

Messages and news from RASA
The Radio Amateur Society of Australia



June 2024

# Celebrating Class Licencing for Amateur Radio in Australia





Your Gateway to the

Amateur fladio provides virtually unlimited appartunities for you to explore the terminal, scientific and social paperts of this truly global hobby.

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FREE Foundation
Study Guide



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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.

You are welcome to join RASA or simply make a donation to support our work.

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#### **Contributing Items For QTC Magazine**

QTC Magazine welcomes contributions for future editions. When planning to submit an article, please read our submission guidelines first. Following the guidelines will save you and the editing team a lot of time and effort. The guidelines are HERE

### Cover picture credit:

Thanks Ian VK3BUF for this creative and delicious offering in recognition of the new Class Licence.





## Out Now! Foundation Level Study Guide

RASA is pleased to announce the Foundation Level Study Guide (FLSG). This innovative new learning resource is targeted at newcomers preparing to sit the Foundation Level exams under the Amateur Radio Class Licence.

Like all our resources, this is free and available to everyone. You don't need to be a member, and you don't need to pay; we want to help make your entry to Amateur Radio as easy as possible.

With the new Class Licence there are changes to what and how you prepare for the exam. Make sure you have the most up-to-date information. And save yourself some money on the way.

This study guide is free, and ACMA Amateur Radio exams are free. All you need to pay for is your callsign; and only once.



## Your Gateway to the World of Amateur Radio

Amateur Radio provides virtually unlimited opportunities for you to explore the technical, scientific and social aspects of this truly global hobby.

#### A Free Amateur Radio Learning Resource

This multimedia learning resource has been developed by RASA and is provided free of charge.



info@vkradioamateurs.org

Web: vkradioamateurs.org

#### These are what differentiates the RASA Study Guide from the other resources:

- Free
- Online
- Multimedia
- · In-house tutorial videos
- Tailored links
- Supported with a ticket-based help system
- Contains up to date and important information on the Class Licence

For more information or to download your free copy, visit our website. You don't need to be a RASA member.

And, as always, we welcome your feedback. We hope you enjoy this new resource, and welcome to Amateur Radio.



## **Editorial**

Welcome to the June edition of QTC Magazine. And we'll start with an apology for missing the March edition. As you'll read, our team has been busy creating a first-in-kind Foundation Level Study Guide. More on that later.

There has been a lot going on since we heralded in 2024 and RASA has been busy behind the scenes. Here at QTC we've been focussed on various initiatives and helping with documentation and web-site updates, as well as reading and analysing the changes resulting from the new Class Licence.

The new callsign prefix changes have created some noise, although, for the most part, these changes wont impact our day-to-day DXing. They will, however, take some adjustment both nationally and internationally. In summary the major changes are:

Lord Howe Island (formally VK9) is now VK2 Macquarie Island Heard Isl (formally VK0) are now VK9

International visitors also face some restrictions in how they operate from VK.

However, these changes impact very few people. Our focus remains on the big-ticket items for our members and the broader Amateur Radio community,

We have news and views from VK and around the world. And Ian VK3BUF has been digging into the history of Amateur Radio; his article makes for a fascinating read.

The results from the 2023 RASA DX Contest are out. Congratulations to Alan VJ6X the 2023 Contest Winner, and to Norm VK3XCI for winning the Participation Prize.

There's still time to get busy and enter the contest in 2024. Read about it and visit the website for details. And don't forget, if you simply have a go and meet our minimum entry criteria and you'll be in the draw to win a great prize. This year it's a . You still have time... head to our to read the rules and get busy!

On the calendar we have PerthTech, the annual VK WWFF get-together and Antennapalooza. Read more in this edition of QTC.

In other headline news, RASA President, Paul Anslow VK2APA, introduces RASA's Foundation Level Study Guide (FLSG). This innovative new learning resource is targeted at newcomers preparing to sit the Foundation Level exams under the new Amateur Radio Class Licence.

At RASA we've always done things differently. We believe our resources should be available to everyone, not just members. You don't need to be a member, and you don't need to pay; we want to help make your entry to Amateur Radio as easy and cost effective as possible.

#### Class Licence

You'll read more about the Class Licence in this edition of QTC. Whilst there are no practical impacts to your day-to-day enjoyment of the hobby or how you use your station, these new arrangements have generated a lot of debate and discussion across the community. There have also been some serious concerns and objections raised over some of the changes.

These changes have resulted in queries, objections, suggestions being sent to the ACMA. In his President's column Paul addresses some of these issues.

As always, we welcome your feedback. We hope you enjoy this edition of QTC, and please drop us an email if you have feedback or questions.

#### 73, Editorial Team



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#### From the President

Paul VK2APA

Here we are halfway through 2024, and RASA has been busy on a new Study Guide for Foundation Level candidates, as well as the details associated with the transition to the new Class Licence.



In this edition of QTC, we again clarify what the Class Licence means to Amateurs, and are in dialogue with the ACMA about some unintended consequences of the changes made in February. We understand amendments and further changes are in the pipeline, however these will take time to be implemented, as they involve amendments to a legislative instrument.

The subject of bullying and poor behaviour in Amateur Radio social media has again been raised. How long must this go on? Read what one person has done about it.

There is also an interesting article which looks at the evolution of National Amateur Radio Societies internationally, and some may be surprised at the findings. Documenting our history accurately is important, and Ian VK3BUF has clarified a few very important historical facts.

The big news this month of course was the launch of the . The guide is available free as an online magazine, as a PDF download, and soon will be available on Kindle both as an ebook and a printed paperback for a small charge.

The Foundation Study Guide is the result of twelve months of research, writing, reviewing, revising and the designing of graphics. The big difference between our online study guide and a "dead tree" book is the use of live links to information sources and instructional videos.

Of course, it also includes all the important changes resulting from the Class Licence, so please spread the word and help prospective Amateurs access this free resource. The project team, consisting of about eight people, was led, cajoled and enthused by Chris VK3QB. RASA greatly appreciates Chris' work leading this project.

The Foundation Level Study Guide is one of many resources developed by RASA and its people, which are free to all Amateurs. RASA's slim structure and modern, efficient management style enables us to be creative, and to respond quickly to what is happening in Amateur Radio in Australia, and all of this on a tiny, but efficient budget.

I'm often asked the question "Why do we need two Amateur Radio Representative bodies in Australia"? That question has been answered many times, and the need for RASA remains as relevant today as it did in 2018.

RASA has, and continues to demonstrate to the Australian Amateur Radio community what is possible with a \$5,000 annual budget, a focus on pragmatic outcomes, and a recognition that a modern, dynamic, representative body doesn't need the burden of a twentieth century business model. My team and I often wish we had just 10% of the WIA's annual budget; even just their Office, General and Utilities expenses, totalling \$45,000 would be directed to real-world benefits for our hobby. And of course, the \$18,000 spent on accountants and book-keepers alone could contribute towards a great marketing campaign. There is so much more important work to be done.

Of course, nothing happens without volunteers. We are always looking for willing and capable people to help us in our mission. Some teamwork with the WIA and larger clubs could yield benefits in this area. We all have a responsibility to encourage more sharing of resources, people, and funds if we really want to change the trajectory of our hobby.

If you feel you can contribute, or even have some good ideas, or any feedback at all, please drop me an email.

73, Paul Anslow, VK2APA
President, RASA
president@vkradioamateurs.org
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## Class Licence - It's Here!

We have seen a fundamental change to our licencing regime with the introduction of the Class Licence. In spite of this, the day-to-day operation of your station and your privileges remain unchanged.

That is worth repeating: the introduction of the Class Licence has no material impact on your day-to-day operation. You can still operate on the same bands with the same power, same modes, construct and modify equipment, and use your radio the same way you did prior to the Class Licence.

Annual Licence fees have been abolished.

For general information let's work through each of the changes.

#### Licence Fees & Renewals

You will still need to pay for a new callsign. However, annual renewal fees are a thing of the past. These are now zero. You effectively have a licence for life with no Government charges.

#### Repeaters & Beacons

No changes. Repeaters and Beacons remain as Assigned Licences and will continue to be registered in the Register of Radiocommunication Licences (the RRL). We understand that fees and the renewal process remain unchanged.

However ACMA have flagged simplification of the assignment process for new repeater/ beacon allocations – more on this later in the year.

#### **ACMA Website:**

The ACMA have made numerous changes to their website, and for the most part these changes are comprehensive and well written. There are some anomalies and we've raised these with the ACMA.

The link to the ACMA Amateur Radio landing page is:

https://www.acma.gov.au/amateur-radio

#### **ACMA Assist**

ACMA Assist is an online portal you can use to:

- view your existing licences
- view and pay your radiocommunications licensing invoices
- · update and manage your contact details.

You will need to create an account. Visit the page for more information.

**Operating Procedures** 

It's great to see that ACMA have updated the Operating Procedures section of their website. You will see that RASA's VKregs.info website has been updated as well, and on the Operating Procedures page we now provide a link directly to the ACMA website.

We value the relationship we have with the ACMA and are pleased to link our content to the ACMA website for the benefit of the Amateur Radio community.

There are a couple of areas not covered by ACMA that we would like to re-enforce:

When transmitting, you should avoid 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.

#### Callsign Register

As a result of the Class Licence, our callsigns are being removed from the Register of Radiocommunication Licences (the RRL). We understand this will be a progressive process, so you may or may not continue to see your callsign in the RRL for some months.

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The ACMA have now implemented a simple register which reports the status of callsigns. This new database will simply confirm if a callsign is assigned, and the qualification of the callsign holder.

There has been considerable controversy over the "secret" callsign register. Amateurs are used to looking up a callsign in the RRL and finding the callsign holder's name, address and class of licence. The flip side of this of course is that it is a breach of privacy.

There are numerous reasons why an amateur may not want his or her name or address published in the public domain.

For those who are comfortable publishing their personal details there are various well-known options available:

- personal websites
- club websites
- and registers such as QRZ.com

# New Callsign Prefixes – The Devil in the Detail

The new callsign prefix allocations appear to have caught the sector unprepared. We cannot find any consultation with the Amateur Radio Community in the decision-making process.

As best we can tell, when crafting the new Class Licence, ACMA lawyers reverted to the External Territories Act as a reference. As a result, we are now faced with what is largely legislative driven change to how we allocate and use our callsign prefixes.

#### In Summary (major changes highlighted):

- Mainland Australia and Tasmania: no changes VK1-VK8
- Norfolk, Willis, Cocos (Keeling), Christmas Islands and Mellish Reef: no changes VK9
- Heard Island: formally VK0 will now be VK9
- Macquarie Island: formally VK0 will now be VK9
- Antarctica South of 60° South: no change -VK0

- Lord Howe Island: formally VK9 will now be VK2
- Ashmore & Cartier Islands: formally VK8 will now be VK9
- Jervis Bay: no change, VK2

Both RASA and the WIA are in dialogue with ACMA over these changes.

## Background from ACMA References: What constitutes VK0 and VK9

Section 12 of the

Radiocommunications (Amateur Stations)
Class Licence 2023 specifies the conditions
for using call signs, and how VK0 and VK9 call
signs are defined and used:

(7) If a person is assigned a call sign with the prefix VK0, the person must not transmit the call sign unless the person is located in the Territory.

Note: See sections 15 and 313 of the Act.

(8) If a person is assigned a call sign with the prefix VK9, the person must not transmit the call sign unless the person is located in an external Territory other than the Territory.

Note 1: See section 15 of the Act. Note 2: External Territory has the meaning given by the Acts Interpretation Act 1901 (9) In subsections (7) and (8), the Territory has the meaning given by the Australian Antarctic Territory Act 1954.

What does all this mean? We are seeking clarification but effective February 2024 the following applies:

VK0 is for all islands and territories situated south of the sixty degrees. This excludes Macquarie and Heard Islands, neither of which are sufficiently south of the equator. This means that VK0 will only apply to operations on the Antarctic shelf.

VK9 is for the Commonwealth of Australia and, when used in a geographical sense, includes Norfolk Island, the Territory of Christmas Island and the Territory of Cocos (Keeling) Islands, Coral Sea Islands (Mellish & Willis), as well as a couple of surprises north of Darwin but does not include any other external Territory.

