

*A beginners guide to.....*

# **SOTA, VK5 Parks Award, KRMNPA, & WWFF**



**By Paul Simmonds VK5PAS**

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<sup>1</sup> Image courtesy of <http://www.imrdb.org>

<sup>2</sup> SOTA logo. Image courtesy of <http://www.sota.org.uk>

# Introduction

This is an updated version of the original publication released in March 2014. A large amount of information has been added in this updated version, including some new articles in the Appendix list, including an article by John VK5BJE, entitled ‘ *Using Lithium Phosphate Chemistry Batteries: A Beginner’s Perspective*’, and an article entitled ‘ *Enjoying QRP operation at home & in the field: equipment options*’ written by Doc VK5BUG, Norm VK5GI & Greg VK5GJ.

It is hoped that this publication will be of some assistance to those amateurs who are new to the exciting world of portable activity within amateur radio.

There are a number of very enjoyable portable activity programs which you can become involved in, including Summits on the Air (SOTA), the VK5 National & Conservation Parks Award (SANPCPA), the Keith Roget Memorial National Parks Award (KRMNPA), and World Wide Flora and Fauna in amateur radio (WWFF).

This publication is not an exhaustive compendium, but rather, it contains basic information to allow amateurs to get started in the various programs mentioned.

Should anyone have suggestions for the next release of this manual, I would be pleased to hear from you.

Best 73 & have fun.

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- # Official Card checker - CQ Awards
- # Australian co-ordinator - World Wide Flora & Fauna (WWFF)
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# Summits on the Air (SOTA)



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## Introduction & History

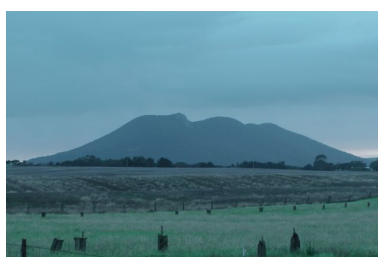
Summits on the Air (SOTA) was launched in March 2002 in the United Kingdom. It was an original concept by John G3WGV and developed by Ric G3CWI. It is an award scheme for radio amateurs and shortwave listeners that....

*encourages portable operation in mountainous areas around the world.*

It is important to note that the SOTA program is not just for mountaineers! There is a SOTA peak for everyone, no matter what your level of fitness. SOTA has been carefully designed to make participation possible for everyone. There are a number of disabled activators and at least one successful blind summiter.<sup>3</sup>

As of 6<sup>th</sup> January 2015, there were 98 active Associations in the SOTA program, located in about 50 countries around the world.

SOTA in Australia commenced in Victoria (VK3) in February 2012 and was followed by South Australia (VK5) in October 2012. There are now Australian Associations in VK1, VK2, VK3, VK4, VK5, VK6, VK7, VK8, & VK9. Currently, only the VK0 Australian Territories are unrepresented.



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<sup>2</sup> SOTA logo. Image courtesy of <http://www.sota.org.uk>

<sup>3</sup> <http://www.sota.org.uk/JoiningIn>

<sup>4</sup> Marble Range, South Australia, VK5/ SW-012. Image courtesy of Paul VK5PAS.

Various SOTA certificates are available for:

- Activators
  - those that climb to the top of a summit and operate
- Chasers
  - those who contact the activators, either from the comfort of home, another SOTA summit, a local park, or a local hilltop
- SWL's
  - those who log QSO's between activators and chasers.

### **How does SOTA work?**

Firstly, SOTA is not a contest. It is a fun program which is all about making radio contacts from designated summits, or making contacts with amateurs who are on top of those summits.

The SOTA program is governed by the SOTA General Rules, which can be found at the SOTA website at.....

<http://www.sota.org.uk/>

Each participating country in SOTA has its own Association/s which define the recognised SOTA summits within that Association. In large countries such as Australia, and the United States, a number of Associations may exist.

Each Association has an Association Reference Manual (ARM), with specific information pertaining to that geographical location.

Summits on the Air – ARM for Australia – South Australia (VK5)

#### **Summits on the Air Australia – South Australia (VK5) Association Reference Manual**



Document Reference: S82.1
Issue number: 1.1
Date of issue: 01 January 2013
Participation start date: 01 October 2012

Authorised:	SOTA MT	Date: 01 October 2013
Association Manager:	W Ian, Northeast VK5CZ, ian.northeast<ian.northeast1952@gmail.com>	
Summits-on-the-Air:	an original concept by G3WGV and developed with G3CWI	

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Document S82.1

A full list of SOTA Associations around the world can be found at.....

<http://www.sota.org.uk/Associations>

Each Association is overseen by an Association Manager (AM).

## **Points**

Each summit earns the activator and chaser a score which is relative to the height of the summit above sea level. Each summit is assigned points ranging from 1 – 10. In some Associations, a seasonal bonus of three points is also offered, e.g. winter periods.



## **Qualifying summits**

SOTA summits need to be clearly defined peaks. The SOTA Management Team recommends a minimum ‘relative height’ or ‘prominence’ for summits of 150 metres (about 492 feet).

There is some confusion within some quarters of the amateur community surrounding the issue of prominence. For SOTA, the summit needs to be more than ‘prominent’, it needs to have ‘prominence’.

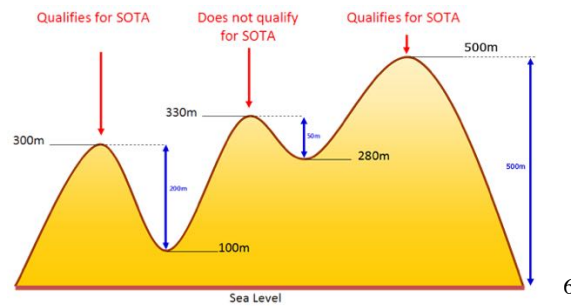
For a summit to qualify for SOTA, there must be a ‘vertical separation’ of at least the Association’s prominence value, between the summits and their associated saddles (also known as cols). In other words, summits need to be distinct peaks. The terrain surrounding the summit needs to fall away by a minimum of 150 metres.

In Australia summits qualify by having 150 metres of ‘prominence’.

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<sup>5</sup> Summits in The Grampians in Victoria. Image courtesy of Paul VK5PAS.





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A list of qualifying summits in each Association can be found on the SOTA website.

For more information on prominence, please have a look at the following.....

<http://www.vk5pas.com/summits-on-the-air-sota.html>

Should you locate a summit that you believe qualifies for SOTA, and is not on the SOTA list, please notify the AM and provide them with details of the summit. If it is confirmed that the summit is indeed a valid SOTA summit, then that summit can be included in the next updated ARM.

Additionally, should you locate a summit with incorrect details listed, again, please contact the relevant AM.

### **Summit identifiers**

Each mountain Region in the relevant SOTA Association is assigned a unique two character identifier. Each individual summit within the Region is assigned a number in the range 001-999.

e.g. VK2/ SM-023

VK2 = New South Wales

SM = Snowy Mountains Region

023 = Far Bald Mountain

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<sup>6</sup> Image courtesy of [www.w0c-sota.org](http://www.w0c-sota.org)



## **Operating frequencies**

The majority of SOTA activity within Australia to date has been concentrated on the 40m band (ssb). And 7.090 has been adopted as a starting frequency. CW activity on 40m is also increasing. The 20m band has also been utilised by Australian operators with activity normally around 14.310 MHz. Considerable interest in working DX whilst on a summit has been generated.

## **Certificates & trophies**

SOTA certificates are available for reaching certain thresholds/scores. This includes the prestigious ‘Mountain Goat’ and ‘Shack Sloth’ certificates.



Additionally, glass etched trophies are issued upon reaching 1,000 points.



<sup>7</sup> Ian VK5CZ, operating from VK5/ SE-009, South Australia. Image courtesy of Paul VK5PAS

<sup>8</sup> Image courtesy of Ian VK1DI

<sup>9</sup> Image courtesy of Andrew VK1NAM

## **SOTA website**

More detailed information on the SOTA program can be found at the Summits on the Air website at.....

<http://www.sota.org.uk>

## **SOTA Australia Yahoo group**

There is an Australian SOTA Yahoo group which is a common meeting point on the Internet for Australian SOTA enthusiasts. It is well worth joining to keep up to date on the latest news within Australia and the wider world, and to view intended activations. The Yahoo group can be found at.....

[https://au.groups.yahoo.com/neo/groups/SOTA\\_Australia/info?tab=s](https://au.groups.yahoo.com/neo/groups/SOTA_Australia/info?tab=s)

## **How do I get started as a SOTA Activator?**

Firstly, you need to find out what summits qualify for SOTA in the area that you live or are travelling through. This information can be found in the relevant ARM which in turn can be found on the SOTA website. Then head to the summit and follow some basic rules.

- all of your gear must be carried to the operating site.
- your final entry into the activation zone (see below) must be “non-motorised”, e.g. walking, climbing, skiing, cycling, horseback, etc.

To qualify the summit, you need just one QSO. However to gain activator points you require four QSOs.



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<sup>10</sup> Peter VK3PF at Mount Kosciuszko, New South Wales. Image courtesy of Peter VK3PF

### **Do I have to walk far?**

As mentioned above, SOTA was designed to be inclusive for everyone. There is no defined distance that you are required to walk.

The distance you will be required to walk, depends on the summit. With many summits, you will need to walk from the very bottom, as there may be no road to the top.



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But if there is a road leading to the top, there is nothing which prevents you driving to the top of the summit. BUT.....remember the SOTA rule that your final entry into the activation zone must be by non motorised means. In Australia, amateurs are adopting the ‘walk out of the activation zone, and walk back in’ method, if they have driven into the activation zone.

So please, if you intend to activate, familiarise yourself with the term ‘activation zone’ (see below). Remember that your final entry into the activation zone must be by non motorised means, e.g. walk, cycle, horseback, etc. All of your equipment must be carried to the operating site. And operations must not be in, or in the vicinity of a motor vehicle.

### **Activation zone (AZ)**

What is the activation zone? It is defined as...

*“an unbroken area within 25 vertical meters of the summit”.*

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<sup>11</sup> Mount Napier summit, Victoria. Image courtesy of Paul VK5PAS

If you are able to get to within 25 vertical metres of the summit, and from your operating position to the actual summit it is possible to get to the highest point without descending beyond 25 vertical metres, then you are within the 'Activation Zone'. If, however, you are on a knoll that is within 25 vertical metres of the summit, but the land drops away below 25 vertical metres between your operation position and the highest point at the summit, then you are not in the activation zone.

### **Why is there an Activation zone?**

Because it is recognized that it is physically impossible, and sometimes dangerous, to reach the very top of a summit. There may be a structure on the top of the summit, or there may be many visitors on a frequently visited summit, e.g. Mount Lofty in South Australia, Mount Kosciuszko in New South Wales. So it is permitted to have an operating position away from the summit, but not more than 25 vertical metres below the summit. If your operation is from outside the AZ, the activation is deemed to be invalid, and will score no points.

### **How can I tell if I am in the activation zone?**

You can use a handheld GPS device. Or there are also a number of applications that can be downloaded to your mobile telephone, e.g. 'Altitude +', 'My Altitude', 'Sea Level', etc.



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<sup>12</sup> Image courtesy of Ian, VK1DI

## **Private property**

Many SOTA peaks in Australia are located on private property. Before entering on private property, please seek the permission of the land owner.

Remember, that your actions may affect future planned activations by other SOTA activators.

For information and tips on accessing property, please have a look at the following.....

<https://vk5pas.wordpress.com/2013/08/02/accessing-private-property/>

<https://vk5pas.wordpress.com/2014/01/31/trig-points-and-access-to-private-property/>

## **Some important tips for Activators**

- Always seek permission from landowners prior to activating a summit
- Operation must not be in, or in the vicinity of a motor vehicle
- Entry into the activation zone must be by 'non-motorised means'
- You must operate from a portable power source, e.g. batteries, solar.
- At least four QSOs must be made for you to claim your activator points.
- Activator points can only be claimed for a particular summit, once in any calendar year
- Activator points are associated with the date of the activation and not the number of QSOs attained by the activator, e.g. an activator who has 4 QSOs gets the same points as an activator who gets 40 QSOs.
- Operate in a considerate manner to others on the summit
- Avoid damage & take home any of your litter
- QSOs through repeaters do not count.
- QSOs with others on the same summit do not count
- Whilst QRP is not a requirement remember that your batteries and mast must be carried as well.

There are some great tips for prospective Activators on the SOTA website. Here is the link.....

<http://www.sota.org.uk/JoiningIn>

## **UTC rollover**

Coordinated Universal time, abbreviated as UTC, is the primary time standard by which the world regulates clocks and time.

When clocks pass 0000 UTC time, the date passes from one to the next. This is referred to as the 'UTC rollover'.

Because it is a new UTC day, SOTA chasers get new chaser points. Many SOTA activators plan their activations around the UTC rollover. Although the activator will not get the extra points (except for New Years Day), the ever hungry SOTA chasers will be rewarded.

## **UTC rollover and log issues.**

SOTA was developed in the United Kingdom. As such, there won't be too many SOTA activators on the top of mountains at the UTC rollover. But here in Australia, the UTC rollover occurs during our morning (depending on where you are in Australia...between 9.30 a.m. to 11.00 a.m.).

