

QTC



Messages and news from RASA
The Radio Amateur Society of Australia

December 2021

Morse Code – getting started

The politics of Amateur Radio

CQ Contest, this is VK3D

Protecting our bands?

Antennapalooza 2021

RD Contest Results

...and more...

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Publication Information

Contact: info@vkradioamateurs.org

<http://vkradioamateurs.org>

QTC is a publication of The Radio Amateur Society of Australia Inc.
ABN: 64 687 227 446 (RASA)

QTC is published every quarter. If you would like to receive your copy you can either visit our web site to download or send us an email and we'll put you on our distribution list.

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Email us at info@vkradioamateurs.org

Cover picture credit: Paul VK3TGX

QTC from the Editorial Team

“But I don’t want to talk about politics” and more...

Many would prefer not to talk about the politics of Amateur Radio (AR).

Unfortunately, like broader societal issues, the outcomes of politics matter. Like it or not, AR politics impacts all of us.

In this edition of QTC we’ll be talking politics and focussing on a few very important topics that are critical to the ongoing vibrancy and vitality of our hobby.

And for clarity, we are not “WIA bashing”. But, where the WIA is misleading the VK community with out-dated or incorrect statements, false news or poor representation, we are calling it out.

Many people would rather not talk about these issues, but they are important... so raise the issues at your local club... and send us your feedback.

Firstly, we’ll be looking into **strategic planning** and some possible options for the future of AR in Australia. We’ve just completed a Strategic Review of AR in Australia. There’s a copy in this edition of QTC.

Some, including the WIA, believe that **the future growth of our hobby is best achieved via STEM and the education system**. We’ve done some on the ground research and those on the frontline are telling a different story.

Next we’re investigating the oft-used phrase **“Protecting our bands”** and **“Help safeguard our bands - become an intruder watcher today.”**... how successful are these programs in the 21st century? And what, exactly, are the WIA and RASA doing

to protect our bands?

The AR Syllabus is about 30 years behind the times. We still expect prospective amateurs to learn valve technology, analogue TV, and resistor colour codes. Where are the requirements to have a basic understanding of modern digital communications, configuring computers, digital filtering techniques, Software Defined Radio, spectrum analysers and 21st century RFI?

Our hobby desperately needs to recognise that the world has moved on. We need to rethink our image and be more relevant and attractive to a broader range of newcomers.

Elsewhere in this issue, we have some great news about radio activities from the field. Results from the 2021 Remembrance Day Contest and a story from a first-time contester... Nathan VK3DNS/VK3D. Isn’t it great that a young person just starting out was able to get a new 2x1 contest callsign? It’s all about being inclusive and encouraging newcomers.

In other news, **Antennapalooza was held in VK3 on 4-5 December**. This event, now in its seventh year, was attended by about 50 people with RASA and four WIA affiliated clubs participating and sponsoring the event.

The WIA refused the host’s invitation. Why?

Despite this it was very positive to see Scott Williams VK3KJ, the WIA President, in attendance. Thanks Scott.

Politics do matter – if you have some feedback, please send us an email. If you’re a WIA Director or supporter and wish to challenge anything we’ve written we would welcome some open, mature debate.

At present, that’s hard to do when the WIA Board censors any material from RASA.... on Facebook groups controlled by WIA supporters, in AR Magazine and on AR

QTC December 2021

News - on the basis that such material is considered "inconvenient".

What are they afraid of?

Send us your feedback and questions. We'll publish in the next edition along with answers and explanations. We just ask that your correspondence be respectful and that you identify yourself.

So, the next time you say "*I don't want to talk about politics*" or avoid the nastiness of bullying, inaccurate news or bickering between the factions, remember the words of 2016 Australian of the Year David Morrison: "*The standard you walk past is the standard you accept*".

Start talking about politics and challenge the bullies and the status quo, for the good of the hobby. We speak with a lot of WIA members. Many of them are as frustrated as we are with the WIA Board's belligerent stance. It needs to change.

Finally, it's been a long 24 months with Covid-19 and the immeasurable impact this virus has had on so many lives.

We sincerely hope this Christmas and New Year season we will see a more peaceful, tolerant, and kind community and we'll find a way to live with (or at least live around) the inevitable new strains that will head our way.

Stay safe and healthy, and very best wishes for a successful 2022.

73, QTC Editorial Team

QTC Editorial Team
info@vkradioamateurs.org



The advertisement is a vertical rectangular panel with a blue header and footer. The header features a stylized atom logo with a globe in the center and the text "RF SOLUTIONS" in white. Below this, it says "Authorised distributor of" followed by the "EPE" logo in green and the text "EXPERT LINEAR AMPLIFIERS". An image of a black linear amplifier is shown. Below that is the "RigExpert" logo in blue and the slogan "Every job needs the right tool". An image of a blue handheld antenna analyzer is shown. At the bottom of the white section is the "Ultra Beam" logo in yellow and black, with "DYNAMIC ANTENNA SYSTEMS" below it. The footer is a solid blue bar containing the contact information: "INFO@RFSOLUTIONS.COM.AU", "T: 07 3264 6443", and "WWW.RFSOLUTIONS.COM.AU".

RASA Membership



We believe we should be measured by our achievements. And we can only succeed with your support, so thanks to all our members and supporters for helping us make this happen.

And thanks to everyone who has sent us emails with feedback.

We listen to our members and respond to emails and questions about our initiatives, policies and priorities.

Please support us by joining or renewing your membership today. It's just \$10 and its simple – [follow this link](#).

We have heard from a number of members who are not receiving our bulletins or emails.

Some of you are overdue with your annual membership fees.

Please drop us an email if you're not sure if you're membership is up-to-date and we'll get back to you.

Also, please check your spam or junk folders; some ISPs and mail clients are very aggressive with how they categorise incoming emails.

QRM Kill Kits

Ferrite kits to suppress unwanted noise in your shack. Click the image to head to our online shop.



Build a simple DF Loop to help you localise and pinpoint the source of the noise. Click on the image to head to our online shop.



The ethos and ethics of Amateur Radio

Like many hobbies, Amateur Radio has traditions, jargon and practices that are not always apparent to the newcomer. Your licence entitles you to get on the air and transmit, but, as a newcomer, you need to familiarise yourself with the way the hobby works operationally before transmitting.

Getting to know how amateur radio stations operate will provide a smooth and stress-free entry to this great hobby of ours.

Have a listen around the bands before you first transmit (if you haven't already) – monitor typical amateur QSOs (conversations). This will give you a feel for on air practices.

Once you start transmitting, steer well clear of controversial topics including:

- religion;
- politics;
- business (you can talk about your profession/trade, but you cannot advertise your services or those of anyone else);
- derogatory remarks/observations/jokes directed at any group (gender, ethnic, religious, political, sexual orientation, etc.); and
- off-colour humour.

Above all, apply common sense and good taste.

Do NOT use CB jargon – you will annoy your fellow amateurs and will be ostracised at best or roundly criticised on air at worst... Amateur and CB radio are different hobbies, with different operating practices. This hobby has many participants with as many differing views.

Remember, you are also prohibited from transmitting any form of entertainment.

The American Radio Relay League has, for many years, published a guide for new amateurs, known as The Amateurs Code:

The Radio Amateur is:

CONSIDERATE...He/she never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...He/She offers loyalty, encouragement and support to other amateurs.

PROGRESSIVE...He/She keeps his/her station up to date. It is well-built and efficient. His/Her operating practice is above reproach.

FRIENDLY...He/She operates slowly and patiently when requested; offers friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED.... Radio is a hobby, never interfering with duties owed to family, job, school or community.

(adapted from the original Amateur's Code, written by Paul M. Segal, W9EEA, in 1928)

RASA supports and promotes this ethos and ethics code.

ACMA and Regulations

The ACMA continue their review of Licencing Conditions and are preparing a series of consultations in the first half of 2022.

It's probably fair to say that we'll be moved to a Class Licence; sometime in 2022.

Unlike the WIA, we don't see a dramatic impact for amateur radio. A Class Licence will have little impact on day-to-day activities for the majority of radio amateurs. The changes proposed by ACMA are summarised as follows:

- there will be no annual licence fee;
- interference protection and management will remain unchanged;
- EMC compliance will remain unchanged;
- callsign issue will be conducted by a 3rd party under contract to ACMA;
- ACMA will need to provide some form of online register of amateur callsigns, either directly or via a 3rd party;
- ACMA will need to provide a suitable certificate or wording on a certificate issued by a 3rd party for amateurs travelling overseas seeking reciprocal licencing rights; and
- ACMA will need to produce an operating procedures document.

RASA continues to ensure focus on the following areas:

Protection from Interference

RASA is the only national body that is actively working here in Australia to protect our bands from interference. We lobby ACMA to ensure our interference protection rights under the Radiocommunications Act are retained, and we promote the benefits of [QRM Guru](#) to ACMA.

We know that ACMA is more responsive to complaints that are supported with evidence and a properly documented submission. QRM Guru provides the framework for such submissions.

On the ground we continue to assist amateurs to hunt down and resolve local QRM issues. We present to clubs regularly and constantly seek feedback from fellow amateurs.

Repeater and Beacon Assignments

Existing legacy arrangements are out-dated, inefficient, painfully slow and exhibit a single point of failure. There are no performance management regimes, and we are aware of numerous complaints from clubs and individuals.

RASA has proposed a more equitable, transparent, and responsive service as a part of the recent consultation process with ACMA.

50-54MHz for Standard Class Licences

RASA continues to lobby the ACMA to have this anomaly addressed.

1kW for Advanced Amateurs

RASA continues to lobby for 1kW.

2x1 Contest Callsigns

RASA won this new privilege, which was implemented in October 2021

RASA wins privacy concession from ACMA

RASA has engaged the ACMA and the Privacy Commissioner several times over the last few years regarding the requirement to publish an amateur's station address (i.e. QTH) in their public access database ([Register of Radiocommunication Licences – RRL](#)).

The previous responses from ACMA have not been favourable, citing the requirements of the Radcom Act. ACMA used this as an argument to the Privacy Commissioner who actually found that the publication of such data was indeed a breach of privacy.

However, the Privacy Commissioner granted ACMA an exemption as the Radcom Act was due to be changed at some date in the future.

Well, there's light at the end of the tunnel as the ACMA have listened to our arguments and Item 37 of the Regulator Performance Bill that is with the Department of Prime Minister and Cabinet will allow the ACMA to grant an exemption from publication of personal data at its discretion.

There is no longer a requirement for ACMA to record your station address. They do, however, still require a postal address for correspondence.