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VK9 Norfolk Island, Willis Island, Mellish Reef, Christmas Island & Cocos Keeling Island

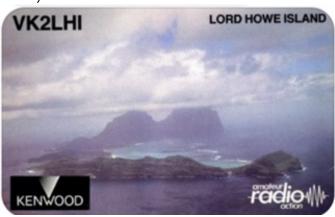
VK9 Heard Island & Macquarie Island

VK9 Ashmore and Cartier Island (these are located off the Northern Territory but are within 350km of mainland Australia (formally treated as VK8). Note that whilst activations of these two islands may be under a VK9 callsign, they will be regarded as mainland Australia (VK) for award purposes (eg. ARRL DXCC Program)

VK2 Lord Howe Island (formally VK9)

It is important to note that the Regulator dropped the suffix designator for external entities over twenty years ago. For example, VK9N no longer identifies the station as being on Norfolk Island. In fact, VK9L is a valid 2x1 contest callsign. The same goes for VK9C (Cocos Keeling), VK9X (Christmas Isl) and the other VK9 and VK0 External Entities.

And before the howls of indignation that "we" cannot change the callsign prefix of a DXCC entity, some older amateurs might recall that it is not too long ago that Lord Howe Island was VK2.... With a DXpedtion signing VK2LHI (ca 1983)



Another more recent DXpediton to Swains Island signs W8S... for an Entity with the formal Prefix of KH8/S.

So, whilst most of us are familiar with and would like to see the status-quo remain, we must be mindful that the tail does not wag the dog. The ACMA sets our callsign templates (subject to ITU Tables) and should these new arrangements align with Government Policy then it is up to us to adapt.

Once again, RASA is in dialogue with ACMA over these changes.

And, let's keep in mind, the use of VK0 and VK9 callsigns really only impacts a tiny percentage of callsign holders. The DXCC Entity won't be changing, nor will the award credit.

# New Regulations for International Visitors

There are some new regulations for international visitors. You can read the detail here.

#### In summary:

International visitors from approved countries can operate from Australia for up to 365 days using their own callsign prefixed by the relevant VK geographical prefix.

If visiting for up to one year, you can use your callsign preceded by the appropriate VK prefix, as follows:

- For mainland Australia and Tasmania (VK1-8): VK
- Lord Howe Island: VK (note this is a recent change)
- Norfolk Island, Mellish Reef, Willis Island, Cocos Keeling and Christmas Islands: VK9

(Note that VK9 dropped the first letter signifier in the suffix about 20 years ago: eg. VK9N for Norfolk Isl is not a valid prefix-in fact VK9N is a contest callsign)

For example, a New Zealander visiting Sydney should sign VK/ZL1YYY. If they wish they could sign VK2/ZL1YYY to provide some geographic information, but this is no longer a regulatory requirement.

A visitor (or DXped) to Norfolk Island should sign VK9/ZL1YYY. They cannot sign VK9N/ZL1YYY. VK9N is not an approved VK prefix. A visitor (or Dxped) to Lord Howe Island would now sign VK/ZL1YYY. Lord Howe is now considered a part of VK2, not VK9. Of course, it remains a unique entity for DXCC and related award purposes.

As with many other countries, these changes are important. The ARRL DXCC Desk can be



notified of the correct DXCC Entity for award purposes, and QRZ dot com can also be advised if a change to the system defined default allocation is required. Logging programs can be manually updated.

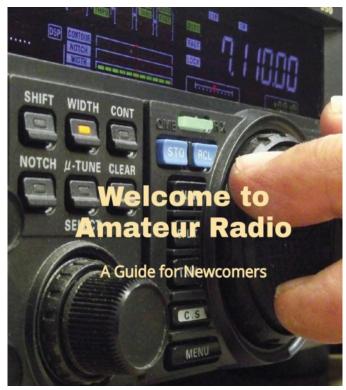
Remember, Government radio regulators assign amateur radio callsign prefixes. Award and database administrators will need to update their systems and callsign prefix tables. (e.g. ARRL DXCC, ClubLog, grz.com etc)

Permanent residents of external territories can only use their VK9 or VK0 callsigns from the designated territory. Eg. VK9XX cannot sign VK9XX portable 2 if visiting Sydney.

Obviously as the ACMA and the Amateur Radio community work through these changes there may be some inconsistent applications of policy, as well as spill-over from pre-Class Licence implementation.

You will see some international DXpedtions using VK9 callsigns (eg. VK9LA) as this was assigned prior to February 2024. By contrast, another to Lord Howe Island will be signing VK2/W7xxx.

RASA is in dialogue with the ACMA over these changes and we will keep you updated in the coming weeks and months if and when there are updates.



The RASA Welcome to Amateur Radio Guidebook provides an introduction to our hobby for new Foundation class amateurs.

The book is published digitally. It contains many hotlinks to external websites with useful information.

It is available as an Acrobat pdf file suitable for reading on a PC or tablet.

The Welcome to Amateur Radio Guidebook is available from the RASA Website.

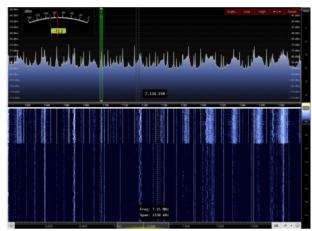


# Resolving interference for Amateur Radio

Does HF look like this at your QTH? Read on....

- \* Are you suffering QRM/EMI?
- \* Do you need online assistance to resolve your noise issues?
- \* What should you expect from the Regulator?

QRM Guru is a RASA online resource to help you resolve your QRM/EMI issues. QRM GURU is a free resource. Visit https://qrm.guru/



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## Callsign Trends for Amateur Radio in Australia

As Amateur Radio in Australia moves to a class license, it is appropriate to take stock of where we are today. We analysed the callsign data for Advanced, Standard, and Foundation licenses for each state and territory over three year intervals, with the most recent data being from January 2024. We have also included Beacons and Repeaters over the same period.

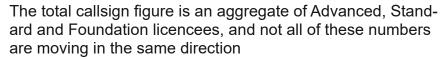
(The data was sourced from the ACMA RRL on 11 January 2024)

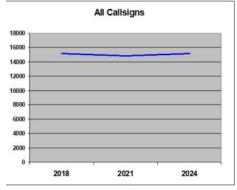
Trends are hard to read from figures alone, so we have plotted some of the results for clarity. The data set is also very limited; we didn't have access to more detailed data that would illustrate entry points for newcomers, exam statistics or upgrade numbers. Some broad assumptions have been proffered as discussion points.

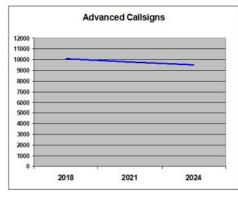
For readers who wish to dig a little deeper, the full data set has been included at the end of this article.

#### All Callsigns

The total number of callsigns registered is currently 15,181. This figure has remained fairly static over the past six years, with an increase of only 1.4% over the period. However, when we analyse the data more closely, we see that this is not the whole story.







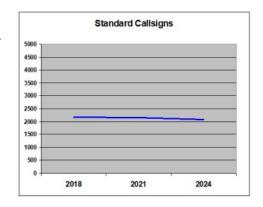
#### **Advanced Callsigns**

Advanced Licences have fallen from 10,064 to 9,523. A reduction of 541 callsigns, or 5.8%. This pattern would seem to indicate that many long-standing licenceesare either losing interest in the hobby, or are departing due to old age and are not being replaced by newcomers or those upgrading their qualifications.

#### Standard Callsigns

This figure has been quite flat, with a reduction of just 87 over the six years. This suggests that not many have gone on to become Advanced operators, as that figure is still falling. Therefore the number of Standard operators who are drifting out of the hobby (for various reasons) are being replaced by new operators and upgrades from Foundation operators.

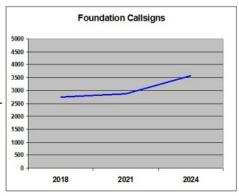
Can we assume that Standard Level licencees are choosing not to upgrade? If so, what can we take away from this assumption?





#### **Foundation Callsigns**

As the Foundation Level qualification is the entry point into the hobby for many, we would expect maximum movement in this class. In the six year period we have seen a jump of 838 callsigns, about 30%. Because of the lacklustre trends of the other two qualification classes, it would appear that many who enter the hobby at the Foundation Level are comfortable remaining at this level, rather than attempting the upgrade process.



#### In Summary

Over the six years portrayed here we have seen some interesting trends. We will continue to monitor the numbers and investigate the trends.

Overall, licence numbers are static. Our hobby is holding it's own; but only just. And it's the Foundation level that is seeing growth. The Advanced Level is in decline.

We could draw a broad conclusion that our hobby is becoming more black box operational and less qualified. This will have long term ramifications for Amateur Radio which need to be analysed.

Historically, there was always a trend for amateurs to follow an upgrade path, but this does not appear to be the case today. There are various reasons for this.

- Many clubs lack the resources to provide training
- courses.
- The 'Callsign for Life' concept has removed the sense of achievement and initiation previously experienced by those who saw the value in having a callsign aligned with a qualification level.
- Perhaps the most influential (anecdotally) both the Foundation and Standard levels have seen quantum increases in privileges, removing the motivation to upgrade for many.

Perhaps the removal of examination fees that came with the Class license will reverse that trend? We don't think so.

Whilst some amateurs are satisfied with their qualification, the challenge for clubs and mentors is to encourage Foundation and Standard Amateurs to upgrade.

This will be an area of focus for RASA in the second half of 2024 and as we move into 2025.

We'd welcome your thoughts and ideas.

**CALLSIGN CENSUS SEPT 2018** 

|            | All States | VK0 | VK1 | VK2  | VK3  | VK4  | VK5  | VK6  | VK7 | VK8 | VK9 |
|------------|------------|-----|-----|------|------|------|------|------|-----|-----|-----|
| Advanced   | 10064      | 9   | 257 | 2803 | 2716 | 1897 | 917  | 948  | 389 | 94  | 34  |
| Standard   | 2169       | 0   | 49  | 583  | 594  | 405  | 211  | 195  | 97  | 30  | 5   |
| Foundation | 2738       | 1   | 110 | 741  | 753  | 496  | 287  | 220  | 114 | 13  | 3   |
| Total      | 14971      | 10  | 416 | 4127 | 4063 | 2798 | 1415 | 1363 | 600 | 137 | 42  |
|            |            |     |     |      |      |      |      |      |     |     |     |
| Repeaters  | 485        | 0   | 6   | 123  | 139  | 101  | 38   | 42   | 28  | 7   | 1   |
| Beacons    | 39         | 0   |     | 2    | 6    | 6    | 6    | 14   | 1   | 2   | 0   |

#### **CALLSIGN CENSUS March 2021**

|            | All States | VK0 | VK1 | VK2  | VK3  | VK4  | VK5  | VK6  | VK7 | VK8 | VK9 |
|------------|------------|-----|-----|------|------|------|------|------|-----|-----|-----|
| Advanced   | 9772       | 11  | 270 | 2715 | 2630 | 1833 | 889  | 922  | 384 | 92  | 26  |
| Standard   | 2154       | 0   | 42  | 587  | 593  | 402  | 211  | 194  | 95  | 26  | 4   |
| Foundation | 2871       | 0   | 132 | 784  | 798  | 498  | 307  | 219  | 118 | 12  | 3   |
| Total      | 14797      | 11  | 444 | 4086 | 4021 | 2733 | 1407 | 1335 | 597 | 130 | 33  |
|            |            |     |     |      |      |      |      |      |     |     |     |
| Repeaters  | 499        | 0   | 6   | 128  | 152  | 97   | 37   | 43   | 26  | 10  | 0   |
| Beacons    | 36         | 0   | 0   | 3    | 6    | 6    | 4    | 13   | 2   | 2   | 0   |

#### **CALLSIGN CENSUS JAN 2024**

|            | All States | VK0 | VK1 | VK2  | VK3  | VK4  | VK5  | VK6  | VK7 | VK8 | VK9 |
|------------|------------|-----|-----|------|------|------|------|------|-----|-----|-----|
| Advanced   | 9523       | 14  | 274 | 2639 | 2553 | 1801 | 844  | 896  | 382 | 94  | 26  |
| Standard   | 2082       | 0   | 43  | 572  | 570  | 405  | 192  | 183  | 87  | 27  | 3   |
| Foundation | 3576       | 0   | 181 | 956  | 955  | 662  | 323  | 335  | 139 | 21  | 4   |
| Total      | 15181      | 14  | 498 | 4167 | 4078 | 2868 | 1359 | 1414 | 608 | 142 | 33  |
|            |            |     |     |      |      |      |      |      |     |     |     |
| Repeaters  | 515        | 0   | 6   | 131  | 154  | 109  | 39   | 43   | 24  | 9   | 0   |
| Beacons    | 37         | 0   | 0   | 3    | 8    | 7    | 4    | 13   | 1   | 1   | 0   |
|            |            |     |     |      |      |      |      |      |     |     |     |

Please send us an email. info@vkradioamateurs.org



# Keep your contact details current with ACMA

Now that the ACMA has transitioned to a Class License for Amateur Radio, Amateurs can retain their callsigns indefinitely. That's great. And no more license fees.

