped us in many ways but a friend suggested we pause and consider that not all are included. What do we know about the 'Digital Divide'? What is it?

 Hope to see you soon.

Frank

Jack shared 5G historical and technical data in our August issue .
Several readers asked for more on the electromagnetic spectrum.

Bluetooth communication

Devices connected in a Bluetooth network communicate with each other using ultra-high frequency (UHF) radio waves. These are electromagnetic waves with frequencies around 2.4 gigahertz (2.4 billion waves per second). A Bluetooth device works by using radio waves instead of wires or cables to connect with your phone or computer. So when Bluetooth-enabled products, such as a cell phone and headphones, are in close proximity to each other, they connect, or pair. Connecting the devices is called 'pairing'.

The Bluetooth standard was originally conceived by Dr. Jaap Haartsen at Ericsson back in 1994. At the time, it was designed to replace RS-232 telecommunication cables, a much older standard conceived in 1960, by using short range UHF radio waves between 2.4 and 2.485 GHz. Although this occupies very similar frequencies to Wi-Fi, Bluetooth has always been designed as a much shorter range and lower power alternative. Although Bluetooth was invented back in 1994, the first Bluetooth phone didn't reach the consumer until 2001.

The Ericsson website states that the technology is named after Harald Bluetooth, a 10th-century Scandinavian king. Harald "Blåtand" Gormsson, a Viking king who ruled Denmark and Norway from the year 958 until 985. ... He was known for his unification of previously warring tribes from Denmark (including now Swedish Scania). The Bluetooth wireless specification design was named after the king in 1997, based on an analogy that the technology would unite devices the way Harald Bluetooth united the tribes of Denmark into a single kingdom.

There is a statue of him outside Ericsson HQ!

Frequency
Bluetooth only does its work on a 2.4GHz frequency, whereas many WiFI networks these days will run on both 2.4GHz and 5GHz frequencies. You'll find many of today's newest wireless devices taking advantage of WiFi's 5GHz frequency, which isn't nearly as congested as the 2.4GHz frequency and helps to reduce any potential interference between WiFi and Bluetooth networks.

Range
The range on a Bluetooth network gets cut off at about 30 meters, whereas the latest versions of WiFi can reach out beyond 100 meters.

Bluetooth and WiFi are different standards for wireless communication.
Bluetooth technology is useful when transferring information between two or more devices that are near each other when speed is not an issue, such as telephones, printers, modems and headsets. It is best suited to low-bandwidth applications like transferring sound data with telephones (i.e. with a Bluetooth headset) or byte data with hand-held computers (transferring files) or keyboard and mice.

Wi-Fi is better suited for operating full-scale networks because it enables a faster connection, better range from the base station, and better wireless security than Bluetooth.

Bluetooth is used more frequently now than infrared communication as infrared relies on line-of-sight to communicate with another device, whereas Bluetooth relies on radio waves.

...Bluetooth continued from previous page

Both WiFi and Bluetooth share their space in the Ultra high frequency (UHF) band between 300 MHz and 3GHz, along with other gadgets like baby monitors, cell phones, and more. You'll also find WiFi advancing into the Super high frequency (SHF) band between 3GHz and 30GHz in its most recent evolution.

| Ultra high frequency	UHF	300 MHz – 3 GHz	1 m – 10 cm
Super high frequency	SHF	3–30 GHz	10–1 cm

Bluetooth uses something called frequency-hopping spread spectrum (FHSS).
This is a radio technology technique of transmitting radio signals by hopping or changing a carrier among many frequency channels, using a sequence which is known to both transmitter and receiver. Although Bluetooth has a narrow frequency range, from 2402 to 2480 MHz, the frequency hops across 79 different bands in that range, around 1600 times a second.

