

Disclaimer

the following text version of newswest was computer generated using the voice to text capability's of Microsoft word newswest dose not warrant that the computer generated text will be totally free from errors.



Audio file

20230820.newswest.mp3.mp3

Transcript

00:00:06 Speaker 1

This is VK6ARN, news West. We are a community organisation and we've been serving at the best amateur radio news in Australia since 1931.

00:00:23 Speaker 1

Hi there and welcome to News W for the.

00:00:25 Speaker 1

20th of August.

00:00:27 Speaker 1

2023 now to Ono VK 6 flab with another episode of Foundations of Amateur Radio.

00:00:36 Speaker 2

Foundations of amateur radio there's nothing quite as satisfying as the click of a well designed piece of equipment.

00:00:44 Speaker 2

It's something that tickles the brain and done well. It makes the hair stand up on the back of your neck.

00:00:49 Speaker 2

If time was on my side and I wasn't going somewhere else with this, I'd now regale you with research on the phenomenon.

00:00:56 Speaker 2

I'd explore the community of people building mechanical keyboards and those who restore equipment to their former glory. Instead, I'm encouraging you to dig whilst I talk about the second and third harmonics.

00:01:07 Speaker 2

This is about amateur radio after.

00:01:10 Speaker 2

Over the years, there's been a steady stream of commentary around the quality of hand held radios. Some

suggest that the cheaper the radio, the worse it is.

00:01:19 Speaker 2

Given that these kinds of radios are often the very first purchase for an aspiring amateur, it would be useful to have a go at exploring this when a radio is designed.

00:01:28 Speaker 2

The aim is for it to transmit exactly where it's intended to and only there any transmission. That's not where you plan is considered a spurious emission.

00:01:38 Speaker 2

By carefully designing a circuit by adding shielding by filtering and other techniques, these spurious emissions can be reduced or eliminated.

00:01:46 Speaker 2

But this costs money, either in the design stage or in the cost of materials

and manufacturing. It's logical to think that the cheaper the radio, the worse it is. But is it really true that a cheap radio has more spurious?

00:02:00 Speaker 2

Than an expensive one.

00:02:02 Speaker 2

To give you an example of a spurious emission, consider an FM transmitter tuned to the two metre amateur band, Let's say 146.5 megahertz.

00:02:13 Speaker 2

If you key the radio in, all is well, the radio will only transmit at that frequency, but that's not always the case.

00:02:21 Speaker 2

It turns out that if you were to listen on 293 megahertz, you might discover that your radio is also transmitting there.

00:02:30 Speaker 2

If you're familiar with the amateur radio band plan, you'll know that 293 megahertz is.

00:02:35 Speaker 2

Not allocated as an amateur frequency, so we're not allowed to transmit there. In fact, in Australia that frequency is reserved for the Australian Department of Defence and there's an additional exclusion for the Emerson Radio Astronomy Observatory.

00:02:51 Speaker 2

293 megahertz isn't a random frequency. It's twice 146.5 megahertz, and it's called the second harmonic.

00:03:02 Speaker 2

There's more if you multiply the base frequency by three, you end up at 439.5 megahertz the third harmonic.

00:03:11 Speaker 2

In Australia, that frequency falls into the amateur allocation as a second use, its primary use is again the Department of Defence.

00:03:19 Speaker 2

These two transmissions are examples of spurious emissions. To be clear, the transmitter is tuned to 146.5 megahertz, and these unintended extra signals come out of the radio at the same time. This is.

00:03:34 Speaker 2

Bad for several reasons, legal and otherwise. The first obvious one is that you're transmitting out of band, which as an amateur you already have no excuse for, since getting your licence requires you to understand that this is strictly not allow.

00:03:50 Speaker 2

The International Telecommunications Union, or ITU, has specific requirements for what's permitted in the way of

spurious emissions from an amateur station.

00:04:00 Speaker 2

Spurious emissions also mean that there is energy being wasted instead of the signal only coming out at the intended frequency.

00:04:07 Speaker 2

Some of it is appearing elsewhere, making the five watts you paid for less effective than you hope for.

00:04:13 Speaker 2

So what's this got to do with the click? I started with. Well, thanks to Randall Victor K6WR.