And, herein lies the problem for those who wish to protect their privacy. To this point, anecdotal advice has been that amateurs should use a Post Office Box if they wish to keep their actual address from being displayed in the ACMA public access database.

This is impractical for many and unfair on others. The arbitrary requirement to spend \$130+ on a Post Office Box is unreasonable, and in some locations, Post Office boxes are simply not available.

ACMA do however point out that the foreshadowed change to a class licence may alter the issue but that many amateurs "like" a public record of call signs.

RASA supports a callsign database, provided that amateurs are able to have their address details suppressed if they so choose. The security and privacy of personal information should not be put at risk by outdated legislation such as the Radcom Act.

Like the recent 2x1 contest callsign win, it is possible to achieve positive outcomes with a realistic and professional approach to representation.



**BEING HEARD
IS IMPORTANT**

The Radio Amateur Society of Australia inc.
vkradioamateurs.org

CQ Contest, this is VK3D

By Nathan VK3DNS/VK3D

My first portable contest – from my backyard!

My dad inspired me to get my ham radio licence. I obtained my foundation license in January 2021 and immediately I realised that I was not happy with the restrictions that applied to my foundation licence. I decided that I wanted at least 100 watts and access to 6m, so I started studying for my advanced licence.

The Radio & Electronics School (www.res.net.au) course helped me the most. It involved reading a couple of chapters of the book "Radio Theory Handbook – Beginner to Advanced" at a time and completing a test about what you just learnt. This is then marked by your facilitator. My facilitator's name was Malcolm (VK5MJ).

Then there are revision tasks and practice exams to make sure you know everything you need to. It ended up taking me about eight months to complete the course with Year 8 at school taking priority.

I had to do my exam on zoom because of lockdown. I passed my Advanced exam first go! It's not as hard as you might think if you put in the effort to revise.

Apart from using full RF power on Dad's radios, I hadn't really used my new privileges until this contest. We had tried to talk on 20m but, living in suburbia with an average home HF antenna setup, some nearby cheap solar panels caused a fair amount of noise. We decided to abort those attempts. Most of my radio activity has been portable while on SOTA summits.

I picked the best time to get my licence as the new 2x1 callsigns were released soon

after. I was successful in obtaining VK3D. In preparation for the Spring VHF/UHF Field Day, Dad and I erected a portable 6m pole with a 2m/70cm Yagi and a 23cm Yagi in the backyard. As a lot of you would know, Yagis are directional antennas.



With no rotator for this installation, I had to turn the Yagis by hand to talk to people, which was challenging because it's a bit hard to know which way to turn it. Fortunately, the excellent logging software we use (VKCL4) tells you where to point your antenna if you tell it the caller's Maidenhead locator. This really helped.



The radio that I used for the contest has a spectrum scope which let me see whether anyone was talking on the frequencies nearby. Because of this, I could see that there was a conversation, say, 20KHz above the frequency I was using so I knew to go there to try to get a contact.



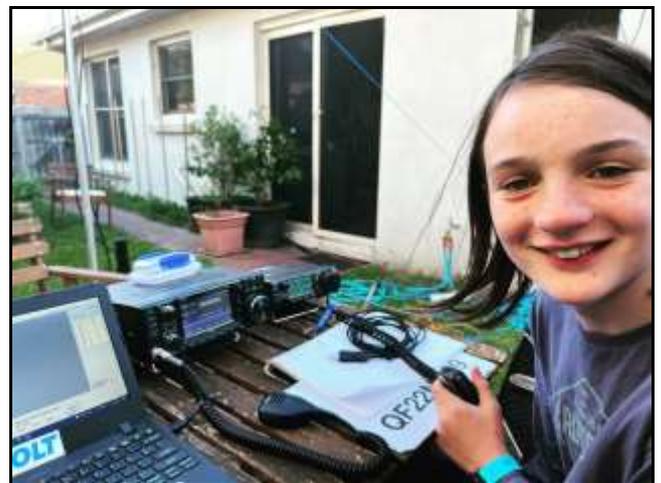
The best part of the contest, I would say, was using 23cm. It's a high enough frequency that there was very little background noise, so it was easier to copy weaker signals or just signals in general. At one point in the contest, someone asked me whether I had access to 6m. We hadn't connected that up in the backyard portable, so dad helped me set up another radio and using a simple HF end fed line antenna, we got 6m going for just for a few contacts and extra points.

Overall, the contest was a fun experience, and I would say the study to gain access to

the additional Advanced bands and power was worth it. (although I'm certainly going to do more, maybe 10GHz next...).

I would encourage any non-amateurs reading this to study for your Foundation Licence; after all the foundation course is only 2-4 hours of study and you have access to these bands for the rest of your life and you'll soon realise the effort for a Standard or Advanced licence is very much worth it.

73,
Nathan VK3DNS/VK3D



Antennapalooza

By Chris VK3QB

Antennapalooza is a amateur radio & social event held over a weekend on a 7 acre rural property about 100km east of Melbourne.

This year it was held on the first weekend of December. Now in its seventh year, the event is popular with a broad and interesting array of presentations, operational and social activities.

About 50 attended over the 2 days, with around 15 camping overnight, enjoying pizza and good comradery around the fire. The Saturday got a bit windy, which gave the new purpose-built pavilion a bit of a hard time, but it survived. Sunday was a much more pleasant day with blue skies and sunshine.



The new purpose-built pavilion

The various presentations were well received, and a good time was had by all. Paul VK2APA gave an excellent talk on maritime communications; Roy VK3GB gave an interesting and practical talk on vertical antennas. Bob VK3XP gave a great insight into automotive power and earthing considerations for setting up a mobile station.

Other topics included a getting started in Morse code, introduction to contesting and setting up antennas for mobile and portable operation.



Graeme VK3BXG demonstrates portable antennas

The entire weekend was about amateur radio and sharing ideas, meeting new friends and catching up with old ones. At least five clubs were represented, with RASA and four WIA Affiliated clubs supporting and sponsoring antennapalooza.



WIA President, Scott Williams VK3KJ came along on Sunday and joined the informal chatter and spoke a little about his new contest station and impressive array of antennas.

It was positive to see the WIA and RASA Presidents having a chat and, no doubt, talking about how we can all grow the hobby together.



As always, the hosts Ian and Di Jackson VK3BUF & VK3JDI did a wonderful job and on behalf of all attendees we thank them both for the tremendous effort in making antennapalooza a success.



Packing up – ready for next year

For more info visit antennapalooza.net.au

A selection of feedback from attendees is provided overleaf.

If you didn't make it, keep an eye open for the 2022 event.

See you all next year!

Here are some emails Ian VK3BUF received from attendees...

“Good evening,

I just thought I'd take a minute to give some feedback about the event today.

I'm a new operator and this was the first event I have attended. I was there from open, but unfortunately had to leave just before the CW presentation and cannot make it for the Sunday. It's a great site for the event.

I found the day very interesting and picked up some great tips re the mobile mounting which is timely as I'm about to set up a mobile installation. I was also able to meet a few other operators and have a great chat.

I'll definitely be supporting this event moving forward. Please pass on my appreciation to those that put it all together.

regards,

*Mike
VK3TDK*

Hi Ian,

I enjoyed Antennapalooza yesterday. Thank you so much for putting it together and hosting it. Much appreciated.

Also was interested if you had a list of the items that were in the QRM Kit that you gave as a prize yesterday? The reason I'm curious is that I've recently developed an RF Toroid Calculator app and wanted to check that it supports all the toroids in that kit.

Here's my app if you're interested in checking it out. Works on mobile phones or desktop browsers.

<https://miguelvaca.github.io/vk3cpu/toroid.html>

*Cheers,
Miguel*

Hi Ian.

Just a few words to tell you how much I enjoyable the antennapalooza event. I feel sure it was one of the best, or near the best weekends you have held. The new pavilion is an absolute winner, it is a pity we could not fill it up, however, if we can spread the word, what a successful weekend it was....you never know?

I think the talks and demonstrations went down very well, and perhaps the more we can offer the better the weekend could possibly be....

Many thanks for a great weekend.

Kind Regards.

Roy. vk3gb.

Good morning Ian,

Thanks for organising the Antennapalooza quite interesting, unfortunately I couldn't stay long.

I certainly will put in more time next year.

We had a committee meeting and decided to donate to the Antennapalooza project \$100

73 de Klaus

Ian,

Thanks so much for organising and hosting Antennapalooza 2021.

It was a great event with practical hands-on sessions and really great networking.

Really appreciate your effort to make this happen.

Kind Regards,

Dean Athan vk3dca

Hotspots for Digital Voice Modes

DMR | Fusion | D-Star | P25



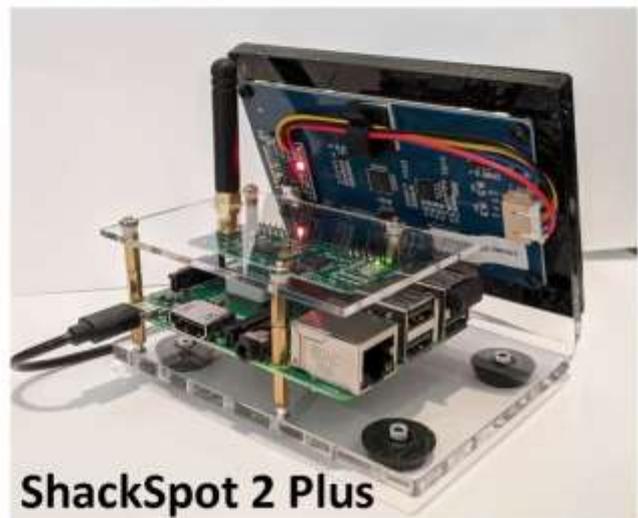
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But I don't want to talk about politics...

Many would prefer not to talk about the politics of Amateur Radio (AR).



Unfortunately, like broader societal issues, the outcomes of politics matter. Like it or not, AR politics impact all of us.

When any sector or industry is represented by a monopoly, it becomes difficult to measure success. There is no competition. All we have to go on is what the incumbent tells us and our own (sometimes uninformed) observations.

Incumbents with a monopoly become complacent and develop a sense of entitlement.



Amateur Radio is no different. Our community was represented by one institution for over 100 years. Sadly, in the last 5-10 years, that institution has become complacent, inefficient, and no longer represents the sector effectively.

Don't believe us? WIA membership numbers

are down by 30% in six years. They lost the Deed to deliver exam and callsign services with ACMA. One of their objectives is to “**protect our bands**”. Read about that topic elsewhere in this issue. They've done nothing innovative or new in 10 years, possibly more.