So do you submit one log or two? The SOTA database Manager has advised Australian activators to submit ONE single log for the activation.



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<sup>13</sup> Mount Zero, Victoria. Image courtesy of Paul VK5PAS



## **Summit to Summit**

A Summit to Summit (S2S) contact is a QSO between SOTA activators who are on different summits. Activator points are combined with Chaser points, to form your Summit to Summit points tally. Summit to Summit certificates are issued upon reaching certain point thresholds.

## **What about Chasing?**

It has been reported that SOTA Chasing is one of the fastest growing specialist interest areas within amateur radio. Summit Chasers do not require any specialist equipment or fitness unlike the activator. Chasers can operate from home, their local favourite hilltop, or a local park. Many chasers often do go portable to escape the noise floor at their home. Chasers can also be other activators who are on the top of a qualifying summit working another activator (summit to summit contact).

Chasers accrue summit points each UTC day. As a chaser you will be awarded points for working a summit once in every day. However, contacts with other Activators on that same summit during that same day, will score no additional points.

Activators often issue alerts on *SOTAwatch2*, so, as a Chaser, it is well worth being familiar with that website.

## **What is *SOTAwatch2*?**

*SOTAwatch2* is a spotting and alert facility for use by SOTA Activators and Chasers. It contains 'Latest Spots' and 'Upcoming Activations'. The SOTA spots are refreshed every 1 minute. The alerts allows Activators to place their activation intentions on the site. There is also a reflector. A reflector is a common meeting spot on the internet for amateurs pursuing SOTA activities. There are also a number of other links including 'Browse SOTA summits', a link back to the SOTA website and the SOTA database, a link to SOTA TV where you can post & view various SOTA videos, a link to the Summits on the Air Photo Pool, and a link to the SOTA Shop.



Please do NOT post park activations on *SOTAwatch2*, unless they are also on a SOTA summit. The appropriate place to spot Park Activators is either on the DX cluster or on the *parksnpeaks* site (see below).

<http://www.sotawatch.org/index.php>

### **Tracking your progress**

SOTA activators and chasers upload their activities on the SOTA Results and Summits Database service.

<http://sotadata.org.uk/>

### **SOTA apps for your phone**

There are a variety of applications that you can download for use on your mobile phone. They include (and are not limited to) SOTA Goat, Rucksack Radio, and Pocket SOTA.



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### **SOTA Mapping project**

The SOTA Mapping Project (SMP) is a website offering mapping resources for amateur radio operators. The SMP aims to provide comprehensive mapping information in graphical form based on Google Maps, on summits in the SOTA program.

<sup>14</sup> Image courtesy of <http://ww1x.com/sotagoat/>

<sup>15</sup> [http://www.dl1dlf.de/rucksack\\_radio\\_tool](http://www.dl1dlf.de/rucksack_radio_tool)

**SOTA Challenge.**

The aim of the official SOTA Challenge is to boost activity on under utilised bands by encouraging SOTA QSOs and creating special awards for those that operate on those bands.

For more information on the 2015/2016 official SOTA challenge, please refer to.....

<http://reflector.sota.org.uk/t/the-2015-2016-official-sota-challenge/9822>

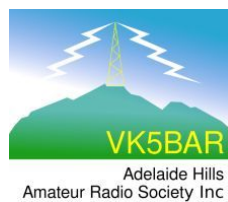
# VK5 National and Conservation Parks Award



## Introduction & history

The VK5 National and Conservation Parks Award commenced in April 2013 and is sponsored by the Adelaide Hills Amateur Radio Society (AHARS). Prior to this award, there was no known formal program that recognised operations from South Australian parks.

The aim of the Award is to encourage portable operation by radio amateurs from within South Australia's 21 National Parks and 269 Conservation Parks. It is a great way to see some of South Australia's spectacular parks, and at the same time enjoy the hobby of amateur radio.



The Award is available to:

- Activators
- Hunters
- SWL's

The Award is not limited to VK5 operators! All Australian and overseas amateurs and SWL's are encouraged to participate and apply for the various certificates. To date, the award has a strong following by amateurs all around Australia.

There are various certificates offered:

- Activator certificates
- Hunter certificates
- SWL certificates
- Park to Park certificates
- Unique Park certificates
- Activated All VK5 Park Regions
- Worked All VK5 Park Regions

To qualify for certificates, Activators and Hunters accrue a specified number of points by either operating portable from a National and / or Conservation Park, or by making contact with an amateur/s operating portable from a National and / or Conservation Park.



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### **Qualifying Parks**

Only South Australian (S.A.) National Parks and / or Conservation Parks qualify. Other S.A. parks such as Recreation Parks, Conservation Reserves, Game Reserves, Marine parks, etc do not qualify for this award.

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<sup>16</sup> Image courtesy of John VK5BJE

## **Points**

Each South Australian National Park is worth 2 points and each South Australian Conservation Park is worth 1 point.

Activators may only claim each National Park or Conservation Park for activator points once per calendar year. You may operate from a park as many times as you like, however, as an activator you will only be awarded activator points once per calendar year for each park.

However Hunters may work the same park once per UTC day for Park Hunter points.

## **General rules**

- Valid activations must be within the official park boundaries.
- All bands and modes are valid.
- Contacts via repeaters, IRLP, or Echolink are not permitted.
- Mobile operation (defined as in or on a vehicle) is not permitted.
- Contacts after 14<sup>th</sup> April 2013 are valid for the award.
- QSL cards are NOT required.



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<sup>17</sup> Steve VK5AIM at Martindale Hall Conservation Park. Image courtesy of Steve VK5AIM

### **Frequencies/Alert facilities.**

There are no specified park frequencies. However, 7.095 on 40m has been adopted as a ‘starting point’. Activity on the 20m band has been focussed around 14.310.

Activators are encouraged to call ‘CQ VK5 Parks Award’.

Activators are also encouraged to place their intended activations on the parksnparks site (see Page 39). Activators can also place their intended activations on the VK5 Parks Yahoo group.

Hunters are encouraged to spot activators on parksnparks, and the DX Cluster. By doing so, you are not only helping the activator achieve more contacts, but you are also assisting your fellow park hunters.



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### **Activator & Hunter Certificates**

For Activator & Hunter certificates, there are 5 levels ranging from Bronze to Diamond. Certificates are offered for each level (each level features a different photograph on the certificate – making each level certificate unique). A glass etched trophy is available to those amateurs reaching Diamond level.

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<sup>18</sup> Andy VK5AKH at Torrens Island Conservation Park. Image courtesy of Andy VK5AKH



### Australian operators

- Bronze 10 points
  - Silver 20 points
  - Gold 35 points
  - Platinum 50 points
  - Diamond 70 points
- (must include all 21 x S.A. National Parks at the Diamond level)

### Overseas operators

- Bronze 5 points
  - Silver 10 points
  - Gold 15 points
  - Platinum 20 points
  - Diamond 50 points
- (must include all 21 x S.A. National Parks at the Diamond level)





## **Park to Park certificates**

Park to Park certificates are also offered for Activators contacting other VK5 Park Activators who are operating within a park. Points are combined e.g. VK5ABC in Belair National Park (2 points) works VK5XYZ in Giles Conservation Park (1 point). A total of 3 points is accrued by both Activators towards their Park to Park score.

Please note, that the points for your park are only counted once per calendar year, no matter how many park to park contacts you achieve during an activation.

There are 5 Park to Park levels:

- |            |           |
|------------|-----------|
| ➤ Bronze   | 10 points |
| ➤ Silver   | 15 points |
| ➤ Gold     | 25 points |
| ➤ Platinum | 50 points |
| ➤ Diamond  | 70 points |



## **Unique park certificates**

Certificates are also issued for operating from or contacting, Unique Parks. A unique park simply means a 'different' park. Or in other words a new park for your log.

There are 5 National Park Uniques levels.....

- |          |               |
|----------|---------------|
| ➤ Bronze | 5 unique NP's |
| ➤ Silver | 7 unique NP's |



- |            |                    |
|------------|--------------------|
| ➤ Gold     | 10 unique NP's     |
| ➤ Platinum | 15 unique NP's     |
| ➤ Diamond  | All 21 unique NP's |

There are 5 Conservation Park Uniques levels.....

- |            |                     |
|------------|---------------------|
| ➤ Bronze   | 25 unique CP's      |
| ➤ Silver   | 50 unique CP's      |
| ➤ Gold     | 100 unique CP's     |
| ➤ Platinum | 150 unique CP's     |
| ➤ Diamond  | All 268 unique CP's |

### **Activated All / Worked All VK5 Park Areas**

There are 8 specific regions in South Australia, that the National and Conservation parks are spread across. Certificates are awarded for either activating from / working a certain number of parks in the various regions.



### **Applying for the award.**

Excel based spread sheets (which enable you to log all your park activity) can be found either on the VK5 Parks Award website, the Adelaide Hills Amateur Radio Society website, or the VK5 Yahoo Users Group.

Amateurs applying for this award are encouraged to use the spreadsheets and submit these when applying for the award.

Applications for this Award (consisting of the spreadsheet) should be forwarded to:-

The Awards Manager (VK5PAS),  
c/o Adelaide Hills Amateur Radio Society Inc,  
P.O. Box 401,  
Blackwood,  
S.A.  
5051.

Applications will include the following:-

- Callsign of station worked/heard
- Name of operator worked
- Date
- Time
- Frequency
- Mode
- Your power output
- Name of National Park / Conservation Park.

Separate individual certificates will be issued for each level. Certificates are issued at a cost of \$5.00 per certificate (to cover printing, postage, photo paper, etc) OR they can be e-mailed to the recipient free of charge as a PDF file.



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Achieving Diamond level as an Activator, Hunter, or SWL, requires a significant amount of dedication and effort. Because of this, an optional glass etched trophy will be awarded for those reaching Diamond level. This is in addition to the Diamond level certificate.

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<sup>19</sup> Greg VK5ZGY at the Wolseley Common Conservation Park. Image courtesy of Greg VK5ZGY

These glass etched trophies measure about 9 cm (W) & 12 cm (H), and weighs about 670 grams, and will be individually engraved with the recipient's call sign, recipient's name, and type and date of award.

For Bronze, Silver, Gold, Platinum & Diamond certificates:

- AUSTRALIAN operators/SWL's
  - AUD \$5.00 or 2 valid International Reply Coupons (IRC's).
- OVERSEAS operators/SWL's.
  - AUD \$10.00 or 3 valid International Reply Coupons (IRC's).

For optional Diamond Award trophy:

- AUSTRALIAN operators/SWL's
  - AUD \$60.00 or 18 valid International Reply Coupons (IRC's)
- OVERSEAS operators/SWL's
  - AUD \$75.00 or 22 valid International Reply Coupons (IRC's)

Or alternatively, money for the cost of the Award certificates or trophy can be placed into the Adelaide Hills Amateur Radio Society account (please include a notation that the money is for the VK5 Nat. & Cons. Parks Award):-

**Bank SA:**

Name: AHARS  
 BSB: 105 186  
 Account no: 036 248 940

**VK5 Parks website.**

The VK5 Parks website can be found at.....

<http://www.vk5parks.com>

**Yahoo group.**

There is a VK5 Parks Yahoo group which can be found at.....

<https://au.groups.yahoo.com/neo/groups/sanpcpa/info>

The Yahoo group is dedicated to those amateurs who are interested in the VK5 Parks Award program. The Yahoo group is well worth joining, to keep abreast of the latest news and intended activations.

**Anniversary activation weekend.**

Each year around March / April, a special activation weekend is held to celebrate the anniversary of the award. More information on this weekend can be located on the VK5 Parks website.



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<sup>20</sup> Col VK5HCF in the Canunda National Park. Image courtesy of Col VK5HCF

# Keith Roget Memorial National Parks Award (KRMNPA)



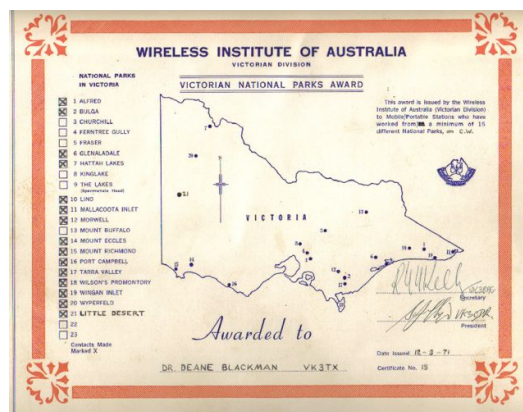
21

## Introduction & history

The Keith Roget Memorial National Parks Award (KRMNPA) is sponsored by Amateur Radio Victoria. The aim of the award is to encourage portable operation in Victoria's 45 National Parks.

This award commenced in around 1970 and was known as the Victorian National Parks Award by the then WIA Victorian Division. At that time there were only 20 Victorian National Parks declared.

A driving force behind this award was the late Keith Roget who had served on the WIA Victorian Division Council. His widow agreed in the 1980s that it was fitting that the award be renamed in his memory to honour his contribution.