00:04:20 Speaker 2

I have on loan a heavy box with a cathode ray tube or green CRT screen. Lots of buttons and knobs, and the ability to measure such spurious emissions. It's marked HP 8920.

00:04:33 Speaker 2

A RF communications test set.

00:04:36 Speaker 2

Using this equipment is very satisfying.

**You switch it on and a fan starts
wearing. After a moment you hear a
beep, then the screen announces itself,
almost as if there's a PC in there
somewhere.**

00:04:48 Speaker 2

**Turns out that there is and the beep is
the power on self test or post beep
originally released in 1992.**

00:04:56 Speaker 2

**This magic box can replace 22
instruments for transceiver testing.**

00:05:01 Speaker 2

**I started downloading user manuals. Ohh
boy, there's lots to learn bringing back
lots of memories. It even has a**

**programming language instrument basic
to control it.**

00:05:11 Speaker 2

**Where have you been all my life? Turns
out that in 1992, this piece of kit costs as
much as my car. Anything for the hobby,
right?**

00:05:20 Speaker 2

**At the next Ham Fest, I'll be using it to
measure as many handhelds as I can get
my hands on and taking notes.**

00:05:27 Speaker 2

**I have no idea how many I'll be able to
test, but I'm looking forward to putting
some numbers against the repeated
claims of quality and price.**

00:05:34 Speaker 2

**I can tell you that a couple of weeks ago I
got together with Randall and Glynn
Victor K6PAW and spent an enjoyable
afternoon testing several radios.**

00:05:44 Speaker 2

And there are some surprising results already. Perhaps this is something you might attempt at your next community event. Gather data rather than opinions.

I'm mono.

00:05:54 Speaker 2

Victor K6FLAB.

00:05:58 Speaker 3

Well, today is a bit of a funny day for hearing the news broadcast because some of you'll be hearing it over your cornflakes.

00:06:04 Speaker 3

Some on the way to Hempfest and some at home, who aren't at Hempfest, and the rest of you listening in the evening.

00:06:10 Speaker 3

I'm Bob V K6 pop and I mentioned Ham Fest because that's where I am this week this morning mainly promoting Perth Tech and the Perth Tech raffle, but I will have a few bits and pieces for sale from a deceased estate.

00:06:23 Speaker 3

Our Perth Tech is shaping up to be a programme full of useful and interesting talks on the Saturday, but Saturday isn't all of Perth tick.

00:06:31 Speaker 3

Let me enthuse you. Firstly I need to be clear, Perth Tech has several components and each stands alone so you can choose to attend any or all of the various parts of Perth.

00:06:42 Speaker 3

For some people, Perth Tech will commence on Friday afternoon with the arrival of those taking up the camping offer.

00:06:48 Speaker 3

Yes, camping we have on site parking for caravans, campers and swags. There's a fee for this option and on Friday evening there'll be some sort of loosely organised activity, even if it's just a show and tell.

00:07:02 Speaker 3

And you should bring something for a communal BBQ.

00:07:05 Speaker 3

Saturday's the big day. The wall to wall presentations of a technical nature of interest to radio amateurs. We're still firming up the programme, but I can tell you it's looking good.

00:07:16 Speaker 3

We'll draw the Perth Tech main raffle on Saturday afternoon. There will also be a day raffle for a bit of fun.

00:07:23 Speaker 3

On Saturday evening, straight after the presentations, there's the sundowner. The bar will be open and you can buy your own drinks.

00:07:32 Speaker 3

On Sunday, we invite people to run workshops on a topic of their choice. They should be practical skills based workshops.

00:07:39 Speaker 3

Would you like to offer a workshop your choice of venue? Your choice of topic will just include it in Perth Tech and promote it for you. So what next for you, the punter, first of all?

00:07:51 Speaker 3

Mark the date in your diary. Set it aside so you won't miss out Friday the 27th of Sunday the 29th of October, with the main show on Saturday.

00:08:01 Speaker 3

Buy raffle tickets, the Perth Tech raffle is what finances Perth Tech the success of the raffle determines how much we can put into Perth Tech.