We understand there has been instability and infighting in the WIA Board room for years. WIA finances, like membership numbers, are in serious decline.

Three successive Boards have refused to use volunteers to manage finances – a strategy that worked flawlessly for 11 years previously – and instead has literally burned over \$220,000 of members' money on accountants and book-keepers in six short years. How does this help the hobby?

When we established RASA, one of the key objectives was to challenge the status quo for AR representation here in Australia, especially when that representation was inadequate, expensive, misleading, or just wrong.

Along the way we hoped we'd see the collective bar rise, but alas, AR representation has become riven with a combative, negative stance from the WIA.

Of course, our presence has ruffled some feathers. But we've always maintained a professional approach and have been clear to call out missteps, bad decisions, and poor representation.

Parallel to this, we've provided education and awareness in regulatory matters, band planning and representation.

We've also kicked some goals along the way, supporting innovative resources like [QRM Guru](#), [Amateur Radio Tech Support](#), [VK Regs](#) and our [Welcome Packs](#).

We've demonstrated we're able to liaise and negotiate effectively with the regulator with the recent **2x1 contest callsign win**.

We've visited over 25 clubs and various Hamfests (across VK2, 3, 4, 5 & 6) in two years to present our work and listen to what amateurs have to say.

We welcome feedback and constantly try to engage with the WIA.

By contrast, the WIA Board can't even bring themselves to utter the word "RASA" in any of their media. They are combative and expend far too much energy on negativity and revenge. They ignore any correspondence from us. And from what we're told, they ignore a lot of correspondence from others as well.

Why?

This denial of reality achieves nothing for the WIA, its members or the broader AR community – indeed, it is entirely counterproductive for the hobby. There is no open mature discussion or debate.



The WIA can't even acknowledge the work RASA undertook to obtain 2x1 contest callsigns. In the "Board Comment" recently, they managed to refer to us as a "stakeholder"....

This behaviour is churlish and petty.

What value does WIA Club Affiliation offer?

- A discounted Public Liability Insurance Policy (has it ever been tested? Some clubs harbour serious concerns over its effectiveness).

- A Club Grants scheme which hasn't offered any grants for at least five years (but the WIA has managed to spend \$220k on accountants in that same period)

And yet many within the WIA refer to RASA as the "Online Radio Club" as though this is a bad thing.

The irony is not lost on us. Being a 21st century organisation, we use technology and innovative business practices to keep our costs down. We deliver innovative services for far less money.

Just compare the two budgets and financial performance; \$11,000 vs \$379,000.... Which one spends over \$30k per year just on office expenses?

And which one consistently returns a surplus and delivers innovative new services to the AR community...?

Kodak also ignored the relentless march of technology and social change with photography. We saw what happened there.

The WIA's membership base is down 30% in six years - set against a much smaller decline in overall AR numbers of about 3%. Overall membership is down from 32% of licenced amateurs to 22%.



Source: WIA

Their magazine schedule has been slashed and their services have not evolved....but their membership fees remain the same.

As far back as 2016 the WIA Board raised the issue of declining membership numbers.

“The falling WIA membership was of concern during the year, attributed to adverse publicity on social media and elsewhere, and natural attrition as older members became SK. The greatest decline was in the first half of the year, while the rate of decline slowed during the second half. The WIA Board had the situation under frequent watch, considering how it could respond to the situation”

Source: [WIA](#)

A very well placed WIA insider told us recently that the WIA has become a *“bureaucratic behemoth that consumes an incredible amount of money and produces very little”*.

An astute observation.

When was the last time the WIA undertook any strategic planning? (2016 STEM Symposium?).

“The WIA conducted a symposium in Canberra on November 19th, seeking input to Amateur Radio involvement in STEM activities. The outcome of this successful symposium was a draft “way forward” plan, a network of STEM interested persons, and another event being planned for 2017.”

Source: [WIA](#)

What became of that initiative? We can't find news of any progress since.

We asked the WIA Strategy Advisory Committee for an update. At the time of going to press we have not received a response.

Then there is the sector's reputation with the regulator.

The debacle of the 2019 syllabus review panel was a classic example of sector dysfunction. The ACMA disbanded the panel as the members could not reach consensus.

How are ACMA expected to take us seriously when we can't even present a consolidated view on technical and regulatory issues?

Take the 60m (5MHz) band. The band was ratified at the 2015 World Radio Conference.

It took ACMA five years to get around to considering it, and when they did, they eventually said no because of some unspecified Defence use.

The band is only 15 kHz wide and is shared with land mobile services; common sense dictates that amateur use would have minimal impact on Defence.

Of course, ACMA was presented with widely divergent submissions from the two representative bodies. The [RASA position](#) was carefully considered and researched, based on real world professional experience, and took account of the existing commercial users.

The WIA position was simply – *we want it all*.

If the representative bodies could have worked together and presented a united front, our chances of getting a new band would have been improved immeasurably.

Over 210 other countries have successfully gained access to 60m, including New Zealand. But not us.

The politics do impact you.

We understand this article raises some very confronting and uncomfortable truths. If you're a WIA member, discuss the issues with a WIA Director. You can find their contact details [here](#).

Because who suffers from all of this “politics”? **You**, dear reader. That's who.

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FT8 & WSPR with a receiving loop antenna

By Glenn VK4DU

The software

Most digital mode users run the popular WSJT-X program. WSJT-X allows you to change between the most two popular digital modes; FT8 and WSPR, with just a couple of mouse clicks. It also remote controls your rig's frequency and keying.

The program forwards your "spots" to popular WSPR and FT8 websites; these display your contacts on a zoomable world map.

The program is available from [WSJT Home Page \(princeton.edu\)](http://www.princeton.edu/~njd12/WSJT-HomePage/)

Horses for courses

FT8 is far more popular than WSPR – there are many more stations on FT8.

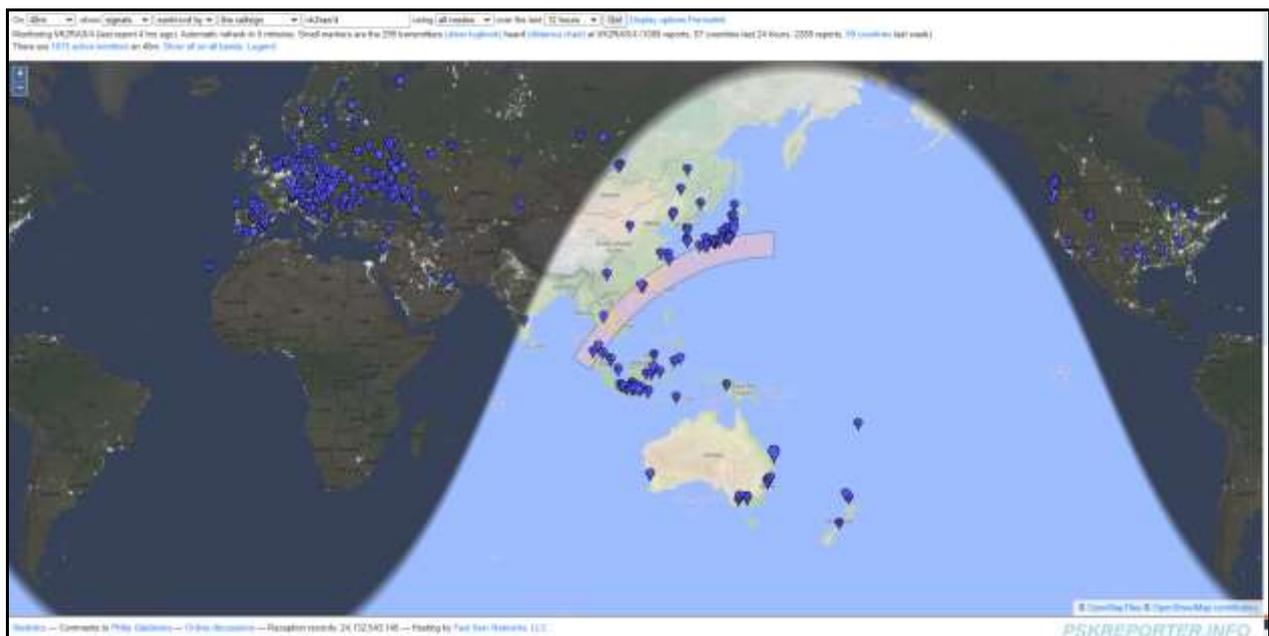
Of course, FT8 is a two-way QSO mode, and WSPR is designed for automated propagation reporting.

DXCC in a day?

I often let the HF rig run in rx mode overnight on the 40m FT8 frequency of 7074 kHz. The rx antenna is a 1m magnetic loop on the back fence.

The psk reporter website at www.pskreporter.info displays stations heard or worked on a world map, and even keeps a running total of your countries.

A screenshot of the FT8 rx activity is displayed below.



VK2RAS/4 40m FT8 activity early Dec 2021

The screenshot covers a 12 hour period. As you can see, propagation was excellent into Asia, EU and the US. In the 24 hour period around this screenshot, VK2RAS/4 received FT8 stations in **57 countries**....

Think back 20 or 30 years...57 countries would take *months* to receive for an average SSB or CW SSB station on 40m.

Well-equipped FT8 stations have worked DXCC in 24 hours, especially when 20 and 15m are open.

Down below the noise

Whilst FT8 is very popular, WSPR is far more effective for weak signal work. WSPR is effectively 10 dB more sensitive than FT8, with a noise floor of -31 dB in a 2500 Hz bandwidth.