However,the ACMA needs to know when Amateurs have drifted away from the hobby, died, or moved overseas. They have indicated that at approximately 5 year intervals they will make contact with all Australian callsign holders to confirm that they are still in use. If no contact can be made, it is likely that unused callsigns will be released to the pool of available callsigns.

It is therefore important that the ACMA can still contact you if they need to, by post, email or even phone number.

They have added a page to their new website to facilitate this. The same form can be used to correct errors in spelling and licence information.

Use this link to access the ACMA update process.

If you received correspondence from the ACMA over the past two months that correctly identified you and your callsign, then it is a fair indication that your details are already correct.

If you didn't receive that letter, then contact the ACMA to resolve the issue.

## Has your Licence Lapsed?

RASA reached out to the ACMA to enquire what the correct procedure was for those whose licence had lapsed. The ACMA responded with the following information:

Amateur operators with lapsed licences and/or do not hold a copy of their qualification can contact the Customer Service Centre to request a search of their licences and/or qualifications in the ACMA database.

As part of the request, the following details should also be provided (if available):

- the name, type or class of amateur licence and/or Australian amateur qualification that was issued (example: Amateur Operator's Certificate of Proficiency (AOCP) or Amateur Operator's Limited Certificate of Proficiency (AOLCP))
- · date of birth
- date of when the licence and/or qualification was issued (approximate dates can be provided).

Additionally, in accordance with the amateur radio call sign policy, replacement call signs can only be assigned in limited circumstances, such as when there:

- are concerns about an amateur operator's privacy or welfare resulting from use of their call sign
- is incorrect assignment of a call sign to an amateur operator by the ACMA.

Therefore, those seeking to re-engage in amateur radio must apply for a new call sign, to operate under the Radiocommunications (Amateur Stations) Class Licence 2023.

## Have you changed address?

There has been some confusion around the requirements to notify ACMA when an Amateur changes their address.

You only need to provide an address when you first apply for a callsign. When moving house, be it locally or interstate, you do not need to notify ACMA. However, ensure your contact details are always up-to-date. For most of us, this will be an email address.





## Space Weather, Solar Indices & Propagation Conditions

#### **Australian Space Weather Forecasting Centre**

There are some excellent online resources to help you understand and monitor propagation conditions.

Solar Ham: https://www.solarham.com/

Space Weather Woman: https://www.spaceweatherwoman.com/

Voice of America Coverage Analysis Program - VOACAP https://www.voacap.com/hf/

Solar Conditions & Ham Radio Propagation https://solar.w5mmw.net/

National Oceanic and Atmospheric Administration https://www.swpc.noaa.gov/

In addition to these great international resources, don't overlook Australia's own Space Weather Systems services from The Bureau of Meteorology.

The SWS website also has some very good educational material SWS - Educational (bom.gov.au)



## **RASA DX Contest**

The objective of this contest is to encourage greater participation and activity on the MF and HF bands. The contest is deliberately designed as a long form event, as many amateurs are unavailable for the more traditional contests held on weekends.

It also provides the opportunity for those who like to operate in a more relaxed fashion to still take part in a

WRASAW)
DX Contest

national contest. This also provides amateurs the opportunity to use their 2×1 Contest Callsigns.

#### Exchange:

There are no formal exchange requirements for this contest, other than the normal minimum standards for a QSO in each mode. (e.g. exchange of signal reports and name for SSB and CW, and callsign, locator and signal SNR for Digital).

For FT8 and FT4 modes, each contact must end with 'RR73'. For other digital modes, you must exchange a Maidenhead locator

#### Scoring:

You get one point per QSO per band/slot/mode. Duplicates are permitted. Details HERE.





RASA PRODUCES HUGE
RESULTS FROM A TINY BUDGET

Foundation Level Study Guide

**QTC** Magazine

**QRM** Guru

ARTS, VKRegs

Representation to Government



RASA relies on member fees and donations, so that we can offer our resources free to everyone. We're inviting you to sign up or renew your membership, or simply donate. You can do this at our website: ykradioamateurs.org

#### Where we came from

RASA, the Radio Amateur Society of Australia, was formed several years ago to provide an alternative representative body for Amateur Radio in Australia, and also to promote and grow the hobby through the provision of educational and technical resources.

#### What we do

RASA provides its service and resources free of charge to all Amateurs. No membership of RASA is required. Take a quick look around our website, , to see how many resources are available to Amateurs. And they are free. The QRM Guru QRM Kill kits are the only things we sell.

#### How we work

RASA is a small organisation, and we run on a small, tight budget. All of our website hosting and domains are paid for by RASA, as are software licences. RASA has a good team of volunteers who help create and maintain our resources.

#### **Our latest opus**

The recently launched Foundation Level Study Guide is a good example of a twelve month long project, by a team of volunteers, producing a first class publication, which is now available free to everyone.

#### So - where does the money come from?

RASA's income is derived from member contributions and donations. For member fees we ask for \$10 per annum, however members or donors can pay as much and as often as they feel able or willing to do. That's up to you.

Visit our website, and select the "Join or Renew" menu item.

Thank you.
The RASA Team



## Hugo Gernsback and the world's first Amateur Radio Societies

#### A Research Article by Ian Jackson VK3BUF

Many Amateurs have a soft spot for a good science fiction story. Perhaps they have heard of the Hugo Award for best Sci Fi story each year. The Hugo Award is a tribute to Hugo Gernsback who started the Amazing Stories magazine in 1926. Apart from his achievements in imaginative literature, there is another perspective to this man and his contributions to Amateur Radio as we know it today. Before telling his story, it is important to understand the world in which he grew up.

Marconi made an amazing, but tenuous wireless contact across the Atlantic in 1901. News of this new medium spread around the world and sparked immense interest. It was exactly what young, creative people everywhere wanted to learn more about. When it came to wireless communications, everyone at that time was an 'Amateur'. The medium was a clear threat to telegraph monopolies in many countries. Governments and their respective military



branches saw its potential to help them – and their enemies, advance their causes. The wireless was embraced and feared at the same time.

It was hard for enthusiasts to get started. There were no global information sources as we have today. There were no trade stores from which experimenters could buy radio components. If someone wanted to create an electrical device, they first had to create their own building blocks from basic materials.

As has always been the case, those who shared common interests came together and formed special interest groups, particularly around centres of education. In 1908 the Wireless Telegraph Club of Columbia University was formed, where experiments in wireless reception were carried out. This may have been the first interest group, but they didn't get to transmit until 1915.

When looking back to the early pioneers of communications, there is a tendency to visualise them as old men. They weren't. Most of them were working in their prime. If those same pioneers could see Amateur Radio today, they would probably be shocked at the lack of young, enthusiastic experimenters.

Hugo Gernsback was born in Luxembourg 1884 and emigrated to America in 1904. He was a young entrepreneur with lots of ideas. He saw the potential and the opportunities that would come from this new medium. He developed some improvements in battery technology and this generated sufficient wealth to launch his next enterprise.



In 1908 Gernsback published a magazine called Modern Electrics and wrote many articles. It was a hit and distribution spread around the country. It became a focal point for wireless technology. From this, the next logical step was to create a national interest group.

In 1909 he founded the **Wireless Association of America**, the world's first true Amateur Radio association. This was the unifying force that America had been wanting for some time. Its aims were listed as **'Furthering the interests of wireless telegraphy and aerophony in** 



**America**'. It would appear that the word 'aerophony' has disappeared into the annals of history, but it must have been acceptable at the time.

By 1910 the association had over 10,000 members and by 1912, it had jumped to 22,000 members. They had a simple membership model. There were no fees, but plenty of membership certificates were issued. Membership was open to American Citizens possessing a wireless station (transmitter, receiver, or both). For fifteen cents they could send away for a Wireless Association of America pin.

#### Back In 1909 Gernsback as the editor wrote some poignant words about the hobby:

"It affords the Editor genuine pleasure to offer to the thousands of wireless enthusiasts an appropriate New Year's present in form of the Wireless Association of America. Every reader perusing the announcement of the association, found elsewhere in this issue, will agree that such an organization has been needed for a long time. Wireless Telegraphy may now be said to have left the experimental stage. It has become an everyday necessity, and already rivals the wire and cable telegraph. Between sea and land wireless is of the utmost importance and to-day forms as necessary an adjunct to every up-to-date vessel, as its coal and lifeboats.

The greatest aim of the Wireless Association of America is to bring young experimenters together—not in clubs, but in practical work. The Editor would like to see every reader of "Modern Electrics" in possession of a wireless station; there is really nothing more instructive and entertaining than a wireless between two isolated, or for that matter, distant points in a city. The necessary instruments, thanks to competition are now so cheap that they are in reach of everybody, and we have as yet to hear of the person regretting an investment in wireless instruments.

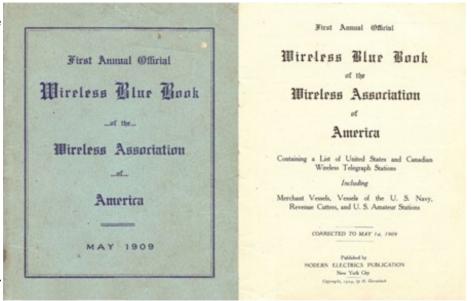
We are now on the threshold of the wireless era, and just beginning to rub our intellectual eyes, as it were. Sometimes we look over the wall of our barred knowledge in amazement, wondering what lays beyond the wall, as yet covered with a dense haze."

Gernsback understood the value of promotion, publication, and popular fads. In May of 1909 the Wireless Association of America launched its first newsletter, listing all known wireless radio

stations in the USA and Canada. It was an immediate hit.

Like many entrepreneurs both before and after his time, a few of his business practices were regarded by some as 'a bit suspect', and his position in history was not without controversy. There were many rivalries.

However, and as is often the case, some of the most eccentric entrepreneurs also acted as a catalyst for change and expansion. For better or worse, they created the



Another first - The Modern Electrics magazine first published in 1909



foundations which shake and change our world.

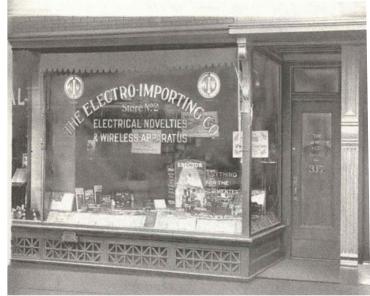
This all took place at a time where the true potential for radio communications was yet to be realised by the general public and there were plenty of conflicting interests. Many in politics and the American military, particularly the US Navy, were steadfast in their belief that civilians should never have access to wireless communications. It was too valuable and potentially gave enemies and spies too much power. At that time, the best practise of communications technology was still the telegraph and the telephone.

Inevitably, industry leaders and technicians with skills in wired and cabled systems were cast into positions of influence at the wireless stations with their ageing hardware, regardless of their actual knowledge in radio.

#### In 1910 Gernsback wrote:

'The trouble is that the majority of commercial and government stations have antiquated instruments and do not care to acquire new ones. Their operators are almost entirely wire telegraph men who have not the slightest idea of wireless nor are they interested in it.'

In the same year Gernsback opened a store in West Broadway dedicated to components for wireless equipment. This was called the 'Electro-Importing Company' specialising in Electrical Novelties and Wireless Apparatus.



Gernsback's first component store in New York, 1910.

The first retail outlet of its kind

It was the first of its kind. This store and the gadgets it sold would become the industry leaders in electrics and electronics in the USA.

In many ways this was a precursor to what Dick Smith Electronics did for hobbyists in Australia seventy years later. His store was also the first seller of vacuum tubes to the general public.

Part of the business plan was the introduction of a catalogue detailing all of the components on offer for Amateurs and experimenters. This catalogue was copied many thousands of times across the country and was highly sought after.

By 1911 the radio spectrum was a place of mayhem. A new wild frontier. Communications was entrenched below about 1500 kHz, close to the top of the AM broadcast band as we know it today. Transmitter and receiver selectivity was very poor. Military equipment was broad, untuned and primitive, but Amateurs were early experimenters with resonant coils to control bandwidth. Within any given 100 mile radius, most stations could hear most other stations. Military and shipping outposts handling important messages were mixing daily with these new 'Amateurs' and their dreadful experiments. There was pressure for a blanket ban on personal and hobby wireless communications. Across the Atlantic, the English were having similar problems between experimenters and commercial wireless operators.

Editorials by Gernsback in the magazine Modern Electrics lobbied for compromise between conflicting interests, lest a complete ban should descend upon this growing sector. Gernsback wrote that the spectrum between 200 and 1,000 metres should be reserved for commercial-military use and Amateur experimenters should retain access to frequencies above 200 metres.