00:08:10 Speaker 3

Remember, Perth Tech is free to attend. We only charge for the catering register for Perth Tech registrations, while open soon will advertise that here on the news on our website Facebook.

00:08:21 Speaker 3

Everything else, all you've gotta do is look and find.

00:08:24 Speaker 3

Consider putting your hand up to help both before and on the day. Again, we'll have details at our vk6.net website, so so we invite you to visit the vk6.net website regularly for updates, and there's lots of other good information there too. That's useful to Western Australian amateurs, the VK 6.

00:08:47 Speaker 4

Since 1931, News West has provided amateur radio news for WA and Beyond. This is VK 6 ARN.

00:08:58 Speaker 5

Hi, I'm Steve Vicki's success, Jay, with this week's episode of did you know?

00:09:04 Speaker 5

I thought this week we might have a quick look at ham and mainstream communication suppliers in WA, not just shops where you can buy stuff for your.

00:09:11 Speaker 5

Weekend projects.

00:09:12 Speaker 5

But also to highlight some high class manufacturers based here in WA who

support our hobbies in ways that not everyone appreciates.

00:09:21 Speaker 5

So who do we have in WA? Anyone who's been in the hobby for 30 plus years will remember the tat Mtron brand.

00:09:28 Speaker 5

It was synonymous with Triband yagis amplifiers and great quality tuners and other things you needed in your shack.

00:09:35 Speaker 5

While many of these products are no longer made by Mtron, Ted Entron moved to WA from Victoria about 15 years ago, and after a brief stint in Perth, moved to the coastal fishing town of Dongara, where mark, the owner of Ted Entron, still makes great quality antennas and tenant components. Balloons of all types and power ratings and components such as coax, connectors and lightning.

00:09:57 Speaker 5

While most antenna manufacturers in Australia only sell assembled antennas, 10 antron will sell separately every component to build your own antennas.

00:10:05 Speaker 5

Or you can buy a complete antenna in kit form that's proven very popular here in WA as well as around the country.

00:10:13 Speaker 5

Mark appears in more hamfests around the country than any other ham supplier, bar none mark along with the rest of the suppliers, to our hobby and Wawa donates heavily to most, if not all, clubs here with vouchers and products.

00:10:27 Speaker 5

Another manufacturer in Perth gets less recognition than they deserve is Bush comp.

00:10:31 Speaker 5

Bush comma as well as the ham specific brand horizon make great products for both the ham and commercial HF sector.

00:10:38 Speaker 5

They make a great selection of wire antennas well suited for the lower bands that also work well in the.

00:10:42 Speaker 5

High bands and there are a lot of newer hams in Perth whose first antenna has come from Bush Combs factory and Bayswater.

00:10:50 Speaker 5

On top of that though, they also make balloons mobile HF antennas, and also open to making the odd special as well.

00:10:56 Speaker 5

The face of Buscombe Graham is often also often seen at hammer events in WA, and also sells many of his products to

DX engineering in the US, one of the world's largest ham sales organisations.

00:11:08 Speaker 5

There's some great boutique products such as magnetic loops and steerable dipoles for 40 metres. Mine and he also donated.

00:11:16 Speaker 5

30 and 40 metre antenna to Ham College, which has been very much appreciated.

00:11:22 Speaker 5

Who remembers the Turland brand beginning? Who knows when I'm only 57, so I don't remember them starting.

00:11:28 Speaker 5

They made the iconic outbacker and hate ham outbacker of mobile tap whips that were they go to antenna before auto antenna tuners became missing.

00:11:38 Speaker 5

This was also a WA brand that enjoyed global exposure and was based here in Perth. Terry, the owner, still makes the odd shipment of product for his most loyal customers, including major international ham brand.

00:11:50 Speaker 5

In the regional areas of WA we also have some great businesses supporting the hobby. In Albany there's the leading leading edge who's a registered ICOM ham dealer and act of Ham, John VK 6 KJ. And in Gelten there's also another emerging icon dealership run by Greg VK 6 FG.

00:12:08 Speaker 5

In Perth, many of the mainstream communications businesses have also supported our hobby in less public ways.

00:12:15 Speaker 5

A friend of mine who's busily building.