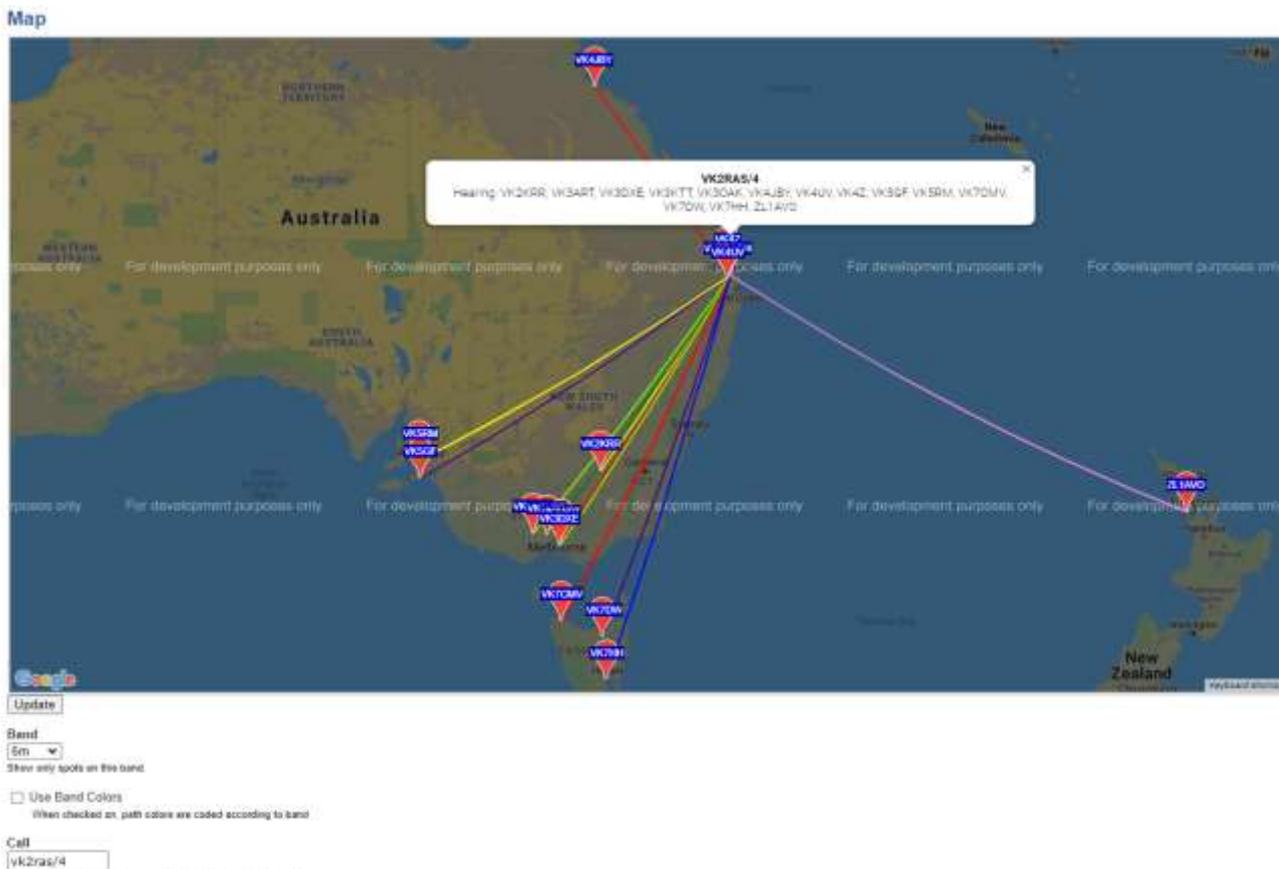
The WSPR transmit period is also much longer than FT8 (2 min vs 15 seconds), and the message transmitted is much shorter - WSPR only transmits your callsign, your grid locator and your tx power in dBm.

WSPR also has an on-line website at [Map | WSPRnet](https://www.wsprnet.org/)

The WSPR website was reporting very good 6m signals across eastern VK in early December. Just for fun, I decided to let the rig run on the 6m WSPR frequency for a few days.

I don't have a 6m antenna, so the HF magnetic loop on the back fence was pressed into service.

I was astounded to see the following stations on the 6m WSPR map for VK2RAS/4.



VK2RAS/4 6m WSPR activity

ZL, VK7, VK5, VK3, VK2 and northern VK4....with a HF loop at 2m....and I'm at sea level.

When 6m opens, the signals can be very strong, but I never thought I could hear ZL



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QRM Guru

By QRM Guru team

In this issue we're going to talk a bit about ACMA's Response to submissions from their **Review of non-assigned amateur and outpost regulatory arrangements – consultation 01/2021**

From the ACMA.....

Interference management

Submitters expressed a range of views on how interference matters between amateurs ought to be managed. Some submitters advocated for the ACMA to take a more active role in monitoring bands and undertaking interference investigations relating to the amateur radio service. Other submitters, including the WIA and the RASA, broadly agreed that in the first instance, interference issues between amateurs are best managed within the amateur community.

The WIA recommended that the ACMA facilitate frameworks that support qualified amateurs to work directly with affected parties to solve interference problems locally. These frameworks and resources should emphasise that there is a mutual responsibility between the transmitting party and the receiving party for solving interference matters, especially electromagnetic compatibility (EMC) matters. RASA and the WIA both submitted that while amateurs should attempt to resolve interference issues amongst themselves in the first instance, the ACMA should retain oversight and an appropriate escalation path and resolution mechanism should be developed and agreed to between the amateur community and the ACMA.

The WIA also recommended that there is demand for an amateur community-wide information campaign on how to manage interference issues. The WIA suggested that self-education programs should be expanded and that regionalised self-help support groups should be established to help amateurs find technical assistance to resolve these problems. The WIA advised that it was prepared to provide more avenues for support in this area.

Response to submitters

We agree that self-management of interference issues will lead to the best outcome for most amateur operators. In the first instance, amateurs should resolve interference problems amongst themselves, with the assistance of frameworks and resources developed between the ACMA and the amateur community. If an interference matter is so serious, or chronic, that it cannot be resolved within the community, affected amateurs will still be able to make a complaint to the ACMA. The ACMA will continue to discharge its regulatory roles and responsibilities as Australia's spectrum manager, including enforcing compliance with licence conditions and equipment rules.

We will continue to consider self-management frameworks and engage with the amateur community on the development of the operating procedures document that will be used to support a streamlined class-licence instrument.

Source: [ACMA](#)

Firstly, let's dispel the myth that under a Class Licence we'll lose all protection from ACMA. Nothing will change – ACMA's response is highlighted in red. We'll get the same protection under a Class Licence as we do under the current licencing arrangements.

To quote the ACMA:

"If an interference matter is so serious, or chronic, that it cannot be resolved within the community, affected amateurs will still be able to make a complaint to the ACMA."

In practice we know that ACMA is working with limited resources and government policy has impacted their priorities and focus areas. The reality is that amateurs must take a more active role in RFI mitigation and suppression. AR is after all, a technical hobby.

RASA and a group of active amateurs recognise this reality and have developed QRM Guru. QRM Guru is a free online resource created by amateurs for amateurs. We have contributors who are RASA members, WIA members, as well as members of ARRL and RSGB. In fact, over 30 amateurs have contributed real world, on the ground advice and case studies of how they've used their own skills to resolve local RFI.

Some of these volunteers visit clubs to explain how to use QRM Guru. A Club education program is being rolled out in 2022, and QRM Guru will be updated with resources to help clubs on the ground.

Clubs are provided with free kits to help them apply some of the techniques

explained in QRM Guru. (DF Loops, ferrites, filters, basic tools and a checklist)

Even the WIA acknowledges:

"that there is demand for an amateur community-wide information campaign on how to manage interference issues. The WIA suggested that self-education programs should be expanded and that regionalised self-help support groups should be established to help amateurs find technical assistance to resolve these problems."

The WIA has been invited to participate in this initiative. Privately, we understand most WIA Directors acknowledge QRM Guru is a great resource and a winner for AR.

The ACMA understand the requirement for such a resource, quote:

"In the first instance, amateurs should resolve interference problems amongst themselves, with the assistance of frameworks and resources developed between the ACMA and the amateur community."

So, given QRM Guru is already out there, widely successful and referenced internationally, and aligns with ACMA's broad objectives, why won't the WIA promote it?

What are they afraid of?

At least two WIA Presidents have made public statements supporting QRM Guru.

But the Board forces a policy of censorship upon its media outlets and magazine.

One QRM Guru contributor attempted to place a paid advertisement in AR Magazine.

The advert request was rejected by the Board of the WIA. Two *Amateur Radio Magazine* editors have refused to publish articles about QRM Guru.

In another example of questionable behaviour, the WIA Board “disappeared” a legitimate merit award submission for QRM Guru from one of their own members last year. This prejudicial behaviour is against the basic principles of the hobby, as well as the WIA Corporate Ethics policy.

Why wont the WIA support and promote QRM Guru?

So, in summary.

- RFI and QRM are the most significant threat to our bands and impact our ability to get on air.
- Class Licencing will have no impact on existing arrangements or legislation for “protection”

- ACMA recommends amateurs take a more active role in self-diagnosis and resolution
- The WIA agrees that ACMA and amateurs needs to work collaboratively, and that self-help strategies are highly effective

And still, the WIA Board resolutely refuses to accept that such a resource has been developed and is successfully deployed.

They are (again) in denial and are not working in their member’s best interests.

Over 62,000 visitors from over 80 countries have visited QRM Guru. It’s a practical and useful resource by amateurs for amateurs.

The QRM Guru team will be reaching out to your club early in 2022. In the meantime, if you’d like support or have any questions or suggestions, please send the team an email. feedback@qrm.guru

ONLINE SUPPORT: QRM Guru assists radio amateurs with QRM issues

QRM Guru is now linked to the Amateur Radio Tech Support (ARTS) ticketing system. This enables users from VK and around the world to raise support tickets if they need a little extra assistance in working through the process.



As word spreads, we are seeing more international amateurs using QRM guru and requesting support via our online ticketing system.

ARTS is a great example of how a member based organisation can use a Help Desk Ticketing System to provide real value to its members.

You can visit ARTS [here](#).

Protecting our bands

What does “protection of our bands” entail? It is probably fair to say that, for most amateurs, this “protection” means:

- protecting our band allocations from other services;
- removing unwanted intruders;
- removing unwanted electrical noise; and
- removing unlawful interference or transmissions from fellow amateurs.

Can any representative group “protect” our band allocations?

There is a core (almost holy..) belief amongst many amateurs that representative institutions “protect” the amateur bands. The reality is somewhat different.

The HF bands, 2m and 6m are codified by international agreement, so we won’t “lose” them, per se.

The truth is that all amateur radio representative organisations have little real-world influence over the allocation and protection of the bands above VHF.

The commercial pressures are too great, and our utilisation of the spectrum above 148 MHz makes it difficult to justify our current allocations. Coupled with the financial value of spectrum, the pressure for government to yield to commercial interests is significant. Recent news:

“Outcome of 850/900 MHz band spectrum auction

Two companies, Optus and Telstra, have won spectrum in the Australian Communications and Media Authority’s (ACMA) latest spectrum auction.

All 16 lots available were allocated. The allocation realised a total revenue of \$2,091,618,000”

And in other [news](#) very big numbers are at play when purchasing spectrum.

IARU Monitoring System

The IARU monitoring system is designed for reporting Intruders on bands in which the amateur service has primary status.

Does it work in Region 3?