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<sup>21</sup> Image courtesy of Amateur Radio Victoria

<sup>22</sup> Image courtesy of Amateur Radio Victoria

To qualify for a basic award, a radio amateur must make contact with and/or from a specified number of the 45 National Parks located within Victoria. Contacts via repeaters, IRLP, or Echolink are not permitted.

A special 'Merit' plaque is also offered for those amateurs activating all 45 parks or working all 45 parks. A 'Grand Slam' plaque is offered if you activate and work all 45 parks.

At this stage, Peter VK3ZPF, and Peter VK3PF, are the only amateurs to have operated from all 45 Victorian National Parks, and worked all 45 Victorian National Parks.

### **Points**

A contact with/from a Victorian National Park earns one (1) point.

Short Wave Listeners earn one (1) point for logging both ends of a valid contact between two radio amateurs with at least one being in a National Park.



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The basic award is issued when the following criteria is met.....

- VK3 station achieves 15 points
- Other VK (non VK3) achieves 10 points
- DX station achieves five points

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<sup>23</sup> Image courtesy of Peter VK3ZPF

## **Endorsements**

Various special endorsements are offered, including.....

- 25 points – making contact with and/or from 25 parks
- 45 points – making contact with and/or from all 45 parks
- CW Ony endorsement
- Activated ALL Parks endorsement
- Worked ALL Parks endorsement
- Other endorsements are being considered

The cost of the award is AUD \$5 or 2 IRCs, to cover postage and costs. The ‘Merit’ plaques cost \$70.00, whilst the ‘Grand Slam’ parks cost \$130.00.



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## **Applying for the award.**

Send a copy of your log showing all claimed contacts to the Awards Manager. Submissions must include: callsign, date, time, operator name, National Park name, frequency, mode.

The website shop <https://amateurradio.com.au/shop/> provides easy credit card payments via PayPal.

## **KRMNPA Activity weekend**

Each year a special KRMNPA Activity weekend is held in November. This is a great opportunity to listen to or become involved with KRMNPA.

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<sup>24</sup> Image courtesy of Peter Vk3PF



## **Parks Victoria**

Parks Victoria has detailed information on each of the 45 Victorian National Parks.

<http://parkweb.vic.gov.au>

## **Yahoo group**

There is a Yahoo group for the KRMNPA, which can be found at.....

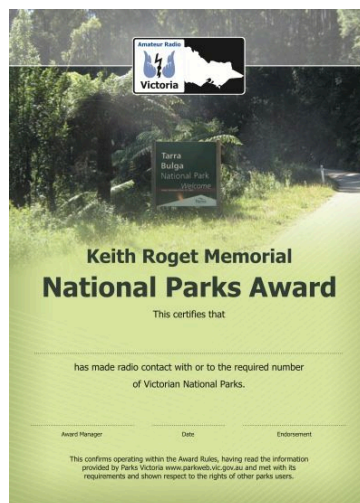
<https://au.groups.yahoo.com/neo/groups/krmnpa/info>

## **More information.**

For more information on the KRMNPA, please go to the Amateur Radio Victoria website at.....

<https://www.amateurradio.com.au/awards>

or contact the Awards Manager, Tony VK3VTH.



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<sup>25</sup> Image courtesy of Amateur Radio Victoria



# World Wide Flora and Fauna (WWFF)



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## Introduction

World Wide Flora and Fauna in amateur radio (WWFF) is an international and non-commercial program run by the co-ordinators of a large number of National Flora and Fauna programs. The WWFF program wants to.....

*‘draw attention to the importance of protecting nature, flora and fauna’.*

Amateurs are encouraged to operate portable from designated nature parks and protected nature areas.

The WWFF program is run by the Chairman Lars PH0NO and Vice chairman Max IK1GPG and the national co-ordinators of the member countries. There are currently a total of 41 participating WWFF member countries in Europe, North America, South America, Asia, and the Pacific.

More detailed information on the WWFF program can be found on the WWFF ‘global’ website at.....

<http://www.wwff.co>

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<sup>26</sup> Image courtesy of World Wide Flora, <http://www.wwff.co>

## **History of WWFF**

The Flora and Fauna movement within ham radio was initiated in 2008 by the Russian Robinson Club as 'World Flora and Fauna' (WFF). In late 2012, the program was relaunched as 'World Wide Flora & Fauna in amateur radio' (WWFF). The Australian WWFF program (referred to as VKFF) commenced in March, 2013.



## **Qualifying Parks**

Qualifying parks for the WWFF program in Australia are those National Parks that were established prior to 2008. A full list of all qualifying Australian National Parks and detailed information on the Awards available can be found on the Australian WWFF website at.....

<http://wwffaustralia.weebly.com>

or in the WWFF Directory.

## **WWFF Directory**

The WWFF Directory contains all the qualifying National Parks and Nature Reserves around the world. The Directory can be downloaded from.....

<http://www.wwff.co/p/wwff-downloads.html>

**Recommended frequencies**

- Phone: 3.744, 7.144, 14.244, 18.144, 21.244, 24.944, 28.444
- CW: 3.544, 7.024, 10.124, 14.044, 18.084, 21.044, 24.894, 28.044

**What is the term '44'?**

During a WWFF QSO you may hear the term '44'. What does this mean? The first digit '4' represents the four elements: earth, water, air, and fire. The second digit '4' represents the four directions: north, south, west & east.

**WWFF LogSearch**

Activators are encouraged to submit their activator logs to the relevant National WWF co-ordinator, so that they can be uploaded to the WWFF LogSearch facility. There is currently a total of 3,635,731 QSO's in the database from 4,149 different references in 85 DXCC's.

<http://logsearch.wwff.co/index.php>

**WWFF Awards**

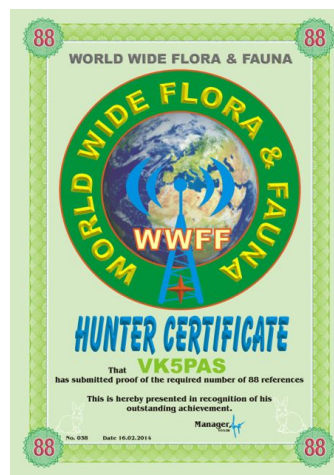
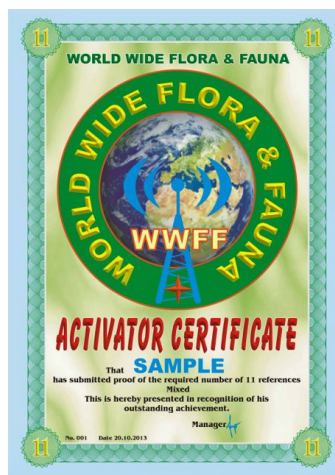
The WWFF program offers a multitude of award certificates. WWFF features a global award program for all hunters and activators of WWFF references. The participating National programs in WWFF also maintain various National award programs (this includes Australia). A list of national award programs can be found by clicking on the following link.....

<http://www.wwff.co/p/wwff.html>

In October 2013, the WWFF Global Award program was launched. These awards are based on the WWFF LogSearch database. Currently, two awards are offered as follows.....

- WWFF Hunter

- The WWFF hunter award starts at 44 references with upgrade steps of 44 up to 444 and then steps of 100. A "novice" award has been added, especially for new hunters of the WWFF program.
- WWFF Activator
  - The WWFF Activator award starts at 11 references and has upgraded steps of 11 references.



The Australian VKFF Award program is open to:

- Activators
- Hunters
- SWL's

Please note, that the threshold for QSOs and activation time has been lowered for the VKFF Awards. For global WWFF awards, a minimum of 44 QSOs are required and an operation time of 2 hours. **Please note that for VKFF awards, a minimum of 10 QSOs is required, with an activation period of 30 minutes.** Also note that this can be over multiple activations.

For VKFF Activators, there are five levels as follows.....

- |            |                               |
|------------|-------------------------------|
| ➤ Bronze   | work from 10 VKFF references  |
| ➤ Silver   | work from 20 VKFF references  |
| ➤ Gold     | work from 30 VKFF references  |
| ➤ Platinum | work from 40 VKFF references  |
| ➤ Diamond  | work from 50 VKFF references. |



For VKFF Hunters and SWL's there are also five levels as follows.....

- |            |                                 |
|------------|---------------------------------|
| ➤ Bronze   | work / hear 10 VKFF references  |
| ➤ Silver   | work / hear 20 VKFF references  |
| ➤ Gold     | work / hear 30 VKFF references  |
| ➤ Platinum | work / hear 40 VKFF references  |
| ➤ Diamond  | work / hear 50 VKFF references. |

### **WWFF Forum**

WWFF has a dedicated Forum where there is a variety of interesting information and you can stay up to date with the latest news and activities. You are also encouraged to post your intended park activations on the Forum.

### **Facebook & Twitter**

<http://forum.wwff.co>

WWFF has a Facebook site.....

<https://www.facebook.com/groups/wwff44>

And WWFF is also on Twitter. The link is on the WWFF global website.

## **Yahoo group**

There is also an Australian WWFF Yahoo group, which can be found at....

<https://au.groups.yahoo.com/neo/groups/wwffaustalia/info>

## **How do I activate a WWFF park?**

In essence:-

- You and all the equipment you use need to be within the perimeters of the park
- For Australian awards you require 10 QSOs and 30 minutes activation time
- For WWFF global awards you require 44 QSO and 2 hours activation time.

## **How do people know I am in a WWFF location?**

- Post your intended activation on the WWFF forum
- Post your intended activation on the Australian WWFF Yahoo group
- If possible use the Flora & Fauna frequencies (not always possible)
- When calling CQ mention where you are
- Once worked you are likely to be spotted on the DX cluster.

## **How do I confirm an activity / send in a log?**

- Send your log in ADIF format to the National co-ordinator.
- Or as a cvs file (a template can be located in the Files section of the WWFF Australia Yahoo group).

# ***parksnpeaks***

The *parksnpeaks* site is a spotting and alert page which has been created by Allen, VK3HRA. It is free to register and is a very good source to follow various park activations for SOTA, the VK5 Parks Award, KRMNPA and WWFF.

The screenshot shows the homepage of the *parksnparks* website. At the top is a navigation bar with links: VK Spots, VK Alerts, VK QRP, KRMNPA, SANPCPA, VK WWFF, and Help. Below this is a 'Status' section with a 'Last Update' timestamp and a login/register area. The main content area is titled 'Current Spots' and lists various SOTA activations with details like time, frequency, and location. On the right side, there are sections for 'Solar-Terrrestrial Data', 'VK Blogs' (listing various VK call signs), 'VK Groups' (listing various groups), and 'Links'.

<http://www.parksnparks.org>

It is highly recommended that park activators place their intentions on the parksnparks site, so that park hunters can see upcoming activations.

It is also highly recommended that park hunters, 'spot' activators.

Nick VK3ANL recently posted on the KRMNPA Yahoo group....



*‘.....activators-please please please alert your intentions on Parksnparks!  
Even if it’s very tentative’.<sup>27</sup>*

Nick raises a very good point. We have an excellent resource in parksnparks, so PLEASE use it. Remember that by posting a ‘spot’ on parksnparks, you are helping out your fellow ham, who may be chasing an elusive park. You are also helping out the activator, who may be trying to chase down the required 44 contacts for the WWFF program.

Please have a look at the following.....

<http://vk5pas.wordpress.com/2014/12/21/dont-become-a-black-hole/>

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<sup>27</sup> Yahoo group posting by Nick VK3ANL



## Checklist for SOTA / Parks activators

In 2013, Allen VK3HRA did a 'straw poll' of various aspects of SOTA activating. Most of the regular SOTA activators responded. The results are equally applicable to Park activations.

### What to do in the planning stages?

- Check maps, google earth
- Check weather reports/conditions
  - including operating on days of extreme fire danger
- Google search the summit or park. Has someone been there before?
- Are there summits and parks I can combine in one trip?
- Ensure batteries are charged
- Post intentions on *SOTAwatch2* or *parksnpeaks* or various Yahoo groups
- Gear prepared? e.g. radio, pen, paper, compass, etc.
- Let someone know your intentions.

### How do you select the summit or park to activate?

- Anything not done before and reachable
- Lack of tourists
- Reasonable access
- Can be reached in the time available
- Estimated physical effort required.
  - Your competence to undertake the activation

### What gear do you take?

- Transceiver
- Antenna
- Squid pole
- Batteries
- First aid kit
- Food & water
- GPS

- Paper & pen, log book
- Camera / video
- Waterproof gear
- Bothy bag/ rain coat
- Mobile telephone
- Suitable clothing
- sturdy walking boots
- Insect repellent
- Torch
- Sunscreen
- Knife



#### What gear do you leave behind?

- Anything you can do without
- Change of clothes & towel (back in the car)
- Extra food & water (in the car)
- Tip – read blogs and see photos for further ideas.

#### Measures of a successful activation?

- Contacts in the log
- A good view
- A summit to summit contact
- A park to park contact

- Reports of good signals from chasers / hunters
- Enjoying the time out-side in the bush.