00:12:18 Speaker 5

Interest in Ham radio in the scouting movement tells me that Rad link repaired his long out of warranty repeated recently, and I keep hearing of Steve at digital radio systems and Canning Vale donating all sorts of stuff to various ham groups, including a couple of solar batteries to wag recently.

00:12:37 Speaker 5

In the past, persons had a very special place in the communications industry, one of two of the largest commercial HF manufacturers in the world. Barrett is based in Perth and now owned by the largest radio manufacturer in the world.

00:12:51 Speaker 5

Who hasn't seen a KL or KX repeater in a repeater sites across the country? Many a ham and Perth has worked for the manufacturer dating back to the late 80s and has a soft spot for.

00:13:00 Speaker 5

Those radios.

00:13:02 Speaker 5

A similar radio but much updated is still manufactured here in Perth by Spectra Engineering, the owner of which is often seen at Hamfests and Perth.

00:13:10 Speaker 5

I was presenting a design package to Los Angeles County for a data radio system about 10 years ago. When Motorola presented their paging system using the MX 800 from Spectra Engineering, I was representing a Sydney based company at the time, but I couldn't help speaking up that it was a great Perth made product.

00:13:28 Speaker 5

Other hams and Perth are not only working in iconic Perth comms companies in niche areas, but one Perth

based ham in particular has been central and bringing software defined radios into the mainstream ham sector film VK 6A pH and has lectured on the subject all around the world.

00:13:45 Speaker 5

And other emerging business in our sector is netweb.

00:13:48 Speaker 5

Test while are predominantly an IT business, they are. They are the technical muscle behind the US travel commercial HF network, of which many hams are also a member of network.

00:13:59 Speaker 5

Net W also repairs ham rigs and I think the only business doing that here.

00:14:04 Speaker 5

They do a very professional job of that.

00:14:05 Speaker 5

By the way.

00:14:07 Speaker 5

Some of you probably know that I also run a ham business. I don't want this to be a blatant self serving plug, so I won't harp on long.

00:14:13 Speaker 5

The business is called X radio systems and has a retail presence in Midland.

00:14:18 Speaker 5

Where the Australian distributor for Flex Radio and the largest ham, ICOM dealer and WA Google. Us and you'll?

00:14:24 Speaker 5

Find out more.

00:14:26 Speaker 5

For a city of 1.5 million, we are well and truly over represented in the communications industry in this country, in my opinion.

00:14:34 Speaker 5

Other iconic iconic brands in the past that have manufactured radios and accessories include Wyc electronics, allcom Perth Communications, who made a small HF mobile radio in the 70s and 80s right here in Perth.

00:14:48 Speaker 5

So support your local businesses in Perth who support your hobby. Look at who keeps turning up to all of the ham events, or at least donating to them.

00:14:57 Speaker 5

The hobby would be poorer for their departure, supporting them assists to make sure that they don't depart and they're all great value anyway, so you aren't paying a premium to support them.

00:15:07 Speaker 5

Well, thanks for listening again. This has been Steve McKay 6S J with another episode of did you know?

00:15:12 Speaker 5

If you'd like a text copy of this or other articles.

00:15:14 Speaker 5

They'll be posted to my.blog.page@dxradiosystems.com dot AU about two weeks after it's gone to air.

00:15:21 Speaker 3

How did you go in the Remembrance Day contest? Before I go any further, I want to remind you to make sure that your log is in.

00:15:28 Speaker 3

Logs are submitted online to vklogchecker.com. Did you get that VK log checker? No spaces dot?

00:15:36 Speaker 3

Comm. If you've already submitted your log, it might pay to check that it's there safe and sound. Now for the contest itself, let me tell you my tale.

00:15:44 Speaker 3

It's not one of woe, even though I could have done a lot better, although I prefer doing contests portable from a Bush campsite.

00:15:51 Speaker 3

This time I did it from my son's residence in Augusta. He's not a ham, so I had to take everything that I.

00:15:57 Speaker 3

Needed. The plan was to string up a long wire, a half wave end fed, sort of a thing. I didn't organise myself to take a 9 to 1 anano so that was strike one.

00:16:07 Speaker 3

I had the materials along with some stuff I bought at the local hardware to make one, but didn't have the right tools to make it successfully.