Intruders are deliberate transmissions in our primary bands. Localised electrical noise is not regarded as an “Intruder”, and is not within the scope of this service.

Similarly, the IARU monitoring system does not deal with Amateur-Amateur complaints – that is the remit of the ACMA.



The WIA still promotes its ***Intruder Watch*** (IW) and IARU Monitoring service.

Hundreds, sometimes thousands of individual observations are submitted to the IARU each month.

You can view the Region 3 reports [here](#).



The WIA website and media encourages members to....

“Help safeguard our bands - become an intruder watcher today.”

The WIA actively promotes Intruder Watch on its website:

“The ACMA is obliged under the WIA IARU Monitoring System mechanism to investigate and as much as is practical resolve intrusions into amateur HF bands in which Australian amateurs have Primary status. The agreed procedure between the ACMA and the WIA for forwarding intruder complaints from the WIA has a 9 point process which can be found on the WIA website at www.wia.org.au/members/protecting/about/”

Source:
https://www.wia.org.au/members/broadcast/wianews/display.php?file_id=wianews-2020-10-25

When was the last time the WIA published any Intruder Watch news or reports for members?

The WIA’s website claims there are agreed procedures and protocols with the ACMA regarding Intruder Watch and that:

”8. The WIA will ensure that these agreed procedures are promulgated to all WIA members. The ACMA will publish the procedures on the ACMA web site.

9. The ACMA will publish the WIA IARU Monitoring System email address on its website, and direct all amateur intrusion complaints to the WIA IARU Monitoring System liaison in the first instance.”

Source:
<https://www.wia.org.au/members/protecting/about/>

We checked. There are no such procedures or agreements between the WIA and ACMA, and there are no references to the IARU Monitoring System on the ACMA website.

The intruders@wia.org.au email address is no longer in use. In fact, it bounces. No-one is there.

Many of you would have read of our experiences with the IARU IW system [in this piece](#). For more history on these matters, search “QRM 40m” on our website.

Is the IARU IW system effective? Should VK amateurs continue to send in reports, in some vain hope that things will change, and intruders magically disappear?
(malfunctioning email notwithstanding...)

Neither the IARU Region 3 nor the WIA have provided any status reports or evidence of real progress on these matters for many years.

Here at RASA, we believe in a more honest and pragmatic approach to communication and representation. We provide clear, objective information, so that amateurs may make an informed decision.

We challenge systems where we see a lack of effectiveness.

The IW system claims that it collates reports from amateurs and passes them to the national regulator – in our case, ACMA. The regulator prioritises the reports and conducts their own monitoring (and DF'ing), in accordance with ITU guidelines.

If the monitoring proves that the interference is genuine and “harmful”^[1], a formal report is forwarded to the ITU Radiocommunications Bureau, who then pass the report to the other Administration (country) concerned.

The ITU International Monitoring System is defined in Article 16 of the Radio Regulations. It is quite formalised – for instance, all administrations participating use calibrated antennas of a standard design. There are specific rules for monitoring and declaring interference “harmful”. It isn't a matter of just listening for a short while – a program of monitoring is required, over a period of time.

As discussed in our IARU piece, one of the most chronic QRM examples emanates from Indonesia on 40m. Another major source of QRM is from Over the Horizon Radars; believed to be emanating from SE Asia. There have been literally thousands of monitoring reports submitted on these problems.

Thousands of reports...over more than 15 years...and the QRM is still there....louder than ever...

RASA conducted our own IW project in 2018. We submitted detailed reports on the 40m QRM to ACMA and requested they conduct formal monitoring with a view to a report through the ITU system.

ACMA advised at the time (2018) that, due to pressure of other work, they were unable to conduct the required monitoring.



ITU calibrated HF rx antenna – ACMA Quoin Ridge monitoring station

The 40m QRM is as bad as ever and is clearly “harmful”. Early this year, we wrote to ACMA again, asking that they conduct official monitoring and report to ITU.

ACMA advised on the 11th March 2021 that they will not take any further action on this issue....

Whilst researching this article, we wrote to ACMA asking what actions they take with Intruder Watch Reports submitted by the WIA. We received this response:

“The ACMA would note that the reports have been provided by the WIA on a long standing basis, but the ACMA has not received any reports since June 2021. We can advise that the ACMA takes no specific action on these matters, beyond noting

them. While we appreciate that this matter is of concern to you and to other amateurs, we have considered this within the context of our compliance and enforcement policy, and with respect to the demands on the resources available to us. When considering radiocommunications matters, the risk to spectrum utility (i.e. the risk of causing harmful interference to the radiocommunications spectrum) and public safety are our first priority when making this assessment.”

Monitoring and Compliance Section

Clearly, there is no point in VK amateurs submitting IW reports, as there is no appetite for them to be processed, actioned and fed into the official ITU system.

We spoke to ACMA and note that for domestic QRM from intruders, the ACMA is more likely to take action if substantive evidence is provided with the complaint. And you can do this directly via the ACMA website.

Can a representative group protect our bands from RFI/QRM?

Most localised electrical noise is created by the plethora of cheap electrical equipment that has become a part of our everyday lives, such as power transformers, garage door openers, computer equipment, LED lights, and the infinite list of connected devices that permeate modern day life. And, of course, power line noise.



Given the massive commercial interests, very little is being done in practice to stem the flow of non-compliant electrical equipment flooding our shores.

This equipment is wreaking havoc on the radio spectrum by raising the general noise floor, particularly in major cities.

The other noise source is the domestic electrical distribution system. Privatisation has meant that utility companies are often reluctant to resolve noise complaints from amateurs.

In a somewhat bewildering statement on their website, the WIA advises that:

“ACMA policy is that protection from electrical noise is not practical in urban areas.”

Source: [WIA](#)

We checked with ACMA. They have no such policy. Why would the WIA throw in the towel on such an important issue and publish such a blatantly misleading statement?

In fact, it remains ACMA policy and legislation that harmful interference will be investigated. We have examples of where ACMA has taken action.

In spite of WIA's defeatist position and lack of any meaningful action, all is not lost!

We can do something about RFI/QRM. www.QRM.guru If you haven't visited this online resource yet, head over and check it out.

Can representative groups protect our bands from unlawful amateur-amateur QRM?

As representative bodies, there is no direct action we can take. We have no legal or punitive grounds on which to “police” amateur bands. This is responsibility of the ACMA.

The most effective course of action is to:

- ignore the interfering station;
- document and (if possible) record the QRM; and
- approach the ACMA directly with the evidence.

Where to next?

So, *there are* threats to our bands, in order of impact and relevance:

1. RFI/QRM from electrical appliances & power line noise

We can use (or develop) our skills and apply them to identify and mitigate or minimise the noise. An innovative amateur driven resource called QRM Guru is freely available to all amateurs.

The WIA refuse to promote this resource, and yet they wax lyrical about the need for it in their submission on the AMCA proposed class licence....!

2. Interference from intruders on our primary bands (radars, unlicensed users)

As we have illustrated in this article, the IARU WIA Monitoring System (and Intruder Watch) is ineffective. Where the intruder is suspected as emanating from Australia, the interference should be recorded and sent to ACMA. Use this [form](#).

For international intruders, there appears very little the ACMA can or will do in the current environment.

3. Losing our bands to commercial interests

For HF, six and two metres there is little to no risk from commercial interests. For 70cm and above, the risks are real and due to our status (secondary users), and financial pressures, there is little we can do; other than to better use these allocations and illustrate to ACMA and others that we can justify our existence.

So, the next time you are thinking about “protecting our bands” and what that means in reality, ask yourself “which representative body is focused on pragmatic real-world outcomes?”.

Ask a [WIA Director](#) why they won't promote QRM Guru?



In September this year a QRM Guru coordinator requested general information from the WIA magazine advertising officer on pricing and deadlines. Nothing happened for five weeks, then a brief email was received from the WIA to say that *'the application had been rejected'* with no further detail.

QRM Guru could not have breached any AR editorial guidelines, because at that point no advert had even been submitted.

Clearly, the WIA board decided on behalf of their members to censor this initiative.

QRM Guru freely available to all amateurs.

If you or your club would like a presentation, just drop the team an email.

feedback@qrm.guru

VKFF Activation weekend

By Bob VK6POP

How did you go in the recent VKFF Activation weekend?



I set up my station in the Avon Valley National Park, Northeast of Perth.

Radio conditions were pretty average with rapid QSB. Even so, I made contacts across Australia and in New Zealand.



The station was set up at the Bald Hill camping area, which is on the edge of the Avon Valley where the Standard Gauge Railway runs through to Kalgoorlie and beyond.

The station consisted of an FT991 and a G5RV antenna, powered by the auxiliary battery mounted in the car.



To learn more about VKFF visit their website. It's a popular activity; combining our hobby with the great outdoors. Perfect if you like camping, bush walking or just want to escape the QRM of city living.

Click the image below for more information.



World Wide Flora & Fauna - Australia

WELCOME
ABOUT AMATEUR RADIO
ABOUT WWFF
CONTACT US
FOR MORE INFORMATION

World Wide Flora & Fauna in amateur radio, abbreviated as WWFF (WWFF), is an international amateur radio program, the purpose of which is to:
'draw attention to the importance of protecting nature, flora and fauna, and to encourage the development of radio skills, especially in portable operations.'

Getting started in Morse Code

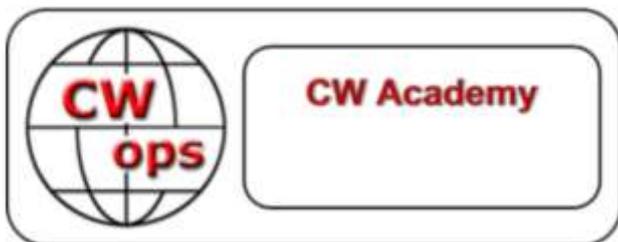
By Chris VK3QB

Learning or improving Morse Code is an ongoing battle for many. As it is no longer a requirement for attaining an amateur radio licence it has become a skill that people learn by choice.

But... what's the best way to learn and/or improve your Morse Code skill?

I learnt the old-fashioned way with a tape from the WIA. 5WPM... and it was painful. The methods used today are far easier and get you up to speed with greater accuracy and fewer hurdles. A little earlier this year I undertook a course with CW Ops.... A club not unlike FISTS, CW Ops is dedicated to the unique art form of Morse Code. From their web site:

“Welcome to CWops! We bring together and support amateur radio operators who enjoy communicating by Morse Code (CW). We offer free CW training to those who want to learn this special skill that reaches back to the very beginning of ham radio and remains vital today. Learning and operating CW is fun and you can do it!”