#### What is too risky?

- Going out in bad weather, especially electrical storms or on high fire risk days
- Terrain that could cause an injury, e.g. thick scrub, rocks
- Not advising somebody of your intended route and approximate timing
- Entering restricted areas without permission
- Damaging the site you choose
- Not getting in touch with someone if you are late back from the activation.

## Mapping

I have found that Google maps has been unreliable when locating many parks. Two mapping sites that are on the internet which are very good are as follows:-

Mapcarta

<http://mapcarta.com>

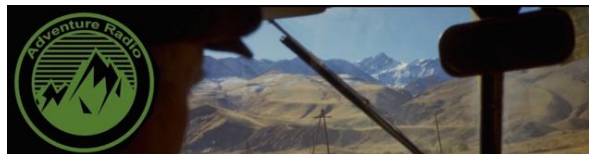
Wikimapia

<http://wikimapia.org>

For South Australian parks you may also like to try the following website, where you can locate a map showing all the protected areas of South Australia.

<http://www.environment.sa.gov.au/haveyoursay/fire-management-assessment>

Additionally, Mario DL4MFM, has created 'Adventure Radio MapView'. This mapping project shows SOTA peaks, WWFF parks, IOTA locations, and has a large number of other interesting options.



<http://cqgma.eu/mv/index.php>

Recently Ian VK1DI created klm files for all qualifying WWFF parks. These can be placed on Google Earth. Ian also provided a spreadsheet to Mario DL4MFM, so Adventure Radio is now completely up to date for Australian WWFF references.

## How else can I attract Park Hunters and fill up my log?



Because there is currently no audible phone alert app for park activations as there is for SOTA. So filling up your logbook for a park activation is a little more challenging.

Here are some tips

- The secret is in the antenna
  - We have all heard this, but it is true. It has been said that antennas compose one third of your QRP station. The other two thirds are your operating equipment and your operating skills.
- Try different bands
  - Propagation is not always kind on 40m for the longer hauls around VK, and certainly not for DX if you are running QRP. So, if possible, try operating on a selection of bands. This may not always be possible due to restrictions with licences and lack of appropriate antennas. But to give amateurs further afield a chance to get in the action as well consider using 15 or 20 metres. The vast majority of portable activity here in Australia seems to be on 40m SSB, which often excludes those in Western Australia (VK6).
- Place your intentions on as many forums as possible
  - The more people who know you are out there the better.
- Consider the time of day / know when the bands are open
  - Who is your targeted audience? There is no point going out at midday if you want to work Europeans on 20m long path. So try to time your activations for those who you would like to get in the log.
- Look at the solar figures / propagation conditions
  - Propagation conditions are extremely important with any QRP operation. If the solar figures are suggesting poor conditions then maybe consider putting off an activation until another day.

- Ask someone to place you on the DX cluster. Remember, the DX Code of Conduct for the cluster....It is impolite to self-spot.
- Consider setting up an SMS group on your mobile telephone
- Try a group e-mail to all your amateur friends.
- Use the local repeater to let people know that you are there.

Remember Park Hunters, please don't just work the station and move on. Give some consideration to the Park Activator and other Park Hunters who would most likely love to get the park in their log. Let as many other amateurs as possible know that the Activator is there in the park looking for contacts.

Nick VK3ANL recently stated on the WWFF Yahoo group:

*‘And if you hear someone calling CQ from a national park, please make contact and exchange a report, even if you don't need that Park yourself. Many are chasing WWFF activation awards, which require logging 10 or even 44 contacts.’<sup>28</sup>*

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<sup>28</sup> post from Nick VK3ANL, KRMNPA Yahoo group, 25<sup>th</sup> November 2014.

## Operating skills / practice

With the popularity of SOTA & Parks activities increasing in Australia, as a SOTA or park activator you may end up with a 'pile up' following calling CQ. Here is a 'recommended' operating practice.....

- call for any SOTA/parks activators
- then call for QRP stations
- then call for portable or mobile stations
- then call for any DX (you might be surprised who calls you!)
- then call for stations who can hear you, but with difficulty (there is nothing worse as a Chaser/Hunter listening to an activator who is weak, but then disappears down below the noise floor due to a change in the band.)
- And finally call for anybody else (now the fun starts).

And for SOTA chasers or park hunters, please:

- Do NOT jump the queue (in other words call in between overs, before the QSO is complete)
- Do NOT call CQ on a frequency until you have asked if the frequency is in use.



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Always remember the DX Code of Conduct

<http://www.dx-code.org>



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<sup>29</sup> Image courtesy of <http://www.dxr.org/>

<sup>30</sup> Image courtesy of DX Code of Conduct, <http://www.dx-code.org>

## **REFERENCES**

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WorldWide Flora & Fauna in amateur radio, 2014, WWFF, Netherlands, viewed 13<sup>th</sup> March 2014, <http://www.wwff.co>



## Appendix 1

### So you want to buy an ‘Adventure Radio’!

**John Dawes VK5BJE**



Here are some ideas for selecting or buying a transceiver for portable use, now commonly known as ‘Adventure Radios’. This term is wide enough to cover the use of radios for casual portable operation in a field day through to more specialised operation where it is necessary to hike for some time through a park or to a summit to reach the desired portable location. Such a park can be in the same location. St Mary Peak, the second highest peak in South Australia, registered for SOTA as VK5 NE 001, is within the Flinders Ranges National Park and Australia’s highest peak, Mount Kosciuszko, VK2 SM 001, is in the Kosciuszko National Park in New South Wales. To some an Adventure Radio is a smaller transceiver capable of being reasonably back-packed into a desired location. A small QRP radio can be suitable for both back-packing to a summit and also for a park activation. Before purchasing a radio especially for portable operation, consider if you have a suitable radio already and use it to try a few activations in parks and easy summits to see if you like the activity.

If you enjoy it there are plenty of suitable radios on the market, ranging from a ‘shack in the box’ (such as an Yaesu FT817nd, a QRP radio which covers

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<sup>31</sup> Image courtesy of John VK5BJE

HF, VHF and UHF or the newer Elecraft KX3 covering HF and six metres) to a CW only radio built from a kit, e.g. MFJ, Ten Tec and YouKits, as well as others. There are also larger but compact radios, such as the Yaesu 897D, Yaesu 857D and Icom IC7000. Ross Pittard, VK3CE, writing in *Amateur Radio's Foundation Corner* V. 82 No. 3 March 2014 pp. 9 – 11, describes older transceivers suitable for Foundation Licensees. Some of the radios he discusses would also be quite suitable for portable operation, e.g. Yeasu FT7, Kenwood TS120V and the Icom 706 Mk11G. Remember that a 100 watt compact transceiver, while perfect in a park, may be totally inappropriate for a demanding summit.

Make a careful choice considering what you may want to do at a much later date.

1. **Budget, affordability**, given the proposed usage. Remember if you buying a specialised QRP radio you need to ensure you can justify the expenditure. There is nothing worse than buying a specialised transceiver and not being able to use it because you don't have the time. Consider the impact on the 'family' budget.

## 2. **Where to buy the radio?**

If the warranty and after-sales service matters to you, then buying from an Australian dealer for ICOM, Yeasu or Ten Tec makes sense. If not, or the radio is only available by importing it, then purchase from the manufacturer, such as the Elecraft KX3. If you choose to buy a used radio you might want read Jim Linton's (VK3PC) article in *Amateur Radio* V77 Nos 1, 2 January/February 2009 pp. 13 & 14. Jim offers many tips in selecting a used radio, which if followed, may save you some heart-ache. The article is too long to be summarised here.

**3. Check out what warranty and after sales service will be available on an imported radio?**

**4. What is the operator's current set up and how does QRP fit into her program?**

What else does he have?

**5. Power output.**

Is the radio QRP, such as the FT817nd, that is a 5 watt radio, or is it capable of higher power such as the Elecraft KX3 (10 watts) or the Ten Tec Argonaut V1, 10 watts? Operating QRP is challenging and great fun and it intensely satisfying to obtain contacts this way. Your operating skills will develop accordingly.

**6. What is proposed as a power supply?**

If the radio is used for casual QRP or low power operation in parks by a non-hiking owner, a reasonable capacity lead-acid battery might be adequate. Sealed lead acid batteries of 4.3 or 7 amp-hours can be carried! If the owner is a SOTA enthusiast, likes hiking and climbing, then a radio with then lowest standing current drain may go to the top of the desirable list, e.g. the Elecraft KX3. The Ten Tec Argonaut, for example, has a drain of 550 ma on receive but I think it is too big for back-packing, but great in the parks. Compare radios such as the FT817nd (400ma) and the ICOM 7000 (1.6 amps) on receive? More specialised lithium based batteries can be considered later.

**7. What bands does the radio cover?**

A 'Shack in the box', such as the FT817nd, may be desired to enable VHF and UHF portable operations or for HF only, the Ten Tec Argonaut V1, 160 to 10 metres, minus 60 (in the USA) and 12 metres may appeal although the non-inclusion of 12 metres brought Ten Tec considerable criticism. You can read

Ten Tec's thinking on their web site. If a *small* radio is desired the Elecraft KX3 may be your choice.

### **8. Transceiver RF qualities.**

I don't propose to deal with these in detail. All the manufacturers list the specifications in their brochures. Get hold of the manufacturer's brochures and read them and check what all of the parameters mean. Consult a hand book in necessary. It is important to remember that an 'Adventure Radio' does not have to perform like a DX/contest radio or a home radio used in a noisy location. You will be amazed at how quiet it is in parks and on summits. You can easily hear and copy signals that do not register on the signal strength meter. What does count for me is the capacity to resolve a signal in a busy band with strong signals on adjacent frequencies. Good reviews can be found in the pages of *Amateur Radio* or *QST*. You will find references to three reviews from *QST* for the Elecraft KX3, the Ten Tec Argonaut V1 (model 539) and the Yaesu FT817 which deal with the issue of adjacent signal interference/overload (among other matters) using various descriptive terms. Make sure, if you consult these reviews, that the parameters are common to each of the three radios otherwise the comparisons will be unequal. The ARRL's *QST* sometimes has additional reviews which explore some features in greater detail. The ARRL has just published a new book on how transceiver performance is measured. Bob Allison, WB1GCM, is the author and the book is titled *Amateur Radio Transceiver Performance Testing: Understanding Transceiver Performance Data*. This is a collection of his reviews previously published in *QST*.

Does the radio offer RF or Audio compression on transmit? A *small* amount of compression can make a difference. In my case the answer is no for Yeasu and yes for the Ten Tec. I own both of these radios. Remember using audio compression increases battery drain so you should use it sparingly if at all.

## 9. Weight.

A back-packing radio needs to be lighter than a radio used for casual use in a park where the operator's position is in easy walking distance from her vehicle. In my view an FT817nd is the heaviest radio that is capable of being back-packed. I have backpacked mine up SOTA peaks where I have had to hike for over two hours and, with a 4.3 amp hour Sealed Lead Acid Battery (SLAB), and it takes a toll! Don't forget you are also carrying an antenna, a squid pole, ropes and bungee straps, water, food, sunburn cream as well! Recently, in activating Maria Island, Tasmania, I carried two SLABS: I did not want the activation to fail because I ran out of power! It took me two days to recover!

## 10. Ergonomic issues

### *Manual*

Is the radio menu driven or simply uses switches? Compare the FT817nd with its deep menu system and an 80 page manual with the Ten Tec Argonaut (a manual which is an A4 sheet both sides). Don't be put off by a menu driven radio. You will find in most instances you will not need to alter settings in most activations. As the reviewers say: 'set and forget'. But you could consider making yourself a reminder sheet with the key functions listed, e.g. how to increase power, or add noise reduction, and laminate it and keep it with your gear.

### *Bail or stand*

The FT817 does not include a stand. I purchased my bail many years ago from *BHI* in the UK. It is light and very helpful with long-term use of the radio. *SOTAbeams*, in the United Kingdom, sell a plastic one for a number of 'Adventure Radios', including the FT817nd. Tilting the radio to improve the angle of the display is of great importance in an activation which goes on and on, may be for two hours or more. In *Amateur Radio V. 75* No.11 of November

2007, pp. 8 – 10, Ron Fisher, VK3OM, in his review of the Yeasu FT - 450 found the absence of a bail or flip bracket surprising on what he thought otherwise was a very fine radio.

### *Display*

Can you read the display in bright sunlight? Check the screen of your smart phone while wearing sunglasses outside. I can't read the screen information on my phone and must remove my glasses. The same can apply to your radio! Does the manufacturer allow for changes to the display colours? How big is the display? Do you get eye-strain after an hour or so of operation?

### *Recovered audio*

How does the audio sound to your ears? Is the radio noisy? Some radios have more background noise than others. This becomes very tiring to the operator. Does the speaker face up or down? Is it covered? This last feature is an issue in wet weather. For example, the Ten Tec's speaker is open to the elements. But the sound is great! I don't use the Ten Tec unless the weather is fine. Remember if you choose to carry an additional speaker or headphones it is additional weight.

### *Experience an activation*

Before buying a radio ask to accompany another amateur on an excursion and have a chance to see a setup, use the radio, or two and see what may suit you. While on the excursion look at the power sources, antennas, supports and other features of the station. Most SOTA and Park activators are only too pleased to provide such an experience.