00:16:15 Speaker 3

I got halfway there and it was getting late and I wanted to be ready to go on Saturday.

00:16:20 Speaker 3

So change of plan after pacing up and down the yard and measuring 2 lengths of cable that I had, I settled on building a trusty dog.

00:16:28 Speaker 3

But I hadn't packed any ladder lines, so I had to settle for a four to one balloon at the feed point and a coax feed to the tuner.

00:16:36 Speaker 3

The double it was set up in an inverted V configuration with the feed point only 6

metres above the ground, supported by a squid bowl. The ends of the two legs of the wire each 30 metres.

00:16:48 Speaker 3

Long wires tied off to the fence just under 2 metres above ground. This antenna probably shouldn't have worked that well, but as I've noted previously, antennas don't read the.

00:16:58 Speaker 3

Book The Antenna analyzer showed that none of the bands I'd be using showed any extraordinarily high or low impedances, and the auto tuner had no difficulty matching them.

00:17:09 Speaker 3

The bonus was, however, the performance of the antenna. I was pleasantly surprised that I worked all States and a few Kiwis on that antenna on 40.

00:17:18 Speaker 3

20 and 80 metres and on Sunday morning I listened to the news broadcast from Phil on 160 metres, crystal clear at S 9 at 350 kilometres.

00:17:30 Speaker 3

Not bad with everything working so well. How come I had a mediocre result? It was mostly because I was feeling unwell and I had a few breaks.

00:17:38 Speaker 3

And on Sunday morning, with all good intentions of resuming at my normal wake up time of 4:00 AM, I slept in till 6:30.

00:17:46 Speaker 3

I worked the station for a couple of hours, but it seemed that most people had packed up and gone home and it didn't take long to start stumbling across the same people who we couldn't work

again. The important things to take home from this are that any antenna is better than no antenna.

00:18:00 Speaker 3

And that you never never know if you never have a go. I'm Bob V K6, POP.

00:18:05 Speaker 6

This is newest from VK 6 ARN produced by amateurs for amateurs purely about the hobby of amateur communication and experimentation.

00:18:16 Speaker 7

Good morning, listeners. This is Roy, VK 6, XV with this week's helpline for the 20th of August 2023.

00:18:23 Speaker 7

So I have the following. I have a hotel T33 linear amplifier by hallicrafters. It's

\$350.00. There's a Daiwa controller and rotator.

00:18:34 Speaker 7

For \$350.00 also there's a vacuum tube voltmeter for \$50. If those ideas, please contact Barry VK 6ADI on mobile 04289597710428959771.

00:18:54 Speaker 7

Or email to Bravo dot Juliet dot BURNS at bigpond.com and Steven Truscott still has a lot of radio accessories cables connect.

00:19:07 Speaker 7

All still available from him, Steven Truscott in Palmyra, his phone number is 0401804.

00:19:15 Speaker 7

166.

00:19:16 Speaker 7

**I'll say again 0401804166 or the email is
STEPHE.**

00:19:26 Speaker 7

**NT at westnet.com dot AU and VK 6K
RCKRC. Did I say that? Yes, and he may
still have an iMac SK 510 jumbo socket,
an iMac ceramic glass chimney.**

00:19:44 Speaker 7

**And iMac anode cooler and iMac four
1000 tube all items \$450. Contact Nora
on 63635350.**

00:19:57 Speaker 7

Telephone 63635350 or 0438352661.

00:20:04 Speaker 7

04/3.

00:20:05 Speaker 7

38352661.

00:20:10 Speaker 7

**And that's me for this week. Thank you.
Have a good day at the Ham Fest and
Northern Corridors radio Group Ham
Fest on today.**

00:20:17 Speaker 7

See you there. Cheers VK 66373.

00:20:21 Speaker 1

**Hi there. I'm Clinton, VK 6, CIC and I'd
like to thank our newest team of
volunteers and broadcasters each week
and those regularly submitting content
each week.**

00:20:30 Speaker 1

**I'd also like to thank our readers and you
for listening. Please stand by now for
callbacks after the ident or if nobody is
taking callbacks, please fill out.**

00:20:38 Speaker 1

The form on the vk6.net website so we know how many people are listening or reading news W each week.