CW Ops offer CW Academy. CW Academy is a well-structured and delivered training course run over eight weeks. Classes are delivered twice a week via online conferencing facilities (like Zoom, Google Meet, Skype) and a thorough schedule of homework is provided – and expected!

The Advisors (not teachers) are extremely supportive and go the extra mile to keep you on track.

I missed one class and my Advisor phoned me (from America) to make sure I was alright... (hint hint, why wasn't I in class).

The classes are very well structured, and the homework expectations are very clear, and achievable. You simply need to commit to 30-60 minutes per day to practice. The coursework includes using computer programs to assist with the learning process, and they're also fun.

If you really are serious about wanting to learn the code, or improve your code, I cannot recommend CW Academy highly enough. But you will need to commit yourself to the program. Make no mistake, this means eight weeks of dedication to attending classes twice a week and doing the homework.

If you want to learn more about CW Academy, click this link or email me for more information.

www.cwops.org/cw-academy

There are useful and practical learning resources here

<https://cwops.org/cw-resources/>



Other local support from FISTS Down Under can provide local comradery and “CW Buddies” to help you get on-air



The Peel Amateur Radio Group (in VK6) also run a number of training and slow morse sessions.

<http://www.parg.org.au/general-information/cw-training>

If you've always wanted to learn to Morse Code but never been quite sure how, don't be deterred. The modern tools and techniques make the learning process fun and provide a far greater likelihood of success.

You simply need to commit to a regular training regime.

A cool online QSO mapping tool

This resource allows you to upload your log and display your QSOs on a map of the world. Click the map below.



Getting started with FT8

Have you ever wondered how to get started with FT8. What's the mode all about and what can you do on FT8?

Hayden Honeywood VK7HH has produced this very informative video on his YouTube channel. Click the image below....



RASA's YouTube Channel

Did you know RASA has our own YouTube Channel? Click the YouTube logo below to visit our channel.



This channel is mostly dedicated to supporting QRM Guru. But you can also find other videos that may be of interest, including recordings of our Annual General Meetings.

Where is the next generation of radio amateurs?

Where is the next generation of amateurs?

Who is promoting our hobby and looking at the data to ensure our limited resources are targeting the best demographic?

Whilst there is no question the ACMA and AMC handle regulation, administration, and exam and callsign administration services, they don't promote our hobby or ensure it retains its allure for new and old hams alike. That's not their role.

What is concerning is that to this point, no-one has taken a helicopter view and developed a plan to grow our hobby. What are the key issues? Why is it 77% of our demographic is 55 years of age or older? Over half of us are over 65.

Only 2.8% are under 34 years of age. Less than **half of a percent** are under 18 – best case that's maybe 50 amateurs under 18. How many are active?

What is the average age of newcomers to our hobby these days? Which activities of our hobby appeal to newcomers the most? How do we use this information to target those people?

Age range of respondents		Enjoyment from AR magazine			
After 'qualifying' respondents with Questions 1 and 2, the survey got down to the nitty gritty with Q3, about age ranges. As the table shows, no real surprises there.		Question 4 covered the subjective view of respondents' enjoyment. It turns out that 54% of survey respondents reported their experience of reading AR magazine ranged from enjoyable to most enjoyable.			
Answer choices	Replies %				
Prefer not to disclose	1.90%				
Under 18	0.47%				
18-24	0.95%				
25-34	1.42%				
35-44	4.74%				
45-54	13.74%				
55-64	25.60%				
65+	51.18%				
Total	100%				
Least enjoyable	Somewhat enjoyable	Enjoyable	Very enjoyable	Most enjoyable	Total
4.00%	15.00%	39.50%	29.00%	12.50%	100%

Source: Amateur Radio Magazine, Vol 89, No. 6 p.17

Why is it that any positive promotional work is not front and centre in the national news, or being talked about at club meetings?

With a little bit of research, we found an effort by the WIA about five years ago. It was focused on young people and STEM.

In November 2016 the WIA hosted its STEM Symposium in Canberra.

“The aim is to develop a role for WIA members and the radio amateur community to use their technological expertise toward Federal and or State Government STEM Programs. The initiative is to enable young Australians to learn technology-based skills and knowledge, rather than being a recruitment exercise, although some may also want to later be radio amateurs.”

Source: <https://www.wia.org.au/newsevents/news/2016/20161010-2/index.php>

*“Symposium Outcomes:
Develop a role in which the WIA members and the radio amateur community can use technological expertise to contribute to Federal and/or State Government’s STEM Programs.*

1. Identify ideas in areas where radio amateurs can provide expertise in STEM-related projects.

2. *Test these ideas and suggestions as to viability*
3. *Identify project groups and leaders for the suggested activities.*
4. *Develop project briefs in targeted areas and submit these to relevant government agencies.”*

Source: [WIA](#)

Two months later the WIA reported that it would develop a plan and more news would be forthcoming in 2017. The outcomes suggested the best demographic for future growth was young people.

<https://www.wia.org.au/newsevents/news/2017/20170102-1/index.php>

Since then, there hasn't been much news.

We contacted the WIA's Strategy Advisory Group for an update, but we understand they've been in hibernation for some time. The Education Committee is vacant. We weren't able to get any updates on the Stem initiative.

Next, we decided to talk to some secondary schools and universities to hear what they had to say about Amateur Radio.

Universities

We canvassed four major universities. None of them have an active AR club anymore. We spoke to staff at two well-known universities that specialise in Communications & Electronics – both were uninterested in AR as an extracurricular activity and saw no value to their students. Neither were interested in engaging with AR.

One mentioned the grossly outdated AR syllabus as being completely irrelevant in the 21st century. There were also comments that there was a serious decline in the technical aspects of the hobby.

We were advised that universities focus on their own syllabi these days. It's a numbers game. Students don't have much time for

ancillary hobbies. Universities are chasing grants, bequests, and philanthropic support.... And Amateur Radio doesn't attract any interest from these funding sources.

Students are looking for a technology landscape that is set in the Internet of Things (IoT), robotics, AI, Cyber security, data comms and (most importantly) employment opportunities.

[Melbourne University](#) had some wonderful history making stuff... but nothing current.

Secondary Schools

Every school we contacted confirmed what anecdotal evidence was suggesting. Interest in Amateur Radio dried up about 20-25 years ago. Even the very successful and popular International Space Station program sees limited ongoing participation in the Australian school system. We contacted two secondary schools to talk about their experiences.

The actual event of contacting the space station and asking questions of astronauts was "cool" and there was some publicity but unfortunately, there was no follow-up or flow-on benefit for Amateur Radio in the school. Certainly, the energy, enthusiasm and professionalism of the ARISS program was commendable and appreciated by the schools.

Here in Australia, the tremendous work done by Tony Hutchison VK5ZAI cannot be faulted. His decades of commitment are a credit to our hobby and its potential as a pathway to STEM.

We were advised that secondary schools are heavily influenced by the formal curriculum and activities that lead to improved Australian Tertiary Admission Rank (ATAR) scores, and funding or publicity for the school itself.

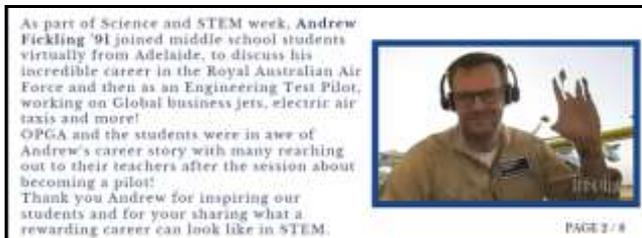
Extracurricular activities in high schools include golf, photography, astronomy, scuba diving and “all things internet”. One science teacher suggested (somewhat unkindly) that amateur radio and stamp collecting really didn’t have a place in 21st century education.

This is harsh and confronting news for those of us who grew up in the second half of the 20th century. Our schools, universities and workplaces were havens for amateur radio.

Many had active clubs, functioning stations or at least a group of like-minded enthusiasts. Involvement in amateur radio led to improved educational outcomes and prepared many for careers in scientific, educational and commercial sectors.

However, the new reality is that amateur radio has all but lost its place in the hallways of education.

Here is one successful example of STEM at work in a secondary school.



Source: Peninsula Grammar newsletter, Issue 3, Dec 2021

Of all the conversations, the only glimmer of hope and energy came from the work Joe VK3YSP and Julie VK3FOWL have been doing with the [Schools Amateur Radio Club Network](#).

They have some positive and relevant experience and a wealth of material that can be applied in the primary school system. They are well known for their energy and regular appearances in schools and at public events.

They bring a fresh perspective to the challenge and have new ideas about how we can refresh our image and be more appealing to newcomers of all ages.

However, the inescapable truth is that Amateur Radio has a real image problem in the education sector (and more broadly) in Australia. Some other countries are doing a far better job, for all sorts of reasons.

But what can we do about it?

Where to next?

Maybe the problem isn't with the education system? Maybe the problem isn't with young people or the community at large; many who see amateur radio as a quaint throw-back to the mid 20th century.

Maybe the problem *is with us*. Our image needs a massive overhaul. We need to rethink how we present ourselves and how we want others to perceive our hobby.

We need to engage in conversations with newcomers and those showing a passing interest, be they young people or more mature folk. We need to learn how to be better ambassadors for the hobby and create an inclusive and welcoming environment.

It's not necessarily about what we enjoy... it's about listening and engaging with others so that they take an interest. They ask questions and ultimately, they get interested in science and technology, and amateur radio can be a part of that journey.

In 2022, RASA will revisit these issues and challenges and, along with our Strategic Review we'll be engaging with the AR community to investigate ideas to help attract newcomers to our hobby.

As always, if you have feedback or would like to help, please send us an email.

Exams and Callsign Administration



Since early 2019, the Australian Maritime College has been providing exams and callsign administration services on behalf of the ACMA.

For more information, visit the [AMC Website](#) and follow the links.

Training Courses



Looking to get your licence or upgrade? If you are in Perth, contact Ham College for excellence in face-to-face training. Click the image to the left for more info.



National Online and Remote Training from the Radio & Electronics School. Since 1997. Click the image for more info.

Club Visits

Even through the Covid lockdowns of the past two years, RASA has been offerings Zoom presentations. We hope we can get back to face-to-face meetings in 2022.

We can talk about what we've been up to, and perhaps more importantly, hear your views and answer your questions.

In the meantime, if your club would like a Zoom presentation, please drop us an email.

RASA is the only national body that visits clubs regularly (in-person or by Zoom).

Email us info@vkradioamateurs.org

RD Contest Results

The Remembrance Day contest is the most revered contest in Australia.