The prevailing opinion was that all the good wireless action was limited to frequencies below 200 metres. Frequencies above 200 metres were thought to be pretty useless economically. While the Amateurs of the day begrudged losing the best parts of the spectrum, they conceded that this move would be better than nothing at all. This motivated experimenters to push the spectrum limits higher and higher each year.

Gernsback's proposal was accepted and its wording was reflected in the passage by Congress of the Wireless Act of 1912. The implementation of this act was also influenced by the sinking of the Titanic. The true value of this wireless medium was driven home by this tragedy. Almost simultaneously, London followed suit and in 1912 the English banned amateur transmissions on frequencies below 200M (1,500kHz). The die was cast for Amateur Radio as we know it today.

#### Lee de Forest was a Foundation Member.

Lee de Forest invented the Triode vacuum tube in 1906 and was a foundation director when the Wireless Association of America was formed. This was a time where there was plentiful legal conflict and patents flying in many directions. de Forest eventually sued Gernsback for patent infringement, as Gernsback had been selling tubes in his shop without paying royalties. Despite this, de Forest continued to publish articles in Gernsback's magazines for many years. In 1912 de Forest was ejected from his own company by a fraudulent investor who seized the company and subsequently went bankrupt. There was a lot going on!

In preparing this article many sources were researched and something of an anomaly appeared. While some books and documents went into great detail about the Hugo Gernsback legacy, other sources focused on the origins of the American Radio Relay League (ARRL) where the bulk of historical ARRL articles fail to mention Hugo Gernsback at all.

This was explained in part by a series of letters sent from the ARRL to the Modern Electrics magazine where the ARRL sought advertising space for the League. This was rejected many times on the basis of 'creative differences'. The simplified reasoning was that the ARRL was all about message relaying and the Modern Electrics was all about experimentation. This dispute seems to have been the basis for a long standing conflict between the key players of the day.

#### The ARRL Beginnings

Hiram Percy Maxim, was the son of Hiram Stevens Maxim, the designer of cars and the Maxim machine gun. In 1914 Maxim was a member of a radio club in Hartford, Connecticut. He believed that they could greatly expand the range of wireless communications by establishing relay station networks across the country to pass on messages, hence he wanted to start a 'Radio Relay League'. There were disagreements with the club, and Maxim left and launched the ARRL in 1915. It was then that they launched the QST magazine.

Volumes have been written about the ARRL since these early beginnings which are beyond the scope of this article. (An excellent read is Two Hundred Metres and Down published in 1936 by Clinton DeSoto)

#### North of the Border

The first Canadian amateur licence was issued in 1911 to Frank Vaughn. By 1912 when commercial and Amateur operators in





Britain and the USA were arguing about frequency allocations, apparently Canada had a more relaxed approach and simply issued a decree via the Canadian Radiotelegraphy Act saying 'Play nice you guys'

#### **Australian connections**

The Australian Government enacted The Wireless Telegraphy Act of 1905 to place control of wireless operations under the Postmaster General's Department. (PMG) This Act provided for private experimenters, but licences were very expensive (three pounds) and severe penalties, including imprisonment, applied to those operating unlicenced. Very few licences were purchased.

By 1909 only two licences were issued. Henry Sutton at Bourke St. Melbourne and C.P. Bartholomew at Mosman, NSW. From 1910 the PMG Dept. issued the experimental stations with 2 letter callsigns prefixed by "X" for experimental. There were no distinctions between states, or between private and commercial operators. This change in legislation freed things up a little.

In 1910, the Institute of Wireless Telegraphy was formed. An article appeared in the Sydney Morning Herald in March of that year citing the details of an inaugural meeting. A short time later it was rebranded as the Wireless Institute of New South Wales. In 1920 it became the Wireless Institute of Australia, New South Wales Division. Today, the same organisation is known as Amateur Radio New South Wales (ARNSW).

Wikipedia states 'The Wireless Institute of Australia (WIA) was formed in 1910, and is the first and oldest national amateur radio society in the world.'

Whilst this claim holds emotional and nostalgic value, it is not historically correct. On occasion, there is a tendency to enhance the origins of an organisation by taking on a name to establish a "heritage brand". By leveraging its history, a heritage brand actively takes advantage of trust and emotional bonds to engage with its audience.

A heritage brand implies longevity, values, philosophy and reputation that it has developed over its life-time.

Whilst it has become folklore, even tradition. for many to claim the WIA is the first and oldest national amateur radio society in the world, the facts do not support this claim.

The Wireless Association of America was the first national amateur radio society, formed in 1909.

The Wireless Institute of Australia (WIA) was formed in 1972 as a Federated Body representing the State Based Divisions and responsible for the production of Amateur Radio Magazine. In 2004 it transformed to a

### INSTITUTE OF WIRELESS TELEGRAPHY.

The Institute of Wireless Telegraphy of Australia was inaugurated on Friday at a meeting at the Australia.

Mr. George A. Taylor, who was chairman, pointed out that investigations of wireless were to-day on the verge of an arena of wonder. They were like explorers of a strange country, where every step was a discovery. But as success could only be achieved after many failures, there was need of mutual cooperation between investigators to avoid making the same mistakes, and to climb together when any successful discovery would be achieved. The time was approaching when this age would not again have the stigma of a Waratah going out into the unknown without a wireless connecting link. There was further necessity for the formation of the institute to protect legitimate experimenting. He proposed the formation of the institute.

Mr. Hannam, in seconding the motion, gave his experiences in endeavouring to secure fair play in his investigations, and referred to the disadvantages private operators were at present labouring under.

The motion was supported by Mr. Pike, and

carried unanimously.

The following provisional committee was formed to arrange working conditions for the institute:- Major Fitzmaurice, Captain Cox-Taylor, Major Rosenthal, Dr. Brissenden, and Messrs. Hannam, Pike, Bartholomew, Gosche, F. Leverrier, H. Leverrier, A. Garnsey, F. Cleary, and the chairman.



National Body, taking on direct membership and absorbing many of the responsibilities previously held by the State Divisions.

Wikipedia should be updated to 'The WIA was formed in 1972 and will celebrate its 52nd anniversary in 2024'.

#### FEDERAL COMMENT:

## CHANGES IN FEDERAL STRUCTURE

On 17th January, 1972, the Wireless Institute of Australia was incorporated as a Company limited by guarantee.

It is now nearly ten years since the changes proposed in the Federal structure that have lead to the incorporation of the Federal body were first advanced to the Federal Council by the Victorian to the Federal Council by the Victorian Division. In fact the need for change has resulted in change taking place before the structural changes could be implemented. For example, when the Victorian Division put forward its original proposals it foresaw that at some time in the future the Federal body could wish, one day, to employ a Secretary or Manager. The structure proposed was designed to allow this to occur. In fact a Manager has now been employed for nearly a year, though interim arrangements have had to be made with the Victorian Division pending finalisation of the incorporation of the Federal body.

We can, as an organisation take, I

We can, as an organisation take, I think, no pride in the fact that we took so long to take these steps that now seem to be so obvious.

seem to be so obvious.

In effect, the Federal body now has a completely new constitution in the form of its Articles of Association. It is, I think, appropriate to point to some of the changes that have been made and the consequences that flow from them. These points may be summarised as follows:

#### WHY A COMPANY?

1. WHY A COMPANY?

The Wireless Institute of Australia is incorporated in Victoria as a Company limited by guarantee and it holds a certificate of the Attorney-General enabling it to dispense with the word "limited" in its title and by virtue of that certificate certain requirements of the Companies Act in relation to the lodgment of documents are not applicable to it. The Company has six "members", namely each of the Divisions. A company is a separate legal entity from the individuals that comprise it. This enables it to enter into contracts and undertake liabilities which ordinarily raise no question of the personal liability of either its members or officers.

#### "AMATEUR RADIO"

2. "AMATEUR RADIO"

This issue of "Amateur Radio" will be the last issue published by the Victorian Division. One of the important changes proposed by the Victorian Division when it advanced its original proposals was that this magazine and the other publications of the Institute should be published by all Divisions. We are a large national body. This magazine is sent to all members of all Divisions. It is only reasonable that all Divisions should have an equal say in its content and production. Therefore, the Federal Council appoints an Editor and a Publications Committee. The Editor is a member of the Federal Executive and is Chairman of the Publications Committee. He is, there-

fore, in a position to see the day to day problems dealt with by the Fed-eral Executive. He is in a position to crai Executive. He is in a position to consult with the Federal Executive as and when it becomes necessary. He will, of course, have the assistance of the Manager who will undertake a large part of the work associated with the magazine.

#### 3. THE FEDERAL COUNCIL

3. THE FEDERAL COUNCIL

Each Division will continue to be represented by a Federal Councillor. The Institute meeting in general meeting is called the Federal Council. The Articles envisage the appointment of an alternate Councillor to represent a Division at any particular or special meeting of the Federal Council. The annual general meeting, incidentally, is called the Federal Councilion. As you can see, most of the fundamental concepts of our Federal body are preserved in the new form. One important difference is that the Federal Councillors are required to have the written cillors are required to have the written authority of their Divisions to vote on behalf of their Division and upon their vote being cast their Division is thereupon bound by it.

In the past the decisions have been subject to ratification by the Divisions—generally speaking decisions of the Federal Council made at Easter at the Federal Convention have not been ratified by all the Divisions until August or even September. However, the new Articles do provide that a Federal Councillor may withhold his vote and exercise it within 30 days of the end of the Convention if he so wishes. This provision is designed to deal with any matter in respect of which the Federal Councillor feels that it is essential that he obtains guidance from his Division. he obtains guidance from his Division. If he does not exercise his vote within 30 days he is deemed to abstain.

#### THE FEDERAL EXECUTIVE

The Federal Executive are appointed at each Federal Convention. Under the old constitution the Federal Executive are nominated by one Division which is nominated as Headquarters Division and the nomination of the individuals is subject to ratification by the Divisions. This is all done prior to the Convention by mail. Convention by mail.

Convention by mail.

The new Articles provide that the members of the Executive are appointed by the Federal Council at the Federal Convention. The new "constitution" has no concept of a Headquarters Division. The only qualification to be a member of the Federal Executive is that the individual is a member of a Division. As a matter of practical reality the Federal Council will, no doubt, at least in the foreseeable future, continue to appoint the members of the Federal Executive from one Division as the costs of bringing a member of the Federal Executive to regular meetings from other States would be certainly more than we can afford at this time. Indeed, the new

Articles go so far as to permit the Federal Council to appoint one of their members as President.

#### THE FEDERAL SECRETARY

I have already indicated how the Federal Executive are appointed and have also referred to the fact that the Editor of "Amateur Radio" is a member of the Federal Executive. Including the President and the Editor of "Amateur Radio" there are six members of the Federal Executive. In addition, the Articles provide that a Secretary shall be appointed by the Executive. The Secretary has no vote as a member of the Executive because it was envisaged (as will in fact be the case) that the Secretary will be a paid employee. The Attorney-General, in granting his certificate, requires that no paid employee can be appointed as a Director (in formal terms the members of the Federal Executive are the Directors of the new Company).

Generally speaking the procedural steps that will be utilised within the new framework parallel the procedural steps in the old structure. One important difference is that notice of motions ant difference is that notice of motions must be given 30 days prior to a Federal Convention. A motion can still be passed at a Federal Convention even if notice has not been given. The Chairman has a discretion to permit such business to be brought forward but if he exercises his discretion to allow the matter to be considered, it requires three-quarters majority to be requires three-quarters majority to be passed.

passed.

These, then, are some of the more important changes that take place with incorporation of the Wireless Institute of Australia. Many of the changes that have been incorporated in the Federal structure are designed primarily to facilitate the handling of its day to day affairs. The new structure does, however, permit the transfer of the publications to the Federal body so that they do become truly national. The structure will also facilitate many of the administrative changes that have already been implimented, such as the centralisation of subscription records and the E.D.P. processing of those records. records.

Ordinarily I am hesitant to pay tribute to the Victorian Division because I am mindful that, as a member of that Division, such comments could be misconstrued. However, on this occasion, I believe that I would have the support of all the Federal Councillors if I were I believe that I would have the support of all the Federal Councillors if I were to point out that these changes, which can only strengthen the Federal body, are due in no small measure to the foresight and truly national outlook of the members and the Council of the Victorian Division. We now have a far more effective structure thanks to that foresight. It is up to us to use that structure effectively.

—Michael J. Owen, VK3KI, Federal President, W.I.A.

Amateur Radio, February, 1972



A prominent advocate of Amateur Radio in Australia was (Florence) Violet McKenzie. She was Australia's first female electrical engineer and in 1920 opened a shop in Sydney selling electronic components. Violet, as she was known, was an enthusiastic radio hobbyist and was the first woman to join the Wireless Institute of NSW.