### *Keeping it all in perspective*

Most of all it is a hobby and it is about having fun, getting outside in the parks and on peaks, enjoying the natural world, getting some exercise and meeting other people. It might provide a chance to combine your interest with that of your partner and family.

If I can be of assistance to you in developing your station please don't hesitate to contact me. Many of the amateurs who are active in the field run blogs: have a look at Paul's blog, VK5PAS, and he has an index of other blogs on his page. Some of the blog owners discuss equipment and you can also see how others found their operating positions: many include maps and GPS coordinates.

**11. Other requirements.** You *will* need an antenna. My strong advice is to use resonant wire antennas at first. A simple half wave dipole will perform well. Start on 40 metres. When you have had some experience add another band appropriate to your licence level. There are plenty of ideas for building a linked dipole and if you don't want to make the link insulators or the centre insulator those bits can be purchased (see VK5BJE.wordpress.com). At QRP levels it does not need to be balanced if your feed-line is coaxial cable. An unbalanced antenna will work well. If you later increase your power I would recommend a balun to ensure a balanced antenna. If you are a Foundation licence holder you might want to add links for 15 metres and 10 metres. Adding links is very easy and effective. A 40 metre antenna used on 15 metres works the third harmonic (say  $3 \times 7.1 \text{ MHz} = 21.300 \text{ MHz}$  which is likely to be too high in frequency) and it will not be a perfect match and you most likely will need an antenna coupler (tuner). It is better to make a linked dipole and select the part of the band that suits you. Always start with the highest band and get that tuned. Then move to the next band lower in frequency and so on. You cannot afford to waste power with a high Voltage Standing Wave Ratio (SWR) and carrying a coupler is additional weight. It is quite reasonable to use 50 Ohm coaxial cable (make sure you buy good quality RG58 coax, preferably double shielded) as a feed line. It is rugged and not as easily damaged as very thin coax, such as RG174.

Finally, most portable operators use a 'squid pole' as an antenna support with the dipole configured as an inverted V. However, if you don't have a

squid pole, use a rope to haul the centre of your antenna into a tree and tie each end off in bushes, stumps, rocks or whatever else is available. I have used my 'go to' box, my ruck-sack and a 'drift-wood' tripod as tie-off points!

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## About the author

John Dawes has been an amateur radio operator since 1976 and has been fascinated by radio all of his life. He has always enjoyed portable operations. Amateur radio is his hobby and has been unrelated to his work. He holds a number of University degrees, including a PhD, and has a Graduate Certificate in Tertiary Education. He can be contacted at [vk5bj@wia.org.au](mailto:vk5bj@wia.org.au) and on 0417 841 425. This paper was first presented at the Adelaide Hills Amateur Radio Society's VK5 SOTA & Parks Symposium on Sunday 9<sup>th</sup> March 2014.



## Appendix 2.

### ***“Enjoying QRP operation at home & in the field: equipment options”***

by Doc VK5BUG, Norm VK5GI & Greg VK5GJ



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### **“Rogues’ Gallery” introduction**

As VK5HP & VK4CMY, Doc completed 12 000 QRP CW contacts between 1975-95 as the first VK op to achieve 20m QRP CW DXCC & WAC awards, and won the VK section of the 1975 inaugural MARTS SeaNet contest using a kit-built 3W Heathkit HW-8 on 20m, & the VK/Oceania sections of the busier 1976 USSR CQ-M contest with a 2.5W Ten Tec Argonaut 509, both rigs fired through a homebrew 2-element 20m spider quad aerial.

Currently as VK5BUG, he runs a stand-alone wind & solar powered home QRP station based on a Ten Tec 535 Argonaut II transceiver (ex-VK7AN), plus an SLA battery powered pedestrian portable trolley running Ten Tec 555 Scout (ex-Canadian eBay) & Realistic HTX-100 (donated by Greg VK5GJ) transceivers.

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<sup>32</sup> Doc VK5BUG at Marino Conservation Park. Image courtesy of Doc VK5BUG

Norm VK5GI has embraced low power operation at home & portable for a number of years, using both SSB & CW from a range of commercial & kit-built equipment. He has recently acquired a camper trailer & plans to more frequently dent the ionosphere from exotic rural locations. This is scheduled to include AHARS Parks Award activations solo & in cahoots with Greg

VK5GJ who has also engaged in a litany of portable & mobile low power SSB activity, particularly during caravanning adventures. Greg has a comprehensive test equipment set-up plus a well-equipped workshop & junkbox, & may frequently be found at the bench with Norm, sorting kitset alignments & all manner of other matters RF, automotive & caravan.

### **Background to QRP equipment options**

Amateurs have never been so spoiled with respect to low-power portable equipment options for their domestic & radio operations. The most recently well-publicised transceivers include the Yaesu FT817/ND & Icom IC703Plus all-band, all-mode units. We are hoping to stimulate interest related to the participation in SOTA, WWFF, AHARS Parks Award & other portable activities through considering the wealth of other options that are available today.

The intention here is to provide a “heads-up” on some of those other options, particularly for portable CW use. Some are very “today”, while others are older rigs, still obtainable from various secondhand marketplaces, & often much cheaper than the newer units.

Snapshots of various brands & models are included here with no fear or favour & this listing is certainly neither complete nor perhaps even comprehensive. We believe it is at least a starting point. Hopefully, there will be enough information to engage a reader and perhaps assist with purchase decision-making.

### **Equipment makes & models**

#### **ELECRAFT**

##### **K1**

A compact dual- or quad-band CW transceiver with many of the K2 bells & whistles. It could be ordered with a choice of any TWO band modules, 80-15m, or if a FOUR band version was desired, provision could be made for 80, 40, 30, 20, 17 or 15m.

40 & 20m had potential for providing a good balance of regular & successful day/night operating. This rig is very compact & portable weighing only about

one Kg. Power output is adjustable from 100mW to 5W & higher. Current drain is about 60mA on receive & one Amp when transmitting @ the 5W level. More information and photos are available @ [www.elecrafter.com](http://www.elecrafter.com)

### **KX1**

This is a trail-friendly, ultra-lightweight CW rig with all the controls on top of the case for ease of portable operation in almost any conventional situation. The basic transceiver covers 40 & 20m, with the option of 30m & 80/30m PC boards. There are auto-coupler & key paddle options for this shirt-pocket size radio & its internal battery provides 20-30 hours of casual operation.

Add a pair of earbuds, a resonant aerial & maybe a counterpoise wire, & you are off & running (no pun intended!). Doc had one of these up until a few years ago but found it to be too fiddly for field use compared to his current transceivers – he sold it to a VK6 who loves it!! Horses for courses...

It is a trail-blazing little rig with digital readout, adjustable IF filtration, an excellent power economy, compact size & easy to use.

### **TEN TEC**

This USA company is synonymous with successful QRP & portable operation, having been highly active in the commercial QRP market since 1969:

TX1 – 2W on 40 & 80m PA board

VO1 – VFO & buffer to drive the TX1

MX1 – dual-gate MOSFET direct conversion mixer for 40/80m

AA1 – IC audio amplifier with 100db gain & output Z of 1Kohm

Check the eHam.net rating of 4.5/5 for what became known as the 'PM' or 'Power-Mite' units.

**PM1** – the first complete commercial QRP transceiver & it contained all the above modules wired as a band-switched CW 80/40m transceiver. This rig had just front, back & base panels.

**PM2/PM2B** – is a PM1 in a full case. PM2B also featured 20m capability.

**PM3/PM3A** – a 5W Power-Mite for 20/40m. The PM3A boasted full CW break-in.

This series of quirky, interesting rigs appear well-priced on North American eBay reasonably frequently. Allow for tracked freight cost & the monetary exchange rate.

**Argonaut 505** (see eHam.net) – from 1971 this is a solid state SSB/CW QRP rig covering 80-10m bands & having a 9MHz IF. Doc has owned & operated several of these radios at sea & ashore over the years, recalling that a lot of fun & reliable QRP operation resulted from use with very basic aerials.

**Argonaut 509** (eHam.net rating of 4.8/5) - this model followed the 505 in 1973 & had improved circuitry plus the option of an external active CW filter. Again, Doc had several of these radios for DXing, contesting & local contacts. Originally the power supply was a pair of lantern batteries in series. Of course, there are a number of much more modern, efficient power sources available today!

The 505 & 509 come up occasionally on the VK market & much more often through the North American outlets, usually at very reasonable prices. Great “bang for your buck” fun machines!!

**Argonaut 515** (eHam.net rating 4.8/5) – released in 1978 the 515 is known as **THE** classic QRP transceiver, with enhanced band-spreading, 10m divided into 3 ranges, & slicker T-R switching. It instantly won popularity with DX operators & 36 years later is still used by many hams as their main station rig.

**Argonaut II 535** (eHam.net rating 4.8/5) – Doc’s current main QRP rig, this is really a 5W version of the 100W **Delta II** & is a big leap over the Argonaut 515. It is a fully synthesised transceiver with a general coverage (100KHz-30MHz) receiver & a 7-digit black-on-orange frequency display. It features a double conversion receiver with 45MHz & 6.144MHz IFs, the latter using a Jones filter (8-pole crystal filter with continuously adjustable bandwidth from 500Hz to 2.5KHz). It provides up to 5W of quality SSB/CW QRP action, features microprocessor control, multi-functional digital display, direct keypad entry, & is operationally the equal of Elecraft & any other current commercial rigs.

**Argosy 525 & Argosy II 525D** (eHam.net rating 4.8/5) – one of the best kept secrets in QRP amateur radio is the Argosy series. The 525 is analogue & 525D the model with digital readout. The Argosy can be switched from 5 to 50W output on the 80, 40, 30, 20, 15 & 10m bands. A T-Kit speech processor really adds punch when installed inside the Argosy. Regrettably, Doc had an Argosy II & sold it to a VK1 who desperately wanted a caravan rig about six years ago – we are given to believe that he has mentally kicked himself ever since! Rare in OZ, the Argosies appear on the North American market for around USD\$300-\$400 plus approximately \$67 shipping. Price naturally depends on condition, options installed, original manual, digital or analogue model, etc. Like the Argonaut II, these radios are very hard not to love using!!

**Argonaut V Model 516** (eHam.net rating 4.7/5) – covers 160-10m with a general coverage receiver 0.5-30MHz, all band, all mode & 20W maximum

output. This suggests 'QRP with an edge' but it would be a great power level for anyone enjoying the slow lane when operating mobile/portable, & those just trying to beat the noise level if operating portable in RF-unfriendly locations. 5W can be selected for all normal authentic QRP goings-on.

It has 35 inbuilt filters & draws 950mA on receive, 6A on transmit @ maximum output. The rig weighs in @ 2.2Kg & has 2 large front feet rather than a bail, 100 memories, scanning facility, CTCSS encoder, is PSK31 ready, IF-DSP, SDR & its RRP in 2003 was \$750USD.

**Ten Tec Scout 555 & 556** (eHam.net rating 4.3/5) - another of the Ten Tec QRP radios about which Doc can write from personal experience & is the one now reposing on his RF pedestrian portable trolley: a Scout 555. It is a 5 or 50W radio, output power being altered by a small adjustment through an access hole in the bottom panel. The 556 does not have the 50W option at all. Both Scouts are very unique in that they feature plug-in single band modules for each of the HF bands including WARC. This allows a purchaser to acquire one with only the bands really wanted for use. Doc has the 80, 40, 30, 20, 15 & 10m modules & is on the lookout for a 160m in the North American market. He bought his Scout 555 via Canada on eBay.com.

No longer in production, used Scouts come up reasonably frequently in that part of the world, with a radio & six modules fetching about USD\$650 plus \$70 shipping.

In Doc's opinion, the eHam.net rating is harsh, and he assigns it at least 4.5/5.

### **Century 21 Model 570 (analogue) & 574 (digital)**

Either of these presents a great QRP/QRO rig for the home station or someone using mains power @ caravan parks. It receives SSB & CW but transmits CW only, with an input power of 70W providing 25-30W output. It covers 80-10m & is a pre-WARC transceiver with onboard AC power supply: in fact, it is the only Ten Tec transceiver having an onboard AC power supply. Doc has run several of these since they first came on the market in the mid-1970s & speaks very highly of the operating fun that they provide.

### **Century 22**

Norm's current home station QRO rig, this unit also receives SSB & CW and only transmits CW to about 20W output on 80, 40, 30, 20, 15 & 10m. He loves using it & had to search the overseas markets to find one.

**Ten Tec summary** – the company has supported the low power & portable operation fraternity since the 1960s, in spite of the fact that the cost of

producing a QRP rig is the same as a 100W unit, but with much less market opportunity to recoup investment: research, design, manufacture, marketing, warranties etc. Since the QRP market is infinitesimal alongside the QRO scene, it is often a business disaster to enter into it, so before we bag any manufacturer for what it produces, we need to recall that it is actually NOT good business sense to do so. The view of QRP manufacturers is highly likely to differ from the view of amateur radio operators because of this fact.