This contest commemorates the Amateurs who died during World War II and is designed to encourage friendly participation and help improve the operating skills of participants. It is held on the weekend closest to the 15th August, the date on which hostilities ceased in the southwest Pacific area.



This year was very well patronised, and some good scores were recorded. Congratulations to all the placegetters and thanks to all participants who make this local contest the great success that it is.

Contest Manager Alan Shannon VK4SN advises:

“This year was exceptional with bigger logs and more activity by default...” and Alan also confirms that some mooted rule changes will **not** be proceeding.

On behalf of the AR contesting community, we extend our thanks to Alan VK4SN for his continued commitment to making this flagship contest a great success.

Winners' Certificates are yet to be posted.

We spoke to WIA President Scott Williams VK3KJ who advised that certificates will be posted to winners this month.

Placegetters

SO Phone

VK2EFM – 1215
VK7HH – 1030
VK5PAS - 1028

SO CW

VK2GR – 456
VK2KJJ – 234
VK2PN - 198

SO Mixed

VK5LJ – 1176
VK4SN – 1003
VK7DW - 514

SO QRP Phone

VK3TWO – 612
VK3MNQ – 290
VK3OAK - 280

SO QRP CW

VK3QB – 278
VK3VB – 190
VK4XQM - 16

SO QRP Mixed

VK2IO – 293
VK3YE – 128
VK7KPC - 40

Multi Single

VK4KW – 1150
VK4WIS – 583
VK6HC - 79

Multi Multi

VK6NC – 1334
VK4HH – 1259
VK5ARG - 1014

Congratulations to placegetters and thanks to everyone who participated in this contest.

More statistics are overleaf. See you in the contest next year.

Remembrance Day Contest 2021

Total Logs: 310
 Total QSOs: 38,076

Congratulations to VK7 who once again win the State Trophy.

Logs per State:

VK0	VK1	VK2	VK3	VK4	VK5	VK6	VK7	VK8	VK9	ZL
1	8	61	69	33	39	38	56	0	0	5

Total Band Usage

Freq	Scorable Contacts	Raw Scores	Phone	CW	RTTY
1800	1102	1133	945	188	0
3500	9719	9996	9396	600	0
7000	15369	15852	14656	1196	0
14000	2706	2798	2706	92	0
21000	191	194	170	24	0
28000	212	216	195	21	0
50	799	817	795	22	0
144	3340	3464	3442	22	0
432	2428	2486	2474	12	0
1.2G	996	1013	1001	12	0
2.3G	4	6	6	0	0
3.4G	47	48	48	0	0
5.7G	4	8	8	0	0

[Source for data](#)

RASA thanks RD Contest Manager Alan VK4SN for allowing us to reproduce the results in QTC.



Strategic Review

RASA conducted a strategic review of Amateur Radio in Australia in the second half of 2021. The results of the review are contained in the attached report. The document requires little by way of introduction.

Please read it. Send a copy to your club committee and make it a topic of discussion at your next club meeting.

Whilst a lot of the findings appear to paint a dull picture, its up to all of us to consider how we can improve the outlook for our hobby.

We certainly don't claim to have all the answers, and we hope we'll receive some constructive feedback. What we need to do as a community is reflect on the findings in this report and ask how we, our clubs, and indeed our national representative bodies can work cooperatively to assure the future of AR in Australia.

As always, we welcome your feedback.

73, RASA

Ps. Don't forget to talk about the elephant in the room at your next club meeting.



A Strategic Review of Amateur Radio in Australia



30 November 2021

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*The Radio Amateur Society
of Australia*

Introduction

Society has changed a great deal in the last 20 to 30 years. Mobile phone technology, the internet, and changes in the way we work and engage in recreational activities have had a marked impact on the hobby of Amateur Radio.

Amateur Radio has a proud tradition of technological development and has led to some of today's popular technologies. Sadly, contemporary public perception (where it exists) is that it is now a quaint but out-dated pastime. Technology development has accelerated, and our hobby has not been able to keep pace with commercial investments or interests. Amateur Radio is (for the most part) no longer at the forefront of technological development.

Many of today's youth are attracted to robotics, gaming and internet-based interests. Employment models have changed, and many people have less time for recreational activities. Previously "Amateur Radio friendly institutions" like universities, public utilities and large corporations provided a foundation for an interest amateur radio. (e.g. Universities, Telecom and IBM once had active AR clubs).

Even our regulator, the ACMA has very few licenced Amateur Radio enthusiasts in its ranks. More densely populated housing, smaller residential blocks, and local RF Interference (QRM) have all had a detrimental impact on Amateur Radio participation rates.

AR's emergency and public service function has become less relevant. Government emergency agencies now operate robust, redundant, and wide-reaching communication networks.

For many years interest has been waning, numbers are in slow decline and our demographic is ageing. Our hobby has no strategic, publicity, or education plans. Whilst the Foundation Licence arrested the decline for a while, the trend continues downward. Nothing illustrates this better than the WIA's own membership decline; their membership base is declining faster than the AR numbers; 30% versus 3%.

	2015	2016	2017	2018	2019	2020
WIA Membership	4,447	4,130	3,905	3,593	3,216	3,125
Australian Amateurs	14,083	13,965	13,930	13,909	13,690	13,687
% Members	31.6%	29.6%	28.0%	25.8%	23.5%	22.8%

Source: WIA Annual Report 2020

There is no clear leadership, and the hobby is often divided by politics; the two national bodies are often at odds.

To this end, the RASA Management Team initiated a Strategic Review of Amateur Radio in Australia.

The Goals:

- explore the future of Amateur Radio;
- retain existing amateurs within the hobby;
- attract newcomers to the hobby;

- promote the interesting and exciting elements of the hobby and encourage greater participation; and
- promote the hobby from within as being inclusive, friendly and engaging.

The Approach:

- convene a small group of amateurs (a Panel) to participate in the process;
- utilise well known methods to drive an effective outcome;
- conduct a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis;
- focus on identifying and addressing the key weaknesses and threats to our hobby;
- playing into our strengths and leverage opportunities; and
- develop a series of recommendation to present to key stakeholders.

The SWOT analysis methodology is described overleaf.

- **STRENGTHS**

Strengths are something we're good at. They usually come naturally and may be unique to our business. We need to play into our strengths and build on them. Strengths can also present opportunities.

- **WEAKNESSES**

Weaknesses are something we're not particularly good at... quite often they'll be something we don't want to acknowledge or would prefer not to do. We either need to address our weaknesses or accept their existence and act accordingly. Weaknesses will almost certainly require specific actions. They are usually a weakness because we've avoided taking action in the past.

- **OPPORTUNITIES**

Opportunities are untapped... they can be visionary and may be regarded as a quantum leap. But opportunities can turn a failing business or association into a success. An opportunity will require specific actions.

- **THREATS**

Threats are usually external to the business or organisation. They may also form an existential threat; and this is where an threat may need to be acknowledged... as unpalatable as that may seem. Threats either need an action plan to address or we need to accept their existence... just don't avoid threats because they make you uncomfortable.

S STRENGTHS	W WEAKNESSES	O OPPORTUNITIES	T THREATS
<ul style="list-style-type: none">• Things your company does well• Qualities that separate you from your competitors• Internal resources such as skilled, knowledgeable staff• Tangible assets such as intellectual property, capital, proprietary technologies etc.	<ul style="list-style-type: none">• Things your company lacks• Things your competitors do better than you• Resource limitations• Unclear unique selling proposition	<ul style="list-style-type: none">• Underserved markets for specific products• Few competitors in your area• Emerging need for your products or services• Press/media coverage of your company	<ul style="list-style-type: none">• Emerging competitors• Changing regulatory environment• Negative press/media coverage• Changing customer attitudes toward your company <p>WordStream</p>

Source: <https://www.wordstream.com/blog/ws/2017/12/20/swot-analysis>

STRENGTHS
Description
Amateur Radio offers the ability to interweave in with other interests. For example, travel, outdoors, hiking, astronomy, electronics, makers, contesting, orienteering, experimentation.
Technology – Amateur Radio offers an extensive array of interesting new technology – if you like playing with new technology this hobby is for you. The hobby and tech are constantly evolving.
Amateur Radio is a diverse hobby. There is something for everyone (construction, SOTA, contesting, digital modes, EME, satellites, morse code, video/pictures, DXing, LW, MW, HF, V/U/SHF, refurbishing old gear, WSPR, SDR, Arduino, Raspberry Pi)
Amateur Radio requires learned and practiced skills. These can be developed at your own pace and interest level. It is a very rewarding hobby and can provide feelings of satisfaction and achievement. The more you put into it, the more you get out of it. You can build your own equipment or buy off-the-shelf gear.
Amateur radio can be a very socially stimulating hobby. It provides many opportunities to break through social barriers, geographical isolation and other issues associated with loneliness. (e.g. interest in the hobby has soared during Covid-19 lockdowns – what can we learn from this?)

WEAKNESSES
Description
Amateur Radio in Australia has no vision for the future. What will our hobby look like in 5 or 10 years? Who is leading the way with vision & strategy?
Amateur Radio has a real public relations problem with society in general – perceived as being mid-20 th century, older men, engineers, and introverted behaviour.
Social Media is often counter-productive. Much of it is characterised by stupidity, negativity, slurs, defamation, politics, and bullying.
There is no central (national) body to oversee the educational resources. This makes it difficult for clubs and individuals to offer consistent education and/or exam preparation classes. It also places the burden for class material onto limited club or private resources.
Some Amateur Radio enthusiasts are unwelcoming to minorities and new hams. There is a reluctance to embrace new ideas and changes to the way things are run. Potential recruits are sometimes ignored.... particularly if they are perceived as different. Amateur Radio can sometimes look like an “old man’s secret society” from the outside.
Entry points for examinations and callsign administration to AR are less than ideal. The hobby and ACMA’s service provider, the Australian Maritime College (AMC) have suffered reputational damage during the first two years of the new arrangements with the ACMA. Much of this damage is due to slow implementation of services and inadequate communication with the sector. There is a perception that AMC are not focused on the needs of the AR community or prospective amateurs.
Some clubs fail to offer a consistent and welcoming image to potential new hams. Entry for newcomers can be a bit “bit and miss”.
There has been a membership decline in many organisations and clubs. This trend is likely to continue and impact their ongoing viability.
Young people and women are underrepresented in Amateur Radio. Is it because the hobby doesn’t appeal to those demographics?

The public at large has no real knowledge or understanding of Amateur radio. Many are surprised that people have to study technology to obtain a licence. (When was the last time a movie correctly portrayed Amateur Radio?)