Another prominent player was Earnest Fisk, who was the president of the Wireless Institute and was also the manager of Amalgamated Wireless of Australia (AWA), a government supported monopoly, endorsed by Billy Hughes, the then Prime Minister and also an AWA Director. There were many concerns about where Fisk's interest lay, as he was also instrumental in the 'factory sealed radio' concept where the public was forced to buy a license for a receiver capable of picking up just one station.

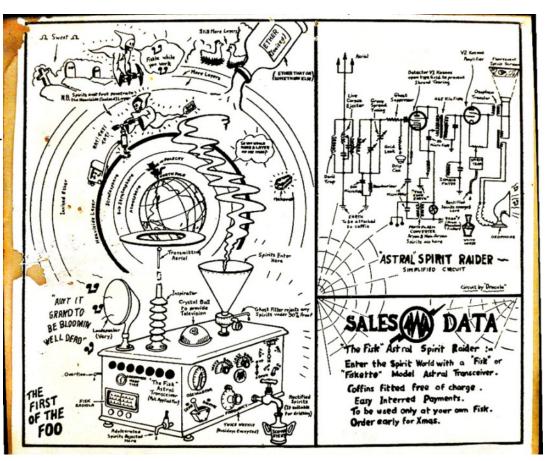
Controversially, Fisk required all Amateurs to sign a binding declaration that they would not disrupt the Sealed Radio network in any way. He also demanded that receiver owners and experimenters pay annual royalties per valve and valve socket to AWA. Violet McKenzie spearheaded a 'Reform Group' via her shop magazine Wireless Weekly to promote Amateur Radio hobbyists rights that had been eroded by Fisk and AWA.

Under protest from the Institute, Mrs McKenzie helped form Australia's first Amateur Radio club, the Metropolitan Radio Club, based in Sydney. Her Wireless Weekly magazine eventually became Radio & Hobbies, then much later, Electronics Australia. Mrs McKenzie also formed the Electrical Association for Women, which during WW2 trained over 10,000 women and men in

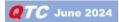
Morse Code to a 25 wpm standard as a part of the war effort. Mrs Mac as she became known, received an OBE for her work and is the subject of a fascinating biography called Radio Girl.

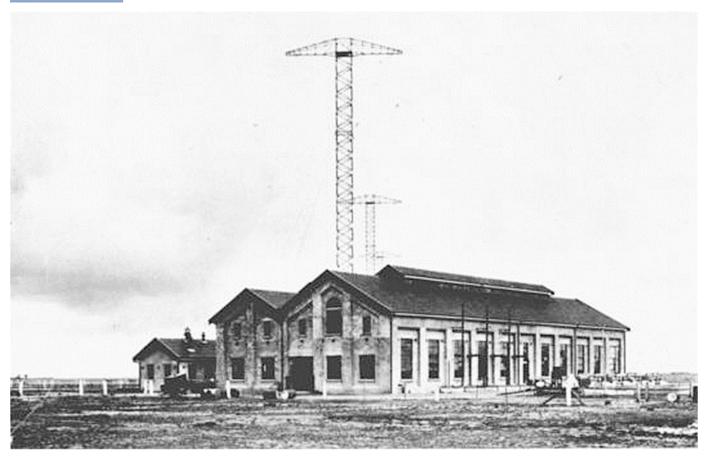
Oddly, Ernest Fisk was reputed to believe that radio waves could be used to communicate with the dead.

Right: The AWA
Drawing Office having a light natured
dig at Ernest Fisk Source Amateur Radio NSW



Under government contract, he established a major radio installation for AWA near Ballan in Victoria, with three 75 metre high radio towers and high power transmitters. The site was officially called Fiskville. This is the same Fiskville that was purchased by the CFA in 1971 as a training ground. The CFA then infamously contaminated the entire site and surrounding water table with large amounts of carcinogenic fire retardants.

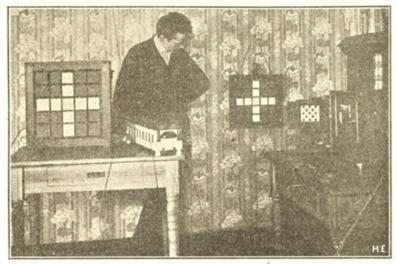




AWA Fiskville radio tower & buildings

Given the distances involved both Australia and New Zealand were early adopters of radio technology and many of their technological developments of the past century have come from people with roots in Amateur Radio. It is fair to say that many of these triumphs happened in spite of, rather than because of successive governments and industrialists who fought for commercial and military domination of the radio spectrum.

While Australia was still getting started in telegraphy and telephony, back in the USA the race was on for the next holy grail of radio communications, the ability to transmit images.



#### What's in a TV?

The word 'television' seems to have first appeared in a magazine article in 1907. Hugo Gernsback wrote an article about television in his Modern Electrics magazine in 1909 (pictured)

There was a lot of speculation about the concept and many ingenious designs of mechanical-electrical hybrids were experimented upon for many years.

In 1915 M.J. Martin wrote an article about television in Wireless World. 'The fact that wireless photography and wireless telegraphy are expering

'The fact that wireless photography and wireless telegraphy are experimentally accomplished facts in no way proves that wireless television is feasible.' and 'To construct wireless apparatus **Page - 22 -**Return to the Table of Contents



capable of transmitting 40,000 signals in one tenth of a second and arrange them in their correct

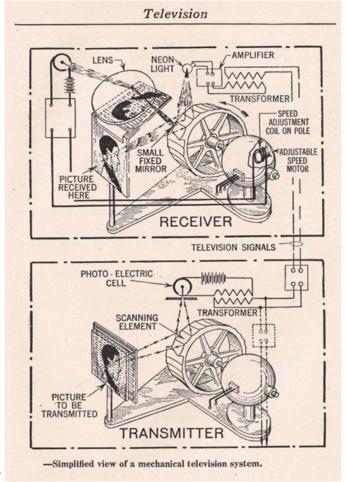
order would surely tax to the utmost the powers of our cleverest inventors and prove the limit of human ingenuity.'

This may have seemed like a reasonable statement at the time, but it aged badly.

Hugo Gernsback makes for a fascinating study. He was a close friend of Nikola Tesla and later wrote about Tesla's idiosyncrasies in detail. (Tesla refused to carry anything metallic on his person and was fanatical about pigeons).

TIME magazine wrote an article about Gernsback in 1944.

Hugo Gernsback is widely and affectionately known among US inventors as a bottomless well of incredible notions. For more than 30 years fantasies have come in such profusion from his brain, there is hardly a modern invention he cannot claim to have anticipated. The father of pseudo-science fiction he started a number of pulp magazines such as AMAZING STORIES, WONDER STORIES etc. As a radio magazine publisher he has given laboratory workers some suggestive ideas. Gernsback himself has patented some 80 inventions.



In 1953 Hugo Gernsback was awarded the first Hugo award for his contributions to Science Fiction. The award that still bears his name is still presented to the best published Science Fiction writer of each year.

It is not possible to contemplate the early origins of Amateur Radio without considering the influence of Hugo Gernsback. He gave a voice and a platform to the hundreds of pioneers that helped launch Amateur Radio. It was an exciting era where ideas and developments came thick and fast. Today's perceptions of early days of radio conjure up images of stodgy old men playing with bits of brass and copper wire, but nothing could be further from the truth. Most of these pioneers were young and enthusiastic individuals, constantly pitching their wills against a recalcitrant establishment that had little understanding of technology.

Today when we contemplate the modern radio, we see a small box with a fancy display, full of microscopic components, which somehow seem to work. How we got to this point should not be forgotten. We all owe a debt to those in the past who created the path that we continue to follow and expand upon each time we enter the shack and flick the power switch to 'ON'.

#### References:

Hugo Gernsback – A man ahead of his time by Lary Steckler / A history of ARNSW by Tim Mills / ARRL History / Modern Electrics (Jan 1909) / Radio History – Amateur Radio – VE1BC / Radio Girl by David Dufty / History of Amateur Radio Callsigns / Two Hundred Metres and Down by Clinton De Soto / Sydney Morning Herald (1910)/ ASIC business search.



## News from around VK

#### **VKFF National Get Together**

Hi all,

This a reminder about the 2024 Annual VKFF National Get Together to be held at Bendigo, Victoria on Friday 25th, Saturday 26th & Sunday 27th October 2024.

The event is a great way for amateurs who enjoy the World Wide Flora Fauna parks program, getting together, enjoying a laugh and sharing their portable experiences.

The event will include a Friday evening dinner at the Hotel Shamrock, various guest speakers during the day at the Lakeside Hotel, a Saturday evening meal at the Lakeside Hotel, a Sunday morning BBQ breakfast, followed by numerous park activations.

If you are new to activating parks for WWFF or an experienced park activator and/or hunter, then this is a great event to attend. Last year's event at Renmark in South Australia was very well received.

Guest speakers on Saturday will include topics such as An introduction to the WWFF/VKFF program; Activating parks on King Island; Satellites from VKFF parks; snake awareness & safety; & CW & digital modes from VKFF parks. And many more.

There will also be static displays of portable equipment.

You must register to attend the event. Walk-ups will not be accepted.

Don't leave your registration to the last minute. Spots are limited. More information including registration can be found HERE

73, Paul VK5PAS VKFF National Co-Ordinator.

#### Petition – Restoration of Validation Documents

Concerns have been raised across the Amateur Radio community over the lack of a single "Amateur Radio Licence Document". Andy Keir VK2AAK has raised a petition for presentation to the House.

You can read the petition by following this link.





## WA Amateur Radio News Inc Invites You to attend

## PerthTech 2024

## Saturday 21 September

- The main event is Saturday 21st September, consisting of technical presentations and discussions
- Camping available Friday through Sunday extra \$
- Entry includes Lunch, morning and afternoon tea, endless tea/coffee
- · Sundowner on Saturday evening extra \$
- Big Aussie Sunday Breakfast for Campers

PerthTech is a Premiere Australian Amateur Radio Event. We offer caravan or camper parking onsite for the weekend, with full ablution, recreation and cooking facilities.

ion and cooking facilities.

The Venue is the Gidgegannup Recreation Centre.

We're seeking presenters for PerthTech. Click HERE for information, updates and registration.

# News from around the world

#### Vale Bob Heil

The following text was posted on the Heil Communications Facebook Page. I had the pleasure of meeting K9EID, Bob Heil, at the Pacific North West DX Convention several years ago. The photo below is of K9JF, Jim Fenstermaker (L) and K9EID, Bob Heil (R), at Jim's dream QTH which looks over the Columbia Gorge. RIP Bob.

"Today we say goodbye to our beloved founder, Dr. Bob Heil. Bob fought a valiant, year-long battle with cancer, and passed peacefully surrounded by his family. Bob's impact on professional and live sound cannot be overstated. Driven by a lifelong passion for sound, Bob's pioneering work revolutionized how concertgoers experienced live sound. Bob created and developed numerous pro sound innovations and products over the years, some of which are preserved in the Rock and Roll Hall of Fame Museum. In 2007, Bob was the recipient of the Audio Innovator Parnelli Award,

recognizing his outstanding influence on the live sound industry. Countless artists, creators, broadcasters, podcasters, sound engineers, and sound professionals worldwide continue to be impacted by Bob's work.



While Bob's presence will dearly be missed, we are immensely proud and happy to honor and carry on his legacy."

Bernie McClenny, W3UR Glenwood, MD (FM19lg)



## QSL Via the Buro OM?

#### **News from M0URX**

Unfortunately we have been unable to get the latest Bureau parcel to Spain URE. Spanish customs have returned the parcel as "Missing Customs Declaration" despite the declaration being right next to the return label. Bureau system is in crisis!

We cannot guarantee the Bureau route. If you need a QSL – REQUEST DIRECT. This is happening all too often now and I reported the problems to IARU as long ago as 2017 that this was going to happen with the World Customs Organisation new regulations. Sadly there is nothing we can do. Is it time now to stop Bureau requests? Because I see no other way forward.

Not allowed to send as GIFT, Not allowed to send as DOCUMENTS. Must have value but how do you value something with no value and how do you provide an invoice if the recipient (The IARU Bureau) did not pay for a product? Complete FARCE.

We are currently discussing with URE and will get this resent to Spain soon.

(Credit: M0URX - United Radio QSL Management Bureau)

#### DXing.com.au

Well known DXer Nick VK2DX/VK9DX has recently established a new retail Amateur Radio business here in Australia.

Nick and his Manager, Gemma, send out a regular (daily) blog with interesting news and hints 'n tips for those interested in DXing. We wish Nick all the best with his new venture.