## **HEATHKIT**

Another long-time supporter of portable & QRP amateur radio was Heathkit (later as Daystrom), sadly no longer with us. However, it left behind a litany of budget-priced models from which to choose & have fun on air.

**HW-7** (eHam.net rating 2.9/5) - appeared in 1973 & covered 40, 20 & 15m with about 2W CW output. Doc actually built one of these kits in 1976 as the required 'practical project' for the General Commercial Operators Certificate of Proficiency (which replaced the First Class COCP) & along the way had to modify a number of original circuit shortcomings so it performed well enough to use in contests & for reliable QRP DXing. In today's band conditions, he thinks one off-the-shelf or unmodified would probably show up to be little more than a toy, a novelty rather than a 'performer' compared with other rigs on the airwaves, but he would like to be proven wrong!

**HW-8** (eHam.Net rating 4.6/5) – perhaps the most heavily modified/customised QRP rig ever to hit the market, this 80-15m 2-Watter has a good direct conversion receiver but its keying is relay controlled, thereby losing the traditional 'must have' full break-in for CW operators. Doc has had several of these over the years, all good performers, & they bob up in Australia & North America for around USD\$150-200 depending on condition & how many/how well modifications have been done: caveat emptor!! Has a cult following.

**HW-9** (eHam.net rating 4.8/5) – this was an early 1980s radical design departure & not without its share of issues, particularly selectivity & unstable transmission on 15 & 10m. It does have a superhet receiver & all nine HF bands however, so a competent techo-amateur with spectrum analyser, CRO & sweep generator access could make this USD\$200-\$350 radio something very special. Not frequently seen in Australia.

## **KENWOOD**

**TS120V** (eHam.net rating 4/5) – until very recently Doc had one of these 10W classics (VK5BW now has it in his stable!) that can be pulled down to 5W SSB & CW. It has a digital readout, many optional extras & produces good quality audio reports. For the keen among us, a whole 'TS120 lineup' can be

assembled to good effect. Doc ran his with an MC-60 desk microphone & also with a CW key for portable DXing. For home station use, he had the external VFO & companion loudspeaker. Other accessories for a lineup could include the matching aerial coupler, power supply & 100W linear amplifier. It covers the standard bands of 80-10m & would be a Number One recommendation for any QRP newbie looking to embark upon portable work on a tight budget. The transceiver is typically available for AUD\$250-400 depending upon condition and accessories.

**TS130V** (eHam.net rating 4.8/5) – the most elusive QRP rig we have ever heard of! Doc has been trying to source one of these for 25 years without success. In fact none of us have never even SEEN one yet! A highly desirable & much enhanced version of the 120V, it features added WARC bands, a 20db RF attenuator, speech processor & selectable dual crystal IF filters for both SSB & CW.

Expect to pay whatever is being asked for one of these beauties – those who have one tell us that they are ‘keepers’, which is probably why we do not see them on the regular market forums ANYWHERE very often. Happy hunting, & if you find a second one, please let us know!!

## **QRP-PLUS**

**QRP-Plus** (eHam.net rating 4.1/5) – produced in 1994-6, it has 160-10m & general coverage receiver, microprocessor control, low current consumption (140mA on receive, 1.5A in transmit) & compact physical size. Its large LCD display is useful for we OTs & it has a rugged steel case – quite handy for bush-bashing. Its superhet receiver has a good switched capacitance audio filter (SCAF) & its full output of 5W can be adjusted to mW levels for some 22-carat QRPing! Prices around \$350-400AUD are asked in the North American market.

## **MFJ**

Here is another manufacturer that has produced quite a prolific line-up of low power rigs suitable for home and portable action. Readers are recommended to review the company website as there are so many details for the large model range, including:

### **MFJ 9015-40 series (often referred to as 90XX & 94XX series)**

Norm & Greg are quite familiar with this marquee & user reviews state that they all work “as claimed”. The 90XX models are monoband CW only & 94XX monoband SSB only. They are robust plug & play models for 75, 40, 30, 20, 15 & 10m, producing 5W/10W respectively & have quality receivers with auto AGC but no NB. Weighing less than one Kg & physically small, they would be attractive to single band SOTA activators.

The website shows a current RRP of USD\$209.95 & more than 20 items are listed.

### **MFJ 9340 Cub**

This tiny rig gets really good user reports too, providing 80, 40, 30, 20, 17 or 15m, a hot receiver, sharp passband filtering, AGC, phones or external speaker options, full break-in, zero to 2W output up to 20m & 1W on 17 & 15m. Power consumption from 12-15V is reported to be a miserly 36mA on receive & 380mA on transmit.

### **ICOM**

**Icom IC-703 & 703Plus** – in 2003 Icom introduced the IC-703 as a low power HF radio. Shortly after, it added the IC-703Plus to their production line. The 703Plus covers all the HF fun that its predecessor did plus 6m, an internal aerial coupler & 10W output capability. Both versions are basically stripped down variants of the IC706. The large LCD display is easy to read from any angle & the rig is ergonomically quite easy to use comfortably. It comes with a well-written manual. Portable 6m could easily be tackled with a discone, halo, J-Pole, dipole & even a rotatable quad or yagi aerial. For full-break-in CW operation, it leaves much to be desired when compared to almost anything from the Ten Tec stable, but it provides satisfactory semi-break-in action.

The critical data for any QRP rig is current drain & in the receive condition the IC-703Plus is claimed to lope along with 450mA.

### **YAESU**

**Yaesu FT-817/817ND** – perhaps the highest volume seller in QRP history, the FT-817 versions were designed for 160-10m, 6m, 2m & 70cm bands with a power output of 5W.

**Author's note** – both the IC-703Plus & FT-817ND are current market products, with much recent material & reviews readily available. The reader is recommended to pursue further research given that scenario & chat with rig owners, perhaps even being able to negotiate a 'test drive' – an important purchasing strategy that cannot be achieved when buying online via any source!

### **KITS FOR QRP OPERATION**

This market area is certainly the forte of Greg & Norm. Today's amateurs tend to be more 'plug & play', with operator technical standards & practical ability having dissipated during recent decades. That, along with the abundance of



annual rollouts of commercial equipment, has seen the demise of homebrew transmitters, receivers & transceivers except perhaps for MF, microwave & QRP work. QRP does seem to be the hobby area most populated by kit availability for the home constructor. It is important to research thoroughly before committing time, effort & money for any kit. One of the most off-putting outcomes of kit building is having the first kit project fail to work. If a QRP radio, however basic, is your 'must have' project and that happens, QRP & perhaps amateur radio overall may lose a disciple. A would-be kit builder needs to carefully match enthusiasm, skillset, time, necessary equipment or tools, and of course the budget.

The depth & breadth of available kits is very encouraging & inviting, if not daunting. Greg VK5GJ & Norm VK5GI have made & tested quite a number of kits in recent times, & it could be well worth a chat with them before you make a decision or commitment.

Some of the kit breeds & models they suggest that readers might like to explore include:

### **AusQrp VK2DOB MST-2**

This is a monoband SSB rig for 80, 40 or 20m. PCBs & parts kits are available for the transmitter, DDS VFO & LED S-meter sections. Current prices are listed on the website as AUD\$82 for the transmitter kit minus a case or controls; AUD\$65 for the DDS VFO kit; & AUD\$28 for the LED S-meter kit.

### **Milton Keynes MKARS 80**

Anyone interested in pursuing building this kit might give consideration to having a chat with Norm VK5GI who has built & used one of these 80m units.

### **Small Wonder Labs (SWL)**

DSW1 rigs are sometimes available secondhand but please check the website for present availability status as the original designer/manufacturer retired some time ago & a 'caretaker' has been at the helm since. Other aspects of life have impacted that person as well, hence the advice to check prior to building up your hopes.

### **Oak Hills Research (OHR)**

Run by former AHARS member Marshall Emm, this USA firm has produced a number of mono- & dual-band QRP rigs for 20 years. The OHR100A is currently listed on their website, & it is a single band CW transceiver kit with a RRP of USD\$179.95. Powered by 12-13.8V its current drain is nominated as being 80mA on receive & 850mA on transmit. Available for 80, 40, 30, 20

& 15m versions, it produces 5W, has a superhet receiver with RIT, 4-pole crystal IF filter, smooth break-in, separate AF & RF controls that are not generally common among the tiny portable transceivers available today.

### **Bitx 17A & 20A**

These are 10W complete monoband SSB transceiver kits having a RRP of USD\$180. Please check the website for more information & ask around, as a number of local operators have built & are using the 20A certainly.

### **What else?**

There are many other brands involved & websites to explore using key words such as:

Kanga Products  
Walford Electronics  
Cumbria Designs  
Hendricks  
Waters & Stanford

### **QRP Club magazines**

The UK SPRAT QRP club magazine index lists over 200 construction articles for QRP rigs, kit & homebrew designs, as well as WARC band & 160m coverage extensions to commercial QRP rigs & kits. Valve & solid state units are revealed to you when entering quirky or intriguing article titles such as:

One tube amateur station complete (SPRAT Vol 7 page 6)

Tunbridge SSB/CW transceiver (26, 3)

10MHz transceiver (31, 11)

Super OXO All Bands transceiver (32, 12)

20/20 transceiver (33, 6)

Force Three 7MHz transceiver (36, 3)

160m DSB transceiver (44, 3)

Rock's Fishing Box (46, 8)

Transceiver for 7/14/21MHz (47, 4)

The Unichip (54, 10)

The Kitten Two transceiver (65, 32)

A solar-powered 40m transceiver (73, 6)

Modifications to the MFJ9020 transceiver (75, 13)

A valve transmitter & receiver for 80m (79, 18)

The Rockcrusher (85,14)

Norm VK5GI is the VK representative for the G-QRP Club & suggests that interested readers might keep a lookout for the next reprint of the G-QRP Club Circuit Book, a mine of ideas, transmitters, receivers, transceivers & all accessories for domestic & portable low power SSB & CW operation.

Please also explore our own VK CW Operators QRP Club via <http://vkqrpclub.org/> for more accessible local information, how to source back issues of the club's Lo-Key journal, membership details etc.

## **Epilogue**

Our intention here has been to post indicators to AHARS members & beyond, that there are potentially a lot of secondhand and/or older QRP radios out there, acquisition of which may empower almost any amateur to gain access to low power & portable operation. We hope you have found it useful.

Best 73 for lots of fun, personal fitness & stress management through low power amateur radio.

de Doc, Norm & Greg

## **Appendix 3.**

### **Using Lithium Phosphate Chemistry Batteries: A Beginner's Perspective**

**John Dawes VK5BJE**

In my life time battery technology has changed dramatically. When I studied for my licence (in the early 1970's) there were just two types: alkaline dry cells (1.5 volts), also packaged into batteries of various voltages, and lead acid batteries (approximately two volts per cell). Then came Nicads and what a huge step forward they were! Good quality ones could be re-charged many times, e.g. 300/400, but I did better than that. But they were heavy, gave 1.2 volts per cell and developed a memory, resulting eventually in a lower than useful life and charge, if they were not fully discharged before re-charging.

#### **Lead Acid batteries.**

These are commonly used by amateurs as portable power sources and as home station supplies. Our house is powered by a solar system: we are not connected to the grid. For portable use I commonly use a 12 volt, 7.2 amp hour battery (specifically a SLAB). It is great, but it weighs 2.65 Kilos. If you are operating a few hundred metres at the most from your car they are fine. If you are hiking they give you a pain in the back! Carrying two is worse, but if you are activating a summit you don't want to get to the top and find your one battery is dead. A 12 volt, 4.3 amp-hour battery weighs 1.75 kilos. SLABS are relatively safe, we are familiar with the technology and they are reliable. To get some perspective on hiking and portable amateur radio have a look at some of the blogs: eg VK5PAS and VK5BJE to name just two. I took two SLABS with me on a recent trip to Maria Island in Tasmania and I suffered for two days as a result.

#### **Lithium Ion batteries**

You probably already have a lithium battery in your collection. Lithium ion batteries are commonly made for hand-held radios. They can be recharged at any time during a discharge cycle, they are small and have pretty good capacity. My ICOM hand held radios use these. The new Lithium Polymer batteries are developed from Lithium Ion batteries. I am not going to say too much about the theory: you can read that. There is plenty of information on the web.

#### **Lithium Polymer**

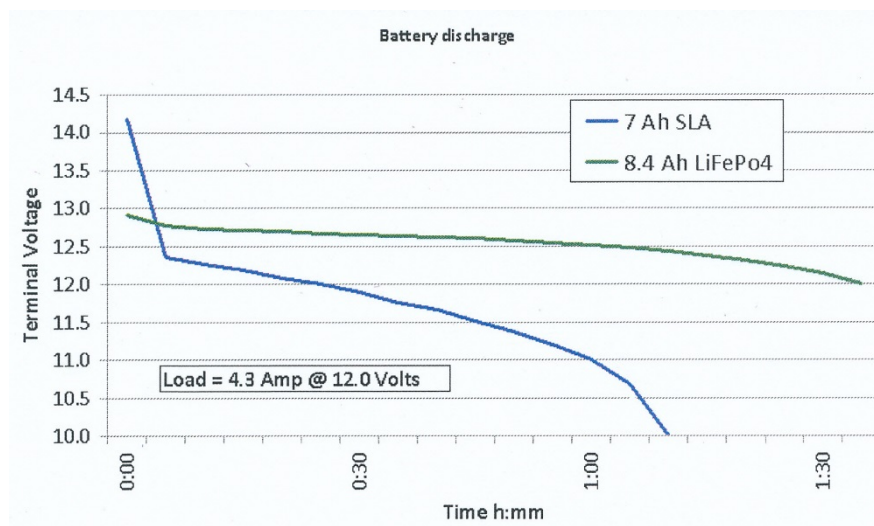
Today I will provide an introduction to two types of Lithium batteries developed for the Radio Control market. These batteries are built into pouches not metal cylinders. So there is a weight saving up front. And there is no lead (Pb, atomic number 82) and this is very important in reducing weight. Here is a LiPO battery rated at 4.8 amp hours (4800 milliamp hours).