Bluetooth devices make use of the ISM radio bands.
The ISM radio bands are portions of the radio spectrum reserved internationally for industrial, scientific and medical (ISM) purposes other than telecommunications.
Cordless phones, Bluetooth devices, near field communication (NFC) devices, garage door openers and wireless computer networks (WiFi) may all use the ISM frequencies
The ISM bands were first established at the International Telecommunications Conference of the ITU in Atlantic City, 1947. The American delegation specifically proposed several bands, including the now commonplace 2.4 GHz band, to accommodate the process of microwave heating.

Looking at the image below, we see that in the electromagnetic spectrum, microwave ovens use the same frequency as our Bluetooth devices, namely 2.4 GHz

The Electromagnetic Spectrum
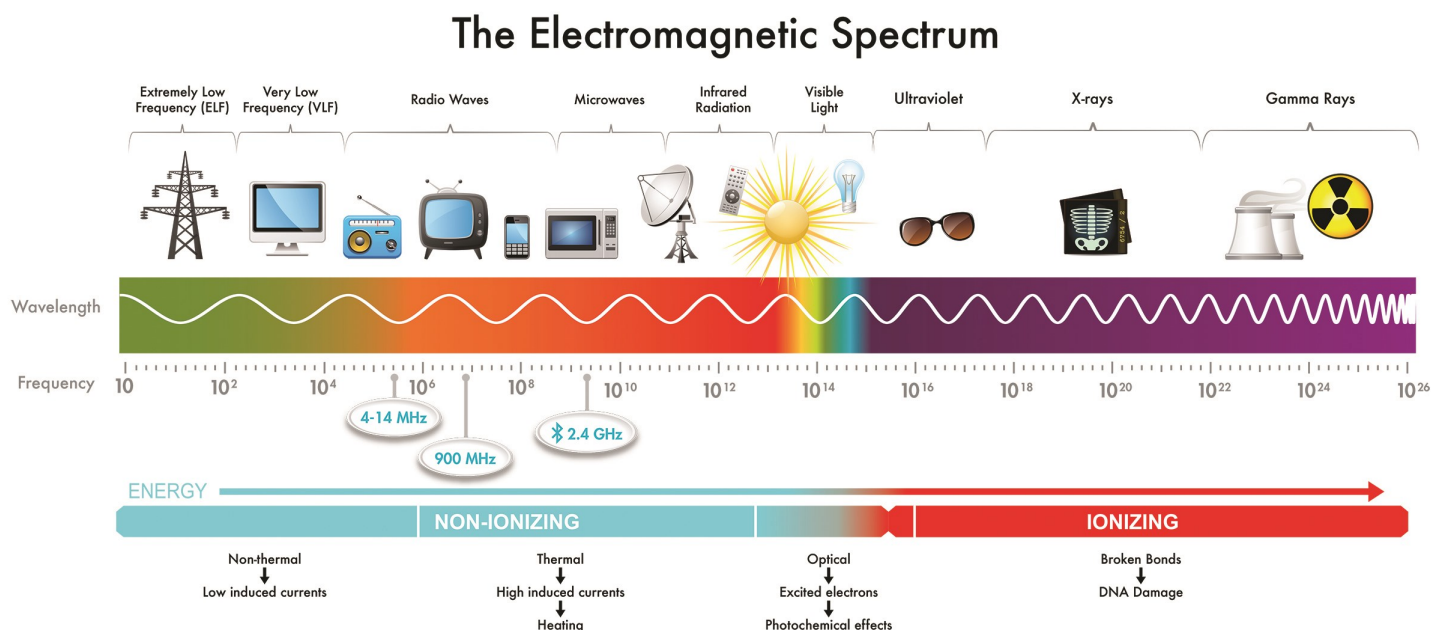
Thanks Jack

Impact of the digital divide in the age of COVID-19

Selected extracts. If interested in the notion of a digital divide go to:

In early 2020, talks of preparation for coronavirus disease 2019 (COVID-19) were furiously circulating around the healthcare system nationwide, and having seen what was occurring in China, and later in Italy, we feared what was to come. Like many others, our hospital system began looking closely at the recommendations for decreasing transmission of COVID-19, chief among them social distancing.