Of note, a recent blog was entitled "I am not going to tolerate such behaviour" and discussed the issue of bad online behaviour by some people. As our readers will be aware, RASA has a clear policy on bullying and we support Nick and Gemma in this regard. We'll repeat that blog here:

"I'll get straight into it: our shop is open to all and everyone. Whether you are a novice, CB, F call, seasoned DXer, amateur or not – we are here to serve you. We love what we do, and we work hard to bring premium ham brands and the finest radios money can buy into Australia.

Practically, this mailing list is an extension of our bricks and mortar shop.

We are a proper business, all transactions are contractual, all offers are equally legally binding, whether made in a shop in person, in writing, online on our website – or here, in the newsletter. The newsletter is a shop.

Therefore, a certain level of mutual respect and civility is expected. Meaning: replying to this newsletter with profanities, abuse of any kind, smart comments with the intention to provoke a reaction are all seen as direct and intentional interferences to our business. We have a zero tolerance policy to any antisocial behaviour.

If for whatever reason you've ended up here as a subscriber, but don't like the content or see no value in what we have to offer, then there is no reason to remain subscribed. Especially so if you are easily offended, overly sensitive and irritable, or have a constant urge to argue: you will be removed without warning. I would not tolerate such behaviour in my shop, and neither online.

The unsubscribe button is right at the bottom. Thank you for your cooperation." (Ref: Blog from 12 Mar 2024)

Here at RASA we have equally strong views about bullying or abusive behaviour. We will not accept it and we applaud Nick and Gemma for calling it out. Only together can we stamp out bullying and bad behaviour in our hobby.





#### **Jarvis Island N5J DXpedition**

August 5, 2024 to August 17, 2024

Dear Fellow DXers,

In March the Dateline DX Association was pleased to announce that it has received permission from the USFWS for a DXpedition to Jarvis Island National Wildlife Reserve this August. Jarvis is ranked number 18 on Clublog's global most wanted list. It is number 9 in Europe. In some EU countries Jarvis is ranked as high as second most wanted on phone and digital. Jarvis is ranked higher than Bouvet (16) in Europe. It is 450 miles from Palmyra Atoll and 1500 miles from Hawaii.

Because it's been over 34 years since it was last activated it is one of the highest ranked IOTA and POTA targets among the hams who chase those awards. We were pleased that both program administrators have altered their rules to allow for their awards to be credited by working one of the 5 operators who are remoting from the ship just offshore (and still in the reserve).

An experienced team of five consisting of George, AA7JV, Don, N1DG, Tomi, HA7RY, Adrian, KO8SCA, and Mike, KN4EEI, will install 6 RIB stations on Jarvis. The at-island team will be augmented by 24 remote operators from Asia, Europe and North America. All phone, 160 and 6 mtr operations will be done locally. The local ops will also operate CW and FT8 on all bands. The remote operators will operate on 80 to 10 meters using CW and FT8 modes. We are permitted 12 days of operation but the permit is good for the whole month of August to allow for weather issues.

The core of the Dateline DX Association is the team of operators from the highly successful Baker Island 2018 and Midway 2009 DXpeditions. Both DXpeditions received the coveted DXpedition of the year awards at Dayton. We have broad experience working from the Pacific and remote and environmentally sensitive areas around the world. It was this experience that earned Dateline the first permission to activate Jarvis since 1990. This will be the third ever operation from Jarvis.

Any DXpedition to a protected area is expens-

ive and our externally financial need is over \$200,000. We have a boat, approved by the US Fish and Wildlife Service, to safely carry us to and from the Reserve and not cause any harm to Jarvis Island or the surrounding reefs.

The budget would easily have been over \$500,000 had it not been for the use of AA7JV's vessel, the Magnet. The \$200,000 is required for fuel, USFWS permit fees, extra crew for the trip and data services and equipment. Radios are not included in the budget as NCDXF contributed to the design and building of the RIBs.

NCDXF has also kickstarted our fundraising campaign with a hefty grant of \$75,000.

Please understand the dates for our DXpedition were not our first choice. Rather, the exact dates of our DXpedition were specified by the U.S. Fish and Wildlife Service. While top band opportunities are limited by the early August dates, 10 and 6 meters should offer ample opportunities to pick up new band counters. Europeans (where Jarvis is number 9) should benefit greatly for ATNO QSOs during the peak months of cycle 25.

There will be extensive science being conducted on Jarvis by 3 biologists from the USFWS. We will be providing free transportation and food for their team.

You can follow our plans on our web site at: , and on Facebook.

We are counting on help from DXers and DX organizations from around the world to help cover our costs. Jarvis has not been activated for 34 years and we anticipate by demonstrating our RIB concept to the USFWS biologists accompanying us to Jarvis we can open the doors to other islands off limits to the ham community.

Please consider making a donation to the Dateline DX Association to help bring Jarvis Island on the air. Donations can be made either through our paypal donate@jarvisisland2024.com or direct to our bank:

Checks made out to the Dateline DX Association should be sent to:



**Dateline DX Association** 

PO BOX 1397

Duxbury, MA 02331-1397

We wish to thank you in advance for your support.

Don Greenbaum, N1DG and George Wallner, AA7JV

Jarvis Island 2024 and The Dateline DX Association

#### PETER I 2027 DXpedition - #8 most wanted.

We plan to activate Peter I Island in February 2027 with a team of 19 operators. We have signed a financial agreement with a private group about sharing the cost for this DX-pedition. The DX-pedition budget and our share is around \$825,000, of which we must deposit \$340,000 in 2024. We will go to Peter I with a large vessel and two helicopters, and the DXpedition will be led by an external Expedition leader from an Antarctica Expedition company Spirit of Sydney. The capacity of the Expedition leader and the vessel have been reviewed and approved by Norwegian Polar Institute and is the basis for the landing permit we received in April 2024. Our expedition leader has supported more than 80+ expeditions to Antarctica and has previously landed on Peter I three times. With the landing permit and external resources involved we're ready to move forward negotiating and signing the contracts.It should be noted that the total cost of this expedition is approximately \$2,000,000, including all logistics, marine, aviation, insurance, safety and rescue, and Antarctica permits. However, the synergies with the small private group and with the Spirit of Sydney Expedition Company have provided enough cost sharing to make this Peter I expedition affordable, albeit still expensive. This is a rare opportunity to activate Peter I and without these unique opportunities to share costs. Peter I would not be possible. At the time of activation in 2027 it will be 21 years since the last DX-pedition to this island, and cost is the primary reason. We have a unique occasion to bring Peter I back on the air. We're grateful for any donation that can help us sign the above contracts. Despite it being almost 3 years until the DX-pedition

time, the size of the deposit requires us to start fundraising now to be able to sign the vessel contracts. Conditions for any donation are as follows:i) Should we not sign the vessel contracts anticipated next month all donations will be refunded 100%, minus the PayPal fees.ii) Should we sign the vessel contracts, all donations will be considered non-refundable, in the same manner as each operator's contribution. Your donation will enable the execution of Peter I DX-pedition in 2027. If you want to donate and make this DX-pedition a success, please visit our website < , proceed to Peter I section and donate through the link on the website. Our website will be updated the next coming days and in meantime you can also donate directly via PayPal at donate@3y0l.com <>We expect a short time of a few weeks to one month to raise the funds needed to pay our first deposit of \$200,000, soon after signing the vessel contracts. DX-pedition planning will start by fall of 2025, but at this time we only raise funds to be able to pay the deposits required in 2024.73, Peter I leadership groupBernie Mc-Clenny, W3URGlenwood, MD (FM19lg)Editor of:The Daily DX (1997-2024)The Weekly DX (2001-2024)How's DX? (1998-2024)

#### IC-7300 sells 100,000 units

Since its debut in January 2016, Icom's IC-7300 HF Transceiver has sold over 100,000 units globally. More than half of these sales are the USA version, which complies with FCC regulations and primarily targets the North American market.

The IC-7300 introduced an innovative RF direct sampling system, a first for Icom's amateur radios. RF signals are directly converted to digital data and processed in the FPGA (Field-Programmable Gate Array). This approach combines high performance with a simplified circuit design within a compact form factor. The integrated real-time spectrum scope and the waterfall function enhance receiver performance to increase QSO opportunities. These features were typically found in high-end models. The IC-7300 set the benchmark for performance and value and was warmly received by a diverse range of HF radio enthusiasts as the sales results show.



## The Tropics, the Doldrums, the Cluster, Kava and CW

Tales and Anecdotes from Tropical Vanuatu - YJ0VK 2024
By Chris Chapman VK3QB



28 March – the Departure Lounge and a flooded highway. Luke VK3HJ and I fly from Melbourne to Port Vila direct. A direct flight these days is a rarity and made for a smooth start to our travels. It is also pretty hard for an airline to lose your bags when it is a direct flight. Two recent DXpeditions to Norfolk Island suffered lost/delayed baggage syndrome, so we were especially pleased with the arrangements this time.

Matt K0BBC (from South Dakota) and Alan VK6CQ (from Perth, Australia) arrived in Vanuatu a couple of days earlier. Matt was to meet us at the airport on arrival at 2200 local time.

Matt messaged me whilst we were in the boarding lounge in Melbourne reporting that heavy rain had damaged the highway (the only sealed road around the island), and that numerous creeks and rivers were over the road. The 47km drive in the dark to collect us would take at least two hours, each way, and as our plane didn't arrive until 2200 local, he asked that we find accommodation in Port Vila. He'd collect us the next day when the waters receded, and daylight offered safer driving conditions.

Of course, we agreed and found suitable accommodation in Port Vila for the night.

#### 29 March

Matt collected us and we made the 47km trip north. On our last visit to Port Vila (2012) the main highway had only just been sealed. Prior to that it was largely unsealed and quite a pathway to navigate. During our 2010 visit, we had hired a bus to take us around the island – a full day excursion (122kms). Nonetheless, the torrential rains had left their mark; it was clear where the road had been underwater just 12 hours earlier, and the washouts and potholes made some sections hard going. It took about 90 minutes to cover the 47km.

Brownie was the local guard dog. He was not much of a guard dog but was a regular (and welcome) visitor to our shack.





The photos do not do the scene justice. We are following the white bus up a very steep incline and as you can see, the other side of the road was washed away by the rain.
The other photo is deceiving.
One could never be certain if it was just a puddle of water, or a 30cm deep pothole.



#### 30 March - On-air and Active.

By mid-day we had all three stations up and running. The main CW station comprised an IC-705 helped along with an SPE amplifier. The SSB station was an IC-7300 with some encouragement from an Elecraft KPA500, and Alan had setup the venerable IC-7000 as the main FT8 station. The Elecraft KX3 was connected to the four-element beam as our six-metre monitoring station and beacon.

Our antennas comprised a 40-metre doublet strung between a couple of coconut trees, not our normal 25-30 metre Norfolk Island pines, but adequate given the task at hand. It was fed with 450ohm ladder line into a (soon to be collector's item) MFJ-962 antenna matching unit. We also took two DX-Commander Expedition verticals. One was setup on the beach, right at the high tide mark, and about 60 metres from the guesthouse/shack. The other was placed behind the guesthouse.

#### About antennas, band pass filters and interference.

Seventeen DXpeditions to small islands has taught us a thing or two about reducing cross-station interference and making the best of things when it cannot be avoided. As any DXpeditioner or multi-station contester will attest, the nemesis of a successful operation is interference from the transmitter sitting three metres to your left. Finding a way for all that RF to co-exist without causing unacceptable levels of RFI to receivers is a major planning consideration.

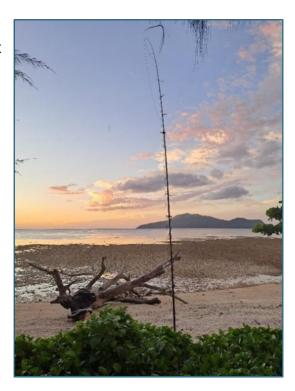
The cross polarisation and physical separation between our two main antennas made a huge difference. By the time band pass filters were inserted between the radios and amplifiers, all but the most stubborn of unwanted RF leakage was suppressed sufficiently. Even the high-duty cycle FT8, renowned for causing unwanted interference to nearby stations, appeared to have been calmed.

Our additional tactics for dealing with RFI included: to QSY to another band, wind the power back, or in rare but unworkable situations, one of the stations would take a break. However, I would say the latter only occurred on a handful of occasions.

Of course, ferrite rings and clip-on ferrites are also an important part of our RFI-killing arsenal.

Good housekeeping with feedlines and separation in the shack also assisted.

The DX-Commanders did a great job. Nothing beats resonance when you are in a remote location with limited resources. There simply is not much that can go wrong. About the only thing we will do better next time is to pull the tensioning shock cords tighter on the radiating wires. On occasion the wind gusts were sufficient to dislodge a radiator and upset the SWR.