It weighs 650 grams. Here is a lithium Iron (LiFePO<sub>4</sub>) battery rated at 8400 milliamp hours and it weighs 1.090 Kilos. LiPo cell voltage is 2.7 v discharged and 4.23 fully charged and Lipoly cells have to be protected during the charging process by limiting the voltage to 4.235 volts per cell. A good charger will take care of this. I will say more about charging later. LiPo or LiPoly batteries need care. They should only be charged while you are present on concrete or other non-combustible material and should be charged with a balanced charger. Demonstrate.

When you decide to use LiPo batteries you will need to do some other calculations and adjustments because these batteries are not designed for 13.8 volt radios. LiPo batteries come in a variety of voltages: it all depends on how many cells are put together to make the battery. Amateurs typically use either three or four cell batteries. If you use an FT817nd you may choose to use a three cell LiPo battery. An FT817 can operate on just over ten volts. A three cell Lipo produces 11.1 volts and a 2200 milliamp hour battery can be purchased for about \$10 US. I choose to use four cell batteries because I have two QRP radios and the second will not operate below about 11.5 volts. A four cell LiPo produces 14.8 volts, in my opinion too high for an amateur radio. Yeasu rates their radios at 13.8 + or - 15% (14.8 volts falls within the safe range, but an FT817nd will just produce heat with the higher battery voltage). I use diodes to reduce the voltage. I have two variations here to show you. I also have a DC to DC converter I will build into a metal box to ensure no hash.

The second Lithium variation I use is the Lithium Iron phosphate battery (LiFePO<sub>4</sub>). My large battery is a four cell configuration and discharges to 13.2 volts, is rated at 13.2 volts and is slightly higher in voltage when charged. These batteries are reputed to have a longer life than their cousins, LiPo chemistry.

Both these batteries have another advantage over lead acid batteries. Here is a chart produced by Peter Fraser, VK3ZPF that shows the discharge curve for a 7.2 amp hour lead acid battery and a Lithium Iron Phosphate battery (8.4 amp hour).



Peter used a 50 watts quartz halogen globe, the temperature was 15 degrees C, each battery was sampled every five minutes for a voltage reading and each battery was full charged before the experiment. You can read more about Peter's work on <http://vk3zpf.com/> The almost constant discharge voltage from the Lithium Iron batteries is great for amateurs. I have LiPo batteries and they are great, but they are more difficult to use and you need to take great care in charging them and using them. Both of these forms of Lithium batteries will be destroyed if you try and draw too much from them. I use an alarm on both batteries to remind me of the critical point and then switch batteries.

When buying these batteries you will need to buy a charger. There are chargers and chargers on the market, or good and not so good. Buy a quality charger capable of charging Lithium batteries up to six cells configuration and which produce a **balanced** charge. This is critical. Each cell will be balanced and be equal to its neighbours in the battery. I recommend a 240 volt charger. Mine also charges from 12 volts. Please contact me if you need help.

## Appendix 4

### What is WWFF LogSearch?



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By Paul Simmonds, VK5PAS  
Australian (VKFF) WWFF Co-ordinator.



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## Introduction

The World Wide Flora and Fauna in amateur radio program (WWFF) ‘wants to draw attention to the importance of protecting nature, flora and fauna. In this spirit amateur radio operators set up and operate their radio stations from designated nature parks and protected nature areas – generating attention for these areas whilst giving the ham radio community an interesting activity to contact’.<sup>35</sup>

A pivotal part of the program is the LogSearch facility, which enables activators to have their logs uploaded electronically by WWFF National co-ordinators. Through LogSearch, WWFF Activators and Hunters can view their progress in the WWFF program, and apply for awards on-line.

This short guide will explain the many features and benefits of LogSearch.

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<sup>33</sup> Image courtesy of <http://www.wwff.co>

<sup>34</sup>

<sup>35</sup> <http://www.wwff.co/p/about-wwff.html>

## **History of WWFF LogSearch.**



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Until 2012 the flora and fauna program was supported by a central database that unfortunately ceased operation at the end of that year. As log search was an essential component of the WWFF program, a replacement system was required.

At the commencement of 2013, a new log search platform for WWFF was commenced. The author was Andrew, M6ADB. The WWFF LogSearch went live on the 16<sup>th</sup> February, 2013.

The task of collecting logs from WWFF activators then commenced. This included the collection of logs dating back as far as the 1990's.

By May 2013, there were 2 million QSOs in the WWFF LogSearch.

As of 26<sup>th</sup> March 2014 there were 3,677,756 QSOs in the database, from 4,397 different references in 85 DXCCs.



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## **Why do we use the WWFF LogSearch?**

The WWFF LogSearch facility allows WWFF park Hunters and park Activators to easily and centrally track their progress in the WWFF program.

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<sup>36</sup> Image courtesy of <http://www.wwff.co>

<sup>37</sup> Image courtesy of [www.spaceportimaging.com](http://www.spaceportimaging.com)



Activator logs are uploaded to the facility by the activator's National representative. In Australia, this is Paul VK5PAS. Paul is the only person in Australia who has access to Australian activator logs and who has permission to upload Australian logs to LogSearch.

Unlike systems such as SOTA, park Hunters do not upload their contacts/logs. Only Activator logs are uploaded to the WWFF system.

A variety of awards are available in the WWFF program. This includes global awards, and numerous awards offered by many of the National WWFF programs.

Many of the National programs offer their award certificates online, accessible via WWFF LogSearch.

The WWFF global awards are also applied for online via LogSearch.

The electronic LogSearch saves both the WWFF Council and the various WWFF National representatives an inordinate amount of time.



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### **Where can I find the WWFF LogSearch?**

WWFF LogSearch can be found by clicking on the following link.....

<http://logsearch.wwff.co/index.php>

### **How do I access LogSearch?**

You need to register to be able to use LogSearch. This is free and easy to do. Click on the 'Register' tab on the LogSearch home page. Then follow the instructions by recording your call sign, home DXCC, Continent, personal name, and e-mail address. You also need to choose a password, and confirm the password. Then click on 'create'.

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<sup>38</sup> Image courtesy of [www.news.com.au](http://www.news.com.au)

Once you have ‘created’ an account, you will receive an e-mail from the WWFF LogSearch Administrator, asking you to verify your e-mail address by clicking on a link. You will then receive an e-mail from the Administrator thanking you for confirming your email. Your LogSearch account will be activated shortly after this.



### **Features.**

There are a number of features on LogSearch. They include.....

- Home (Search)Top Operators
- Reference Report
- Who's Who
- Known Issues & ToDos

### **Home (Search)**

On the Home (Search) page in the top right hand corner, if you are logged in, you will see ‘Hello’.....your name and your callsign. You are able to Edit your profile from here also.

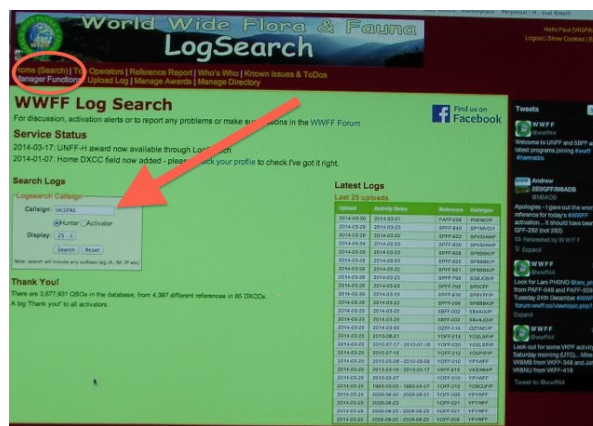
On this page you can also view the Latest Logs. The list displays the last 25 WWFF log uploads that have been made by the various National representatives.

On this page you will also find ‘Search Logs’ and underneath this in the dialogue box, ‘Logsearch Callsign’.

You can type either your own call sign, or another amateur’s call sign in the ‘Callsign’ box. Then select either ‘Hunter’ or ‘Activator’ depending on which type of log you would like to view. You can either view a thread of 25 lines or 50 lines of QSOs. This can be adjusted by altering the figure in the ‘Display’ area. Then click on the ‘Search’ button. Note, that the search will include any suffixes, e.g. /A, /M, /P.

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<sup>39</sup> Image courtesy of <http://www.skeyesmedia.org>



By selecting 'Hunter', and the clicking on 'Search', the following screen will be displayed. This screen shows your Summary Statistics. These are divided into.....

- References
  - The number of WWFF references you have either worked/activated
- DXCCs
  - The number of DXCC entities you have either worked/activated from
- Continents.
  - The number of continents you have either worked/activated from.

You will see two columns.....

- Worked
  - Relates to WWFF activators you have worked.
- Activated
  - Relates to WWFF references you have activated.

2014-03-17: UNFF-H award now available through LogSearch  
2014-01-07: Home DXCC field now added - please check your profile to check I've got it right.

**Search Results**

All-time: 1 Mixed: 2 Mixed: 2 Start New Search Showing Activator Results  
Show Summary Stats Show Programs and Awards Show Activations

Note: Award applications must ONLY be made using your OWN call-sign

**Summary Statistics for call-sign VKSPAS (using call-sign VKSPAS)**

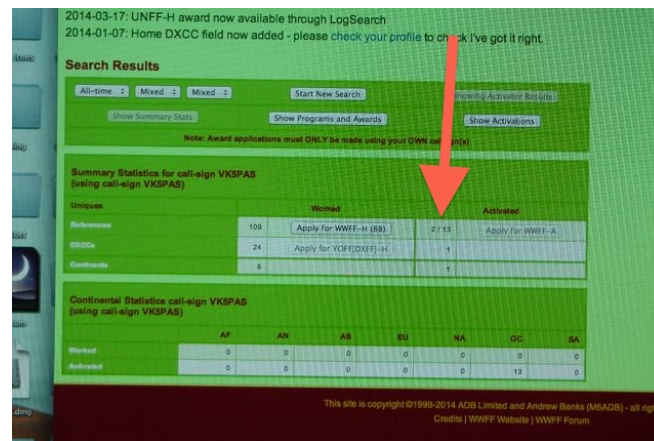
	Worked	Activated
References	100	2 / 13
DXCCs	24	1
Continents	6	1

**Continental Statistics call-sign VKSPAS (using call-sign VKSPAS)**

	AF	AN	AS	EU	NA	OC	SA
Worked	2	0	0	0	0	0	0
Activated	0	0	0	0	0	1	0

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Credits: WWFF Website | WWFF Forum

In the image below, in the Activated column you will see '2/13'. This means that a total of 13 WWFF references have been activated, however, only 2 of those have the required 44 QSOs. Remember that for Australian (VKFF) activations, only 10 QSOs are required. However, for the global WWFF awards, a total of 44 QSOs are required.



2014-03-17: UNFF-H award now available through LogSearch  
2014-01-07: Home DXCC field now added - please check your profile to check I've got it right.

**Search Results**

All-time Mixed Mixed Start New Search Show Summary Stats Show Programs and Awards Show Activations

Note: Award applications must ONLY be made using your QRM account.

**Summary Statistics for call-sign VK3PAS (using call-sign VK3PAS)**

Uniques	Worked	Activated
References	109 Apply for WWFF-H (88)	2 / 13 Apply for WWFF-A
QSOs	24 Apply for YCFF(DXFF)-H	1
Continents	5	1

**Continental Statistics call-sign VK3PAS (using call-sign VK3PAS)**

	AF	AN	AS	EU	NA	OC	SA
Worked	0	0	0	0	0	0	0
Activated	0	0	0	0	0	13	0

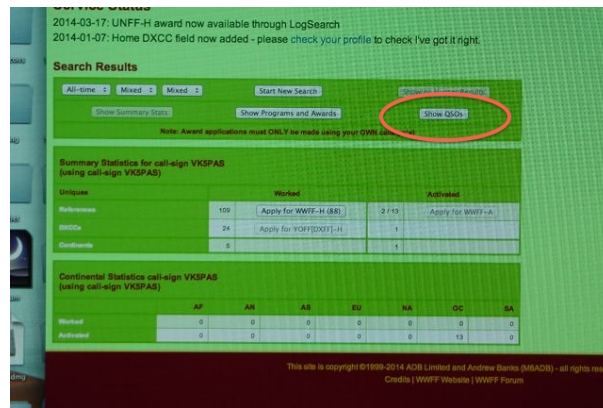
This site is copyright ©1999-2014 ADS Limited and Andrew Banks (M5AQB) - all rights reserved.  
Credits | WWFF Website | WWFF Forum

This page also shows your Continental Statistics for 'Worked' and 'Activated'.