OPPORTUNITIES

Description

The broader community have the wrong impression, (or none at all), of Amateur Radio. We have an opportunity to grow the hobby by increasing community awareness of its existence, attractiveness and benefits.

Exams should be delivered online – this will streamline processing and result in vastly improved service delivery for new candidates.

There are opportunities to grow numbers and participation levels by promoting Amateur Radio in with other interests. For example, travel, outdoors, hiking, astronomy, electronics, makers, contesting, orientation.

Amateur Radio really can be an interesting an engaging hobby – something for everyone – when you grow bored of one facet there is another to investigate

There is an opportunity to build a modern support and marketing structure:

- Positive PR to the general public;
- Support for all new and existing amateurs;
- Development and delivery of programs to target youth, women, families, etc; and
- Learning from overseas successes of groups in NZ, UK & USA.

If pitched positively, Amateur Radio is an interest that can be shared with other family members, friends, and associates. For example, the latest generation of compact HF equipment/antennas makes portable operation interesting and fun.

There are missed opportunities for some clubs to present a consistent and welcoming image to members and potential new hams. There are virtually no best-practice resources or support for clubs. For example, financial management, exams & education, operating procedures, mentoring new members, meetings & governance, committee structure, web-site content, membership management, bullying etc.

THREATS
Description
<p>Lack of vision and cooperation from WIA, RASA and the larger clubs with resources: AR NSW and AR Vic and some of the larger local clubs.</p> <p>Amateur Radio is riven by politics at the representative level, to the detriment of all amateurs and our relationship with the ACMA. This can be seen in the failure of the Syllabus Review Panel and the rejection of the 60m band.</p>
<p>Government policies and competing workloads see the regulator with less focus and fewer resources committed to Amateur Radio. There have been some inconsistent and poor policy decisions over the past two years. The regulator has a lack of in-house expertise and has been reluctant to consider impartial advice.</p> <p>Government is driving a policy to move to greater self-regulation and less oversight by the regulator. All these influences will have an impact on the future of Amateur Radio in Australia. (e.g. RFI & QRM, Enforcement of policy, delegation to third parties)</p>
<p>More high density living detracts from <i>some</i> aspects of AR (eg. HF antennas). It is very rare to see a tower and a tri-bander in suburbia these days.</p>
<p>Our numbers are dropping every year. Natural attrition through SK, but also many just walk-away... do we know why? What can be done?</p>
<p>QRM – RFI is having a significant negative impact on people’s ability to get on-air and enjoy noise free operations</p>

Recommended Strategies & Actions

The following list of strategies and actions have been drafted with a focus on the SWOT analysis, ensuring that:

- We play into our strengths
- We aim to address our weaknesses
- We seize opportunities
- We acknowledge and investigate how we can mitigate threats

Whilst the list is not exhaustive, we believe it addresses the most pressing issues facing our hobby and those raised in the SWOT analysis.

Category	Recommendation
Vision & Strategy	It is essential that the two National Bodies overcome their differences. We all want what is best for AR. Meet regularly, discuss mutual goals and look for areas of cooperation. This would allow far better use of limited resources across the Amateur Radio community.
Vision & Strategy	Create a national strategy to develop a vision for our hobby. This will require a working relationship between RASA, the WIA, AR NSW, AR Vic and ideally, some of the larger clubs.
Vision & Strategy	Create a strong association between the national bodies and Clubs, and special interest groups. It will require a working relationship where ideas are shared, problems discussed and tools developed that support the operation of the clubs, their members and newcomers.
Vision & Strategy	Understand that the arrangements for the management of Amateur Radio have changed over the years and will change again. What can/should we be doing to consider a regulatory environment where self-governance may play a bigger role. What can we do to better assist ACMA and AMC in reducing the burden of AR regulation and administration?
Publicity & Marketing	Develop a publicity and marketing capability to be managed by a central national body to promote the hobby. Materials available for free to all clubs and individuals. A small team of certified amateurs can be available for press, clubs, and lobbying/liasing with stakeholders
Publicity & Marketing	Identify the target audience categories for those who may be interested in amateur radio - target them – e.g. Grey nomads, retirees, people who live in remote locations including islands - rock climbers, hikers, marine, people with disabilities. Promote Amateur Radio in specialty magazines. Make a short film on AR - it is not that hard can be done professionally - does not have to cost much. There are groups starting out in film looking for starter projects.

	This recommendation would require a well-resourced national association to respond to enquiries. E.g. well designed web site, staff/volunteers to respond to enquiries, clubs to be ready to respond etc.
Education & Training	Create a national education and training package managed by a central team (or association) for all clubs and trainers to use at no charge. The package needs to include modules for face-to-face study as well as remote study. It must be aligned with the syllabus and updated as required. It must also include modules for different study styles.
Education & Training	Build and deploy QRM education and support materials – integrate this into the national syllabi
Education & Training	Exams must be taken to an online environment. This will make the process faster, friendlier, and cheaper.
Club Support	Encourage clubs to engage new members - loan equipment - perhaps a pamphlet for clubs. Anything to encourage club activity - Not everyone is interested in radio contests. Awards (recognition) for Trainers/Mentors. Consider a survey or study to better understand how clubs can be more successful at attracting and retaining members.
Club Support	Build and deploy QRM education and capability – make resolving QRM a part of club activities. Clubs can help fight QRM and increase participation levels.
Club Support	Develop a national service to engage directly and regularly with clubs to assist with: <ul style="list-style-type: none"> • Surveys • Education & Training support • Connecting new amateurs • Publicity & marketing • KPIs • Continuous improvement feedback
Radio & Operating	Consider sponsorship for remote HF station(s) to improve accessibility for those unable to establish a station at their home location.
Radio & Operating	QRM Guru - keep improving – promote, get clubs on-board to help locals resolve their QRM issues.
Radio & Operating	Develop strategies that deal with the difficulties of suburban Amateur Radio. Clubs, groups and individuals encouraged to provide remote access to Amateur Stations away from Urban

	<p>issues and constraints.</p> <p>Work with clubs, groups and individuals to develop skills in identifying and resolving QRM/EMC Issues for both for Amateurs and the General Public.</p> <p>Lobby for the enforcement of standards and for a less polluted electromagnetic spectrum by pointing out the benefits to all spectrum users.</p> <p>Educate all that QRM and EMC issues are often caused by equipment prior to failure or radiated as wasted energy.</p> <p>Further promote portable and mobile operation by internal and external publicity and marketing. Icom, Yaesu, and several Chinese manufacturers have portable products and there are some kits and home-brew projects. This is a younger (physically able) facet of AR.</p>
Radio & Operating	<p>Sponsor challenges/rewards for new achievements to encourage technological development - for example we have had 100kHz bandwidth allowable on 2 metres and done nothing with it - put out challenges</p>
Understand, develop & improve	<p>Collect and analyse data to better understand; Why People get into AR? What people expect from AR? Understanding why people leave AR?</p> <p>This may require professional services as the usual surveys conducted are not getting results.</p> <p>Using this data to develop strategies and tools to improve AR.</p>
Understand, develop & improve	<p>Develop a basic set of measurements (KPIs) to track and report progress of an improved Amateur Radio culture & participation rate in Australia</p>

Next steps

For any meaningful progress to be made, the Amateur Radio community must band together. RASA does not have the resources or reach to undertake all of the work required.

We are seeking the support of the amateur radio community and the larger clubs to consider how these strategic recommendations can be implemented.

We believe the single largest challenge will be finding a pathway to work constructively with the WIA Board. The WIA is still the largest representative body with the greatest national reach.

However, the Board has refused to work cooperatively on solutions like [QRM Guru](#) [VK Regs](#) or [Amateur Radio Tech Support](#). They refuse to even promote these resources, thereby denying their own members the benefits of participation and development.

QTC December 2021

The WIA Board must evaluate its culture, reinvent itself, and be willing to work with others for the benefit of all amateurs. Their infighting, inability to make progress with any initiatives, and lack of focus on members and the hobby must change.

More broadly, we extend an invitation to all clubs to consider how they can contribute to these proposals.

RASA has sent this report to the three largest associations in Australia, and we have invited them to review and provide feedback:

- Wireless Institute of Australia;
- Amateur Radio NSW; and
- Amateur Radio Victoria.

As with all our publications, we invite feedback and comment from clubs and individual amateurs. Please send your feedback to info@vkradioamateurs.org.au

This document may be shared between clubs and individuals.

We will provide updates via our e-bulletins, website, social media and our e-magazine QTC early in 2022.

On behalf of RASA, we thank the Panel volunteers who contributed so much of their time to this strategic review.

RASA, November 2021



Welcome Packs: Free resources for Clubs

Does your club run training courses or exams for newcomers? If so, read on...

RASA has put together a free **Amateur Radio Welcome Pack**. These packs comprise a portfolio folder which includes a number of useful documents and reference sheets.

Give your students some practical and relevant material to take away at the end of the course.

Included in this **Welcome Pack** are some documents and information sheets to help your students get started.



- Welcome to Amateur Radio Guide Book
- VK Regulations Handbook
- Getting started with Repeaters
- Australian Band Plan Quick Reference Guide
- Interference Resolution (QRM) Process Guide
- Useful Web sites information sheet

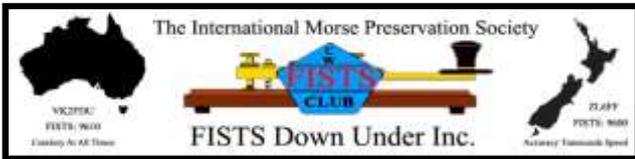
If your club is running a course and would like to provide these resources to your students just send us an email. This is a free resource. We only ask that you cover postage costs.

Have your Club President email us at info@vkradioamateurs.org

National Special Interest Groups

Links to VK national groups with a brief explanation of their activities. Click on the image to visit their web site.

Morse code – VK/ZL site all about the code



VK QRP Club – low power operation



Parks n Peaks – all about operating portable



VK Contest Club – VK Contesting



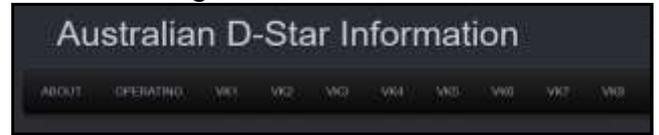
QRM Guru – resolving interference



VK DMR Network – Australia's largest digital radio network



D-Star – Digital Radio



RAOTC – for amateurs licenced 25 years or more



ALARA – Ladies Amateur Radio Association



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