By early March, the need for an immediate adaptation of our clinical care delivery system was clear. Within a week, clinics had transitioned from in-person visits to telehealth involving telephone or video. Screening processes for COVID-19 were quickly made available on a free online platform through which at-risk individuals were directed to drive-through centers for in-person testing.

The problem was that many of our patients could not access the online system.

In our roles as directors of free clinics, we have become intimately involved with the complexity inherent to the care of underserved populations, including how seemingly innovative programs can sometimes not meet their intended goals.

The CARES clinic has a main site and a rural outreach site that treat uninsured adult patients and a pediatric immunization clinic for uninsured and underinsured children.

The 529 Meeting Street clinic treats patients at a drop-in resource center serving individuals experiencing housing instability. Levels of literacy, extent of chronic diseases, and complexity of social circumstances for patient populations at both clinics are highly variable.

As our main hospital system was transitioning to telehealth-based care, we were rapidly trying to put measures into place at our free clinics that would ensure that our patients did not lose their access to health care. It quickly became apparent that the newly built telehealth systems created additional access hurdles for our free clinic patients, and we would soon learn that pockets existed within the larger population that were impacted by these barriers.

As is often the case, those whose access was impeded were the most vulnerable to poor health outcomes related to COVID-19.

Medical teams dealing with the Spanish Flu

In Sydney, Australia, nurses leave Blackfriars Depot in Chippendale during the flu epidemic in April of 1919.

The task was the same, resources and skills were relatively primitive.
The digital world was yet to emerge.



Photo courtesy NSW State Archives.

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People arrive at a quarantine camp in Wallangarra, Australia, during the influenza epidemic of 1919
Photo courtesy State Library of Queensland

There are lessons to be learned from all that has and is threatening the life we have taken for granted.

Three key words from the American Journal quoted
digital divide, underserved populations, underserved care

We have a shared responsibility to equip future generations to manage what happens next.
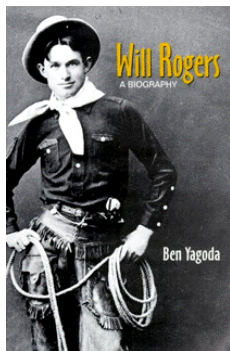
Will Rogers, who died in a 1935 plane crash, was one of the most popular political sages the USA has known.

Some of his humorous but sound advice included:

1. Never slap a man who's chewing tobacco.

2. Never kick a cow pat on a hot day.

3. There are two theories to arguing with a woman.   Neither works.

4. Never miss a good chance to shut up.

5. Always drink upstream from the herd.

6. If you find yourself in a hole, stop digging.

7. The quickest way to double your money is to fold   it and put it back into your pocket.

8. There are three kinds of men: The ones that learn by reading. The few who learn by observation.
    The rest of them have to pee on the electric fence   and find out for themselves.

9. Good judgment comes from experience, and a lot of that comes from bad judgment.

10. If you're riding' ahead of the herd, take a look back every now and then to make sure it's still there.

11. Lettin' the cat outta the bag is a whole lot   easier'n puttin' it back.

12. After eating an entire bull, a mountain lion felt   so good he started roaring. He kept it up until a hunter came along and shot him.
The moral: When you're full of bull, keep your mouth shut.

ABOUT GROWING OLDER...

~Eventually you will reach a point when you stop lying about your age and start bragging about it.

~ The older we get, the fewer things seem worth waiting in line for.

~ Some people try to turn back their odometers. Not me; I want people to know why I look this way. I've travelled a long way, and some of the roads weren't paved.

~ When you are dissatisfied and would like to go back to youth, think of Algebra.

~ You know you are getting old when everything either dries up or leaks.

~ I don't know how I got over the hill without getting to the top.

~ One of the many things no one tells you about aging is that it's such a nice change from being young.

~ One must wait until evening to see how splendid the day has been.

~ Being young is beautiful, but being old is comfortable.

~ Long ago, when men cursed and beat the ground with sticks, it was called witchcraft.
Today it's called golf.

Thanks Faye.

That's about it folks.

Frank