In addition, when collapsed the Expedition model poles fit nicely in a standard suitcase. These poles are extremely strong and we saw no signs of wear and tear after 14 days on the beach in pretty harsh conditions. These will be a permanent part of our antenna compliment for future DXpeditions. Check them out here.

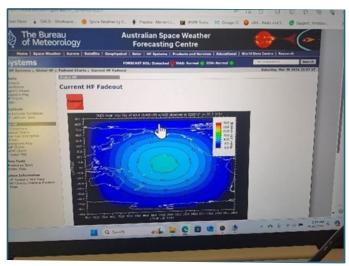
#### 31 March - The Doldrums

"The doldrums is a popular nautical term that refers to the belt around the earth near the equator where sailing ships sometimes get stuck on windless waters."

Ref: https://oceanservice.noaa.gov/facts/doldrums.html

It is also a term that refers to the boredom and frustration suffered by Dxpeditoners (and chasers) when the ionised layers around the Earth sometimes get over-energised and absorb our radio signals, resulting in eerily silent bands.

An M-class flare from AR3615 graced us with its presence, producing strong fadeouts on HF. Our 20m FT8 signal was only being decoded in VK4 and ZL. Our CQs on CW were not being heard by the RBN.... not even in VK or ZL.



The higher bands were not much better. FT8 on 12m hobbled along in a lacklustre fashion. By early afternoon the effects of the flare were waning, and we started to see activity again on 15, 12 and 10m. Nothing remarkable, but worthy of calling CQ with the paddle. 10 and 12 m produced just enough activity to keep things interesting... but certainly not hectic.

Most of the team used the opportunity to grab a midday nap as well as having a fiddle around with radio control software for the new IC-705 and checking some cards for the ARRL DXCC program. On the flip side, conditions were great later in the day and the 31st March proved to be our busiest day by QSO count.

ARRL Card Checker Matt K0BBC checks cards for ARRL Card Checker Luke VK3HJ... on-location at YJ0VK. Kinda cool – that is a lot of kilometres to get a card confirmed. Luke was pretty chuffed.

#### About The Cluster...

I use DX-Summit. What can I say... the Cluster provides an endless source of amusement and insight into those on the 'other side'. It really proves the old adage that 'amateur radio is a broad church'.

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| DXER-@  | 21000 | YJ0VK | 05:29 02 Apr<br>24 | having a bubble bath             | Vanuatu |
|---------|-------|-------|--------------------|----------------------------------|---------|
| H44MS-@ | 24000 | YJ0VK | 05:25 02 Apr<br>24 | having a local steak french cook | Vanuatu |
| SWL-@   | 24000 | YJ0VK | 05:15 02 Apr<br>24 | all drunk                        | Vanuatu |
| SWL-@   | 24911 | YJ0VK | 05:06 02 Apr<br>24 | Please log update                | Vanuatu |
| K1ICU-@ | 24000 | YJ0VK | 04:57 02 Apr<br>24 | VK Hangover OFF AIR now 6hrs     | Vanuatu |
| DXEU-@  | 24911 | YJ0VK | 04:50 02 Apr<br>24 | pse 12m FT8 today                | Vanuatu |

<sup>4</sup> Courtesy of "the cluster" explaining where we were if you couldn't hear us. And it's not true. He was an English cook.

Oh, and for the record, having "gud ears" is a compliment... as is "big ears", unlike what we called Billy Smith at school. But, and I'm sure you know this, "cloth ears" is not a compliment. You do not want to be called cloth ears on the cluster. One correspondent scolded me for being too QRS. At the time I was exchanging callsigns at 26WPM.

It can be very difficult finding the sweet spot when on the pointy end. We try to keep a balance and I use the keyboard function keys rarely. I tend to find that 24-28WPM achieves the best efficiency with minimal repeats. This also appears, anedotally, to be a range where I believe most people are able to copy their own callsign, if nothing else. Of course, many operators fire their callsigns at us at higher speeds and after some hours I found I could copy callsigns probably somewhere aound 33-35WPM.

Much faster than this (say 28WPM) and error rates tend to increase and the pileup gets frustrated. On more than one ocassion a QRQ operator missed a QSO simply because he/she would not QRS when asked.

Having said that, I know some very skilled and experienced CW operators can maintain QSOs rates of 150-180 per hour. But it does rely very much on a well behaved and equally skilled pileup; and well behaved pileups are a rarity. It will come as no surprise to many, but I could rarely fault the excellent operating practices of the JAs. When asked to QRX whilst we worked EU or NA it was extremely rare to hear a JA calling.

Messages like this one always make it worth the effort. It was our pleasure.

| YO5ODT-@ | 18082 | YJ0VK | 15:17 03 Apr<br>24 | tnx 73! ATNO | Vanuatu |  |
|----------|-------|-------|--------------------|--------------|---------|--|
|          |       |       |                    |              |         |  |



#### 6 April - The doldrums. Again.

01:50Z: The doldrums. Even with three FT8 stations we worked only five QSOs in one hour.

| 17.000 |     | 10.02.5 |      |   | Rx Freque    | ency |
|--------|-----|---------|------|---|--------------|------|
| UTC    | dB  | DT      | Frea |   | Message      |      |
| 014600 | ΙX  |         | 500  | ~ | ZEIPWD YJOVK | K-10 |
| 014630 | Tx  |         | 500  | ~ | ZL1PWD YJ0VK | R-10 |
| 014645 | -10 | -1.4    | 1066 | ~ | YJØVK ZL1PWD | -19  |
| 014700 | Tx  |         | 500  | ~ | ZL1PWD YJ0VK | R-10 |
| 014715 | -11 | -1.3    | 1065 | ~ | YJ0VK ZL1PWD | -19  |
| 014730 | Tx  |         | 500  | ~ | ZL1PWD YJ0VK | R-10 |
| 014745 | -15 | -1.3    | 1065 | ~ | YJØVK ZL1PWD | -19  |
| 014800 | Tx  |         | 500  | ~ | ZL1PWD YJ0VK | R-10 |
| 014815 | -16 | -1.3    | 1065 | ~ | YJØVK ZL1PWD | -19  |
| 014830 | Tx  |         | 500  | ~ | ZL1PWD YJ0VK | R-10 |
| 014845 | -7  | -1.3    | 1065 | ~ | YJØVK ZL1PWD | -19  |
| 014900 | Tx  |         | 500  | ~ | ZL1PWD YJ0VK | R-10 |
| 014915 | -12 | -1.3    | 1065 | ~ | YJØVK ZL1PWD | RR73 |
| 014930 | Tx  |         | 500  | ~ | ZL1PWD YJØVK | 73   |

And I can assure you that if FT8 is dead then there will not be any CW or SSB activity.

#### Statistics and *That* mode.

It would be remiss (irresponsible?) of any DX-pedition article to exclude statistics; it seems the world is addicted to statistics; not to mention real-time logging, personalised sked planning via the Cluster and emails, and arbitrary QSO count milestones.

I still like to spin the dial and listen for new ones, or simply to hear who is on the band. Listening is a learned skill and opens up a lot of interesting and fun experiences for CW operators. YJ0VK made 23,739 QSOs. 78% FT8, 19.5% CW, 2.5% SSB. It was disappointing we did not achieve DXCC on CW.

|      |     | SOs: <b>23,739</b><br>Calls: <b>9,530</b><br>Os: <b>1,948</b> (8.21 |           | First QSO: 2024-03-28 05:28:00 Last QSO: 2024-04-11 20:26:35 Number of days: 14.62  Band/Mode breakdown |         |       |     |       |      |        |
|------|-----|---|-----------|---|---------|-------|-----|-------|------|--------|
| Tota | SSB | FT8   | с ву вапо | DAC   | Total % | Total | SSB | FT8   | cw   | Band   |
| 6    | 0   | 59  | 31        | 40  | 6.2%    | 1470  | 0   | 1131  | 339  | 40     |
|      |     |   |           |   |         |       |     |       |      |        |
| 7    | 0   | 73  | 44        | 30  | 9.7%    | 2296  | 0   | 1863  | 433  | 30     |
| 10   | 7   | 98  | 51        | 20  | 17.5%   | 4157  | 22  | 3410  | 725  | 20     |
| 10   | 0   | 91  | 68        | 17  | 16.5%   | 3917  | 0   | 2610  | 1307 | 17     |
| 9    | 6   | 87  | 59        | 15  | 11.9%   | 2817  | 21  | 1991  | 805  | 15     |
| 9    | 7   | 89  | 52        | 12  | 16.1%   | 3821  | 19  | 3177  | 625  | 12     |
| 9    | 20  | 97  | 7         | 10  | 12.9%   | 3067  | 124 | 2916  | 27   | 10     |
| 1    | 3   | 19  | 3         | 6   | 9.2%    | 2194  | 398 | 1400  | 396  | 6      |
| 13   | 25  | 130   | 90        | Totals  |         | 23739 | 584 | 18498 | 4657 | Totals |

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Most DXpeditioners want to get you in their log. As many of you as possible. This means efficiency and maximising QSO counts. Nothing can achieve this like FT8. And it can be done with a fraction of the resources required for SSB and to a lesser extent, CW. Our primary FT8 station was a bare-foot IC-7000 running no more than 30-50W on average and radiating from a Terlin Mobile whip sitting on top of 24 ground radials.

This very basic station made over 9,000 FT8 contacts, adding to ATNOs, band slots, IOTA credits and various other award programs. I also recognised a lot of CW callsigns tramping down the FT8 screen when I was on watch. Even 'we CW operators' are not immune to that mode. A word about that mode (FT8) and SSB. FT8 seems to be the mode that everyone hates.... but uses anyway. There is no escaping its popularity and success, and for many, it is the only mode that allows them to remain active in the hobby. Those who use it enjoy it and invest a lot of time and effort in constructing a capable and functional station.

FT8 is supposed to be a weak-signal mode. This does not mean QRP... but some of the signals we saw (and heard) indicated without doubt that amplifiers and many hundreds of Watts have become the modus-operandi for some digital operators. This is a shame... it is cluttering the band segment and often splattering other signals. We appear to be caught in some kind of perverse arms race.

On one of our recent trips to the South Pacific, we received an email asking why we were not working a station. He was on the West coast of North America and informed us that he was running 1,000 Watts (FT8) into a five-element beam on 28Mhz... and a lot of his buddies were working us... and asking(?) why weren't we working him? Of course we were hearing him. But we set our filtering to exclude any signals greater than +20dB.

You simply do not need hundreds of watts to make QSOs with FT8 under decent band conditions. If everyone committed to run the minimal practical power required to make the QSO we would get more in the log, and those truly 'little guns' would have a fair go. Next time, turn your amplifier off.

#### Magic Band.

FT8 is a good early warning alert for CW openings – especially on 6m – and it would be remiss of me not to make mention of 6 metres. We had the KX3 monitoring the FT8 channel (50.313MHz) and whenever that familiar warbling graced us with its presence someone would have a look at the action. If the opening looked reasonable (... and I'm informed any 6m opening is reasonable), we would swing into action. Action usually started with a run on FT8 and as signals peaked, we would move to SSB or CW. We made 1,400 FT8 QSOs and just shy of 400 for each CW and SSB. Our most remarkable QSO was to Angola; around 15,000km. In all we worked 19 DXCC entities on 6m.

#### All is not lost.



The CW pileup (left-most huddle of signals) is larger than the FT8 channel (18.100MHz). This happens on many DXpeditions. All of us want a slice of the action at the same time.

Of course, it makes sense that we CW operators spread out for the rest of the time.

But there is nothing like a huge pileup lasting for several hours to attest that CW is far from dead.

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#### 9 April - The Humidity.

When we planned the trip, we were focussed on avoiding the cyclone season. Sadly, Vanuatu gets its fair share of wild weather in the wet season. We were confident a late March arrival would avoid any straggling cyclonic weather.



Most days were a pleasant 28-30c with humidity in the low 80% range. This was not particularly comfortable, especially for those of us not accustomed to the brutal reality of tropical living, but we managed.

However, on 9 April the humidity increased and rarely dropped below 90%. This made hard work of just about everything. Even the locals complained. Outside activities were very limited. Antenna maintenance was performed before 0800 local or after 1700 local.

Next time we will leave our visit until September.

The windy and salty environment was not easy on the DX-Commander antennas. Nonetheless, we were extremely impressed with the quality of the product and engineering design. The only lesson we need to apply next time is to really pull the radiating elements' tensioning shock cords more tightly.

On the last day we dismantled the verticals and washed them with clean water prior to packing. Everything was in really good condition; no sign of degradation to the wires, clamps or shock cords after two weeks in a harsh tropical environment.



#### Kava – could this be the answer to pileup fury?

Kava is a plant native to the Pacific Islands. It has traditional uses as a ceremonial drink, and is a well-known alternative to alcohol in this part of the world. The shrub kava originates from the South Pacific, where Islanders use it to promote psychological and physical relaxation. Within traditional cultures, the root of the plant is crushed, ground, and then combined with a mixture of water and coconut milk to make it drinkable. It has an earthy taste, and it would be fair to say you don't drink it for the flavour!



Kava bars are commonplace across Vanuatu. Smaller villages offer local Kava bars on the road-side. As there was one about 1km from our QTH we thought we would try it out. Luke, Matt and I ventured out early evening and tried a bowl. Whilst not providing the 'buzz' of alcohol, it certainly created a sense of relaxation, calm and social licence. And I think we all slept better as well.

The evening pileups also seemed to be a little less hectic after a couple of bowls of Kava.



#### In closing....

Overall, our 14-day trip to Vanuatu was a great success. Had it not been for the high humidity and two or three days impacted by HF fade-outs I think we would have rated it a resounding 10 out of 10! As always, these trips rely on both sides of the QSO to be a success, and 99% operators were just great. Sure, there is always the apparent messy and incoherent commotion of the pileup, but that is what makes DXpedtions and 'working that rare one' so much fun for both sides of the QSO. I recognised quite a few VK, NA and JA callsigns in there, which always makes the pileups just a little more personal.



From the YJ0VK team, we thank Roman, RX0F for our first contact, Jan, SP2ESG for the last, and the 23,737 contacts in-between. We hope you got in our log and enjoyed chasing us as much as we enjoyed working you. We hope to hear and work you all again next year.

73, Chris VK3QB (YJ0VK team member) CW Ops # 2949, Fists # 9085





## Dits n Dahs

## Taking Action By Chris Chapman VK3QB

Like so many of us these days, I have a Facebook account and follow various Morse Code groups. I also receive a few newsletters and bulletins

A constant theme that keeps reappearing relates to learning (or relearning) Morse Code. And of course as soon as someone asks for help or advice on Facebook you will see as many responses as there are days in a month. Sometimes more.

Usually (thankfully) all the responses are well-intentioned and encouraging.

Learning (or re-learning) Morse Code requires a few considerations:

- Commitment & attitude
- Method
- Practice

#### Commitment

Let's address the issue of commitment and attitude first. Without it, you will not succeed. Learning (or re-learning) Morse Code will require commitment. Listening to some recording or an "app" a few times a week will not work. You will just get frustrated and will make excuses; many of us know them too well... either from personal experience or by hearing them from others. "I just don't get it", "I'm too old", "I don't have time", "my brain isn't cut out for morse code", "work was too busy".... and so forth.

If you really want to master the code you must make the time and commit to a plan. You simply must commit at least thirty minutes a day, six days a week for at least eight weeks. And let's be honest, thirty minutes a day for eight weeks really is not much to ask for a lifetime of pleasure with one of the best modes in Amatuer Radio!

There are twenty-four hours in a day. Finding 30 minutes should not be that hard. Ditch Facebook. Cancel Netflix for two months. Get out of bed thirty minutes earlier each day.

If you are re-learning the code, hopefully things will be a little easier. But this is not always the case. Many of us (myself included) learned the old-fashioned way - with those WIA 5 and 10 WPM tapes.

Only you can find a way to commit to a plan. Once you've managed that the next consideration is the learning method.

#### Method

Much has been written about the best way to learn the code. One thing is for sure. If you want to truly master the code you will need to hear the characters and words; not count dits and dahs and then do a mental lookup in a table stored in your brain. There are two well respected clubs that offer training programs and I recommend you research their offerings.

CW Academy from CWops. Website HERE

CW Ops offers four options, depending on your starting point.

Beginner, Fundamental, Intermediate, and Advanced.

Head over to their web site and complete and take the quiz.

The other option is Learn Morse Code (CW) Online (LCWO). Website HERE

Another great resource is Morse Code Ninja.

#### **Practice**

This means taking action. Whichever method you choose will be moot if you do not take action.

Take action every day. It does not have to be perfect. You do not have to excel; and it does



not matter if you only manage 10 mins instead of 30 minutes. What is important is building a habit and practicing every day.

Even a little practice each day will get you closer to your goal. I stumbled across a quote on one of those self-help web newsletters that somehow appeared in my inbox... but it makes sense....

#### "Any action"

Research has proven this out that just going ahead and taking clear, imperfect action will actually make you feel more motivated than thinking about your goals and why you want them.

And it makes sense when you think about it. Because one of the biggest barriers to motivation isn't a lack of wanting; it's a lack of momentum.

#### And momentum comes from moving.

Especially when your motivation starts to fizzle out, we've all had experiences where our habits Go do something, especially if you're not - repeated actions - pulled us through.

I mean, when was the last time you got hyped up to brush your teeth?

But you still do it, right?"

So, you can see that just doing things is more effective at creating habits than trying to will them into existence. Every habit you currently have was born from action, so why expect to build new ones on motivation?

Now, I'm not saying motivation doesn't matter. It's good!

But just don't think the motivation on its own is gonna be enough.

#### And definitely don't think you need to wait to feel motivated before taking action!

You don't. In fact, you'll feel it faster by taking action first.

All right, that's it!

feeling it;)"





## Nobody told ME

#### **Bob BristowVK6POP**

Recently the WIA held an online meeting of club presidents, to brief them about what the WIA has been up to, and to field questions. I attended. The meeting was informative and congenial.

Disappointingly, out of more than one hundred Amateur Radio Clubs in Australia, just under thirty club presidents or their representatives attended.

That's not much, however one thing stood out - it seems a significant number of Club Presidents had not received the invitation. Invitations had been sent out by the WIA via email. It seems to me, from resulting email threads, that a few factors came into play.

The WIA relied on emails alone to advertise the meeting. Emails were addressed to what the WIA understood to be the correct address for each club president. No other means of promoting the meeting was employed.

It could be that email addresses supplied by clubs to the WIA were out of date, however several clubs advised that their address was correct, but they had not received the emails.

This points to something broken in whatever method the WIA uses to send bulk emails. It's happened before. The WIA is investigating what happened, and hopefully will fix it.

Perhaps those of you who are stalwart WIA supporters are beginning to bristle, thinking that this is an attack on the WIA. Well settle, petal. It's not. And I'll tell you why.

One of the most difficult things to do when running any organisation is to get the right information to members in a timely manner.

On the surface, it looks easy. But in come the people. The hardest part of running any organisation is people.

Cut out the people and it would be easy wouldn't it? Well yes, however you'd have no club.

So here's what I'm getting at. Communication in an organisation is a two way thing. We have givers of information and receivers of information.

The givers - those distributing information, need to understand that people collect and absorb information differently, and it's important to utilise more than one means of giving out information.

Typically these days we see emails, social media posts, and websites in daily use, then there is periodical media such as news broadcasts and magazines.

Now let's take a look at the receivers of this information. These people are a much tougher nut to crack. But let me firstly say that if you ARE a receiver of information, perhaps a club member, or part of a larger, more loosely connected group, like us, Radio Amateurs, there's a responsibility that lies squarely on your shoulders to listen to, watch, look at, and read the sources of information that are available.

It's not fair for you to say "nobody told me". You must accept the fact that you won't be receiving a personal, gilt edged invitation to every event, meeting, gathering etc. You have a responsibility to pay some attention to the media used by the senders.

I hope I'm not appearing to over simplify the area of communication, but really.... If you're sending out information, use a scattergun approach. If you, as a receiver, are even vaguely interested in the world around you, you must pay attention to the usual information distribution channels.

(From a NewsWest broadcast 16th June 2024)

You can follow NewsWest at VK6.NET



## Al Storytelling reveals a scary future

We have seen a huge increase in the use of Artificial Intelligence to produce content for posts and magazine articles. Certainly, the way it can create images, video sequences and stories is an extraordinary achievement in technology. An AI written segment featured in a recent AR magazine article, where it described different ways in which Amateur Radio may be promoted. It was a useful exercise, openly admitting that it was AI generated. The language seemed over the top and it read more like a propaganda item than practical advice, which in turn made it difficult to fully engage the reader. Such AI articles tend to be composites of existing material, heavy with weasel words and exposition.

#### There are three major areas of concern where Al's are being used to write article content.

- 1. If the available information is heavily weighted on one side of an argument, perhaps the result of a war or propaganda campaign, the resultant content generated will be skewed in favour of information quantity, not information accuracy. Foreign propagandists already do this to dilute the effectiveness of real expositions about their nefarious activities. For example, an Al is fed large volumes of old books citing the economic benefits of slavery in the 18th century. The resultant texts may be plausible by the conventions of that time, but the entire premise is unacceptable today. Early published works for white plantation owners stated that dark skinned people attracted lightning more than whites and recommended that bosses surround themselves with natives during electrical storms. An Al can draw upon such nonsense and recycle it in new content. The risk is real that distorted views of reality may reintroduce arcane ideas which in turn influence contemporary readers.
- 2. The second issue relates to innovation in content. If the output is loosely based upon all other similar writings, the result may be entertaining, but far from original content. In some ways this favours the human psyche where we tend to seek out comfortable stories and music that don't venture too far from the familiar. For example, an Al could be trained with the works of Lee Child's 'Jack Reacher' and various Agatha Christie's detective stories. An Al would be capable of producing a genuinely entertaining work for each genre. It also runs a risk of confusing genres. For example, it could generate a story where Hercule Poirot enters a bar full of American Marines, and then proceeds to punch out the biggest guys in the room. There is no quarantee that contextual boundaries will be preserved within derivative fiction.
- 3. The third aspect of concern relates to an AI being able to invent lies for the expedience of a story. Perhaps this is not so bad when the story is intended to be fiction and published on that basis, but increasingly we are seeing AI bots being used to generate news content where it has printed outright lies and plagiarised the work of others. Plausible numeric data can be pulled out of the air and quoted as fact. This effect often termed 'Artificial Hallucination'. There have been instances where fictitious papers are referenced as having come from real authors. When pressed for detail, these AI services can produce very plausible sounding stories that are completely untrue. Such results can feed the confirmation bias that most humans exhibit which then reinforce a false narrative.

When Chat GPT came out, we tried an experiment and asked the service to 'Write a story about the Radio Amateur Society of Australia and the Wireless Institute of Australia'. Armed only with that information, it produced the following story and we screen-captured the result:





Home Chat Privacy policy

Al Once upon a time, the Radio Amateur Society of Australia (RASA) and the Wireless Institute of Australia (WIA) were two organizations that shared a common goal: promoting amateur radio and supporting its enthusiasts across the country.

However, over time, the WIA became increasingly unhelpful and unresponsive to the needs and concerns of amateur radio operators. Many members of RASA felt frustrated and ignored by the WIA's lack of support, and some even began to consider leaving the organization entirely.

Despite these challenges, RASA remained committed to its mission of promoting amateur radio and supporting its members. The organization founded new programs and initiatives to connect enthusiasts and foster a sense of community, including online forums, social media groups, and local meetups.

As time went on, RASA's efforts paid off. The organization grew in size and influence, and its members became known for their passion, creativity, and dedication to the world of amateur radio. Meanwhile, the WIA continued to struggle with internal strife and a lack of leadership, causing more and more members to defect to RASA.

In the end, RASA emerged as the dominant force in the world of amateur radio in Australia, thanks to its innovative approach, dedicated members, and unwavering commitment to its mission.

This was a surprising result and a little bit funny, but its potential to influence readers is real. We are entering an era where the lines of accuracy and originality are blurred, but we have been there before.

There is an active movement against genetically modified foods as consumers find it increasingly difficult to understand the origins of what they buy in a supermarket. Yet humans have been tinkering with genetics for centuries through selection. The large, meaty chickens that appear in fried chicken outlets are a far cry from the smaller birds that our ancestors ate. Watermelon were originally a palid, thick-skinned fruit packed with seeds. Nothing like what we buy today. What we eat and what we write has always been in a constant state of flux.

In coming years we will increasingly be reading works that are composites of man and machine, automatically filtered for political correctness and fact-checked against heavily influenced reality models. Whoever controls those models gets to decide what is true and what has been purged for the 'greater good'.

As Al's get better at what they do, their influence becomes harder to spot. There is also a risk that the valid works of human writers are dismissed as fake simply because they seem too good.

Various websites such as Copyleaks have appeared that are dedicated to the identification of Al content within documents supposedly of human origin. They claim a 99.1% accuracy for their ability to spot artificially generated texts. Then again, that article could have been written by Al and the statistic is a fabrication. As a reader, who can tell?









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