- AF
  - Africa
- AN
  - Antarctic
- AS
  - Asia
- EU
  - Europe
- NA
  - North America
- OC
  - Oceania
- SA
  - South America.

This search screen also allows you to filter which years you would like to view. To do this, simply click on the 'All-time' tab and this will display a year. Select the appropriate year you would like to search.

By clicking on the 'Show QSOs' tab, a full list of your Hunter QSOs will be displayed, commencing from the most recent.



## Apply for Awards.

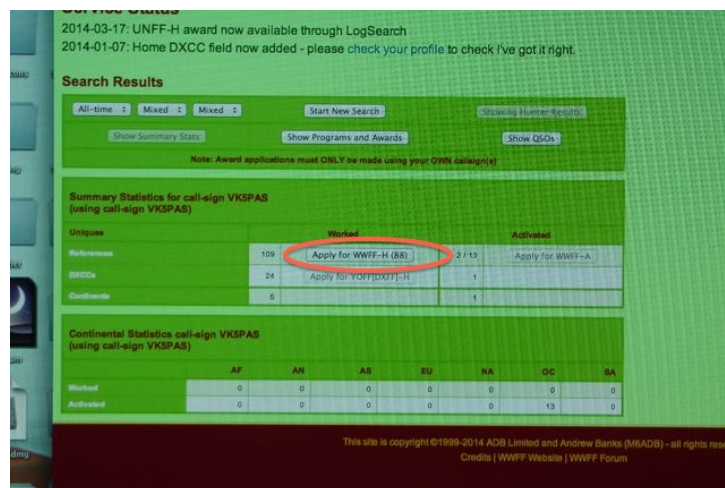


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From this screen you can also apply for the WWFF global awards (both as an Activator and a Hunter).

These awards are sent to you electronically, free of charge.

Please note that Award applications must only be made using your own call sign.



<sup>40</sup> Image courtesy of <http://www.sdanational.org>

## Search Results.

After clicking on 'Show QSOs', the following screen will be displayed. This shows a list of all the stations you have worked (those whose activator logs have been uploaded to LogSearch).

#	Date	Reference	Mode	Activator Call	Hunter Call	Band	Valid
1	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
2	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
3	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
4	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
5	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
6	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
7	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
8	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
9	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
10	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
11	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
12	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
13	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
14	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
15	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
16	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
17	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
18	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
19	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
20	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
21	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
22	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
23	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
24	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500
25	2014-03-15	VKFF-055	OC-15	VKFF-055	VKFF-055	400	500

Details displayed on the screen are as follows.....

- Number
  - The number of the QSO in the log
- Date
  - All dates/times are in UTC.
- Reference
  - The specific WWFF reference number, e.g. VKFF-055
- DXCC
  - Home DXCC & Continent
- Activator Call (Operator)
  - The callsign the activator used and the callsign of the operator as registered with WWFF LogSearch.
- Hunter Call
  - The callsign of the Hunter who worked the activator.
- Band
- Mode
  - SSB, CW, etc.
- Valid



- Whether the QSO was valid.

From this screen, you can download the full Hunter log as a csv file if you wish by clicking on the 'Download' tab.

The same procedure applies for searching for Activator statistics.

## Top Operators

This area displays the following.....

- Top Hunter classification
- Top Activator classification
- Top Activator Classification (QSOs-min 3 unique Refs).



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You can either via all Hunters or Activators, around the world, or limit your search to a particular program, e.g. VKFF.

Program	QSOs	Activators	Hunters
1. 100000	100000	100000	100000
2. 100000	100000	100000	100000
3. 100000	100000	100000	100000
4. 100000	100000	100000	100000
5. 100000	100000	100000	100000
6. 100000	100000	100000	100000
7. 100000	100000	100000	100000
8. 100000	100000	100000	100000
9. 100000	100000	100000	100000
10. 100000	100000	100000	100000
11. 100000	100000	100000	100000
12. 100000	100000	100000	100000
13. 100000	100000	100000	100000
14. 100000	100000	100000	100000
15. 100000	100000	100000	100000
16. 100000	100000	100000	100000
17. 100000	100000	100000	100000
18. 100000	100000	100000	100000
19. 100000	100000	100000	100000
20. 100000	100000	100000	100000
21. 100000	100000	100000	100000
22. 100000	100000	100000	100000
23. 100000	100000	100000	100000
24. 100000	100000	100000	100000
25. 100000	100000	100000	100000
26. 100000	100000	100000	100000
27. 100000	100000	100000	100000
28. 100000	100000	100000	100000
29. 100000	100000	100000	100000
30. 100000	100000	100000	100000
31. 100000	100000	100000	100000
32. 100000	100000	100000	100000
33. 100000	100000	100000	100000
34. 100000	100000	100000	100000
35. 100000	100000	100000	100000
36. 100000	100000	100000	100000
37. 100000	100000	100000	100000
38. 100000	100000	100000	100000
39. 100000	100000	100000	100000
40. 100000	100000	100000	100000
41. 100000	100000	100000	100000
42. 100000	100000	100000	100000
43. 100000	100000	100000	100000
44. 100000	100000	100000	100000
45. 100000	100000	100000	100000
46. 100000	100000	100000	100000
47. 100000	100000	100000	100000
48. 100000	100000	100000	100000
49. 100000	100000	100000	100000
50. 100000	100000	100000	100000
51. 100000	100000	100000	100000
52. 100000	100000	100000	100000
53. 100000	100000	100000	100000
54. 100000	100000	100000	100000
55. 100000	100000	100000	100000
56. 100000	100000	100000	100000
57. 100000	100000	100000	100000
58. 100000	100000	100000	100000
59. 100000	100000	100000	100000
60. 100000	100000	100000	100000
61. 100000	100000	100000	100000
62. 100000	100000	100000	100000
63. 100000	100000	100000	100000
64. 100000	100000	100000	100000
65. 100000	100000	100000	100000
66. 100000	100000	100000	100000
67. 100000	100000	100000	100000
68. 100000	100000	100000	100000
69. 100000	100000	100000	100000
70. 100000	100000	100000	100000
71. 100000	100000	100000	100000
72. 100000	100000	100000	100000
73. 100000	100000	100000	100000
74. 100000	100000	100000	100000
75. 100000	100000	100000	100000
76. 100000	100000	100000	100000
77. 100000	100000	100000	100000
78. 100000	100000	100000	100000
79. 100000	100000	100000	100000
80. 100000	100000	100000	100000
81. 100000	100000	100000	100000
82. 100000	100000	100000	100000
83. 100000	100000	100000	100000
84. 100000	100000	100000	100000
85. 100000	100000	100000	100000
86. 100000	100000	100000	100000
87. 100000	100000	100000	100000
88. 100000	100000	100000	100000
89. 100000	100000	100000	100000
90. 100000	100000	100000	100000
91. 100000	100000	100000	100000
92. 100000	100000	100000	100000
93. 100000	100000	100000	100000
94. 100000	100000	100000	100000
95. 100000	100000	100000	100000
96. 100000	100000	100000	100000
97. 100000	100000	100000	100000
98. 100000	100000	100000	100000
99. 100000	100000	100000	100000
100. 100000	100000	100000	100000

<sup>41</sup> Image courtesy of <http://www.marsecreview.com>

## Reference Report

This area displays all of the References around the world, and the statistics associated with those references. Information displayed includes.....

- Reference number
- Location Name
- Activations
- Total QSOs
- Unique Calls
- % Logged



**LogSearch**

Home (Search) | Top Operators | Reference Report | Who's Who | Known Issues & ToDos  
 Manager Functions: Upload Log | Manage Awards | Manage Directory

### WWFF Log Search

For discussion, activation alerts or to report any problems or make suggestions in the WWFF Forum

**Service Status**  
 2014-03-17: UNFF-H award now available through LogSearch  
 2014-01-07: Home DXCC field now added - please check your profile to check I've got it right.

**Activation Statistics**

4,292 of 16,838 references activated. 30,229 regular WWFF member calllogs logged.  
 Last update: Sat, 06 Dec 2014 23:09:03 GMT  
 The % Logged column shows the percentage of regular WWFF huffers who have been credited with the reference.  
 A regular WWFF huffer is a call-sign with at least 10 WWFF contacts posted in the database.

Reference	Location Name	Activations	Total QSOs	Unique Calls	% Logged
IAFF-001	Riviera du Lanocto	1	279	274	0.43 %
IAFF-016	Turkeyday	2	805	570	1.14 %
IAFF-016	Kanar Dagi	4	2,090	1,892	2.74 %
IAFF-019	Shetlag	1	253	241	0.68 %
IAFF-020	Gale	3	617	584	1.16 %
IAFF-023	Dumbr	2	177	189	0.84 %
IAFF-024	Loren	1	127	124	0.25 %
IAFF-024	Stadenski Jezero	1	66	23	0.17 %
IAFF-025	Akhuir Beach Ins	2	2,710	2,584	4.15 %
IAFF-025	Alexander Sideris	1	161	136	0.31 %
IAFF-025	Ashkhar	2	156	154	0.31 %
IAFF-027	Bel Gasser Maratha	1	74	74	0.15 %
IAFF-028	Bel Sh'ar	1	26	24	0.07 %
IAFF-029	City of David (Jerusalem wall)	1	289	271	0.54 %
IAFF-010	Cesarea	2	128	131	0.26 %
IAFF-011	Dor Haborim Beach	1	214	199	0.40 %
IAFF-012	Silva	1	89	86	0.17 %
IAFF-016	En Gedi	1	217	216	0.43 %
IAFF-017	Judean Desert	1	109	103	0.20 %
IAFF-018	Herbert Hg. Egnat	2	127	126	0.25 %
IAFF-020	Mount Hermon Inc. Barak, Sana, Shend	3	477	462	0.88 %
IAFF-024	Kula	1	225	223	0.44 %
IAFF-027	Shedda UNESCO-W.H	1	111	110	0.22 %
IAFF-028	Mount Carmel	2	307	283	0.58 %
IAFF-028	Quinn T HP	2	2,048	1,721	3.44 %
IAFF-029	Sharon Park	1	116	119	0.21 %
IAFF-036	Tai Baya Shana UNESCO-W.H	3	242	236	0.47 %
IAFF-037	Megido UNESCO-W.H	1	88	85	0.17 %
IAFF-038	Tarfon	1	140	136	0.28 %

**Tweets**

WWFF @wwffuk  
 Welcome to UNFF and SFF as the latest programs joining thewwff #wwffuk

Andrew @2EGFF/MSADS @MSADS  
 Apologies - I gave out the wrong reference for today's #WWFF activation... It should have been QFF-292 (not 282)  
 13 Retweeted by WWFF F  
 Expand

WWFF @wwffuk  
 Look for Lars PH2NO @lars\_ph2no from PAFF-043 and PAFF-059 on Tuesday 24th December #wwffuk  
 forum.wwff.co.uk/viewtopic.php?...

WWFF @wwffuk  
 Look out for some VKFF activity on Saturday morning (UTC)... Mike VK6ML from VKFF-348 and John VK6NU from VKFF-419  
 Tweet to @wwffuk



## Who's Who

In this area you can view details of the LogSearch Administrators, and also details of the various Program Managers around the world.



CallSign	Role
ZEDGFF (ex MBADR)	Gaff Coordinator and LogSearch Administrator
ADMIN	Logsearch Administrator
ISFLN	WWFF Directory Manager
IK1GPG	IFF Coordinator
PH0NO	PAFF Coordinator and WWFF Chairman

CallSign	Role
5B4AIX	5BFF Coordinator
SP00	OZFF co-Coordinator
9A5AA	9AFF Coordinator
9W2WF	9WFF Coordinator
CT1GFK	CTFF/DPRN Coordinator
DF8EX	DLFF Coordinator
DL4BBH	
F55SN	FFF Coordinator
HA2HW	HAFF Coordinator
HB0TZA	HBFF Coordinator
L05VV	LUFF Coordinator
LZ2JR	LZFF Coordinator
OE3RGS	OEFF Coordinator
OK1HOG	OKFF Award Manager
OK1IN	OKFF Coordinator and WWFF Forum Administrator
OK3APY	OKFF Reference Manager
ON2SSB	ONFF Award Manager
ON4BB	ONFF Coordinator
OZ7AEI	OZFF co-Coordinator
PA3FYG	PAFF Coordinator
SM7FSK	SMFF Coordinator
SP2FAP	SPFF Coordinator
UN6QC	UNFF Coordinator
UN7GIT	UNFF Coordinator
UT7UT	URFF Coordinator
VA3RJ	VEFF
VK5PAS	VKFF Coordinator
YL25W	
YL2TW	YLFF Coordinator
YO3JW	YOFF Coordinator and WWFF Award Manager

## Known Issues & To-Do's

This section shows known issues with the LogSearch program, and features which are to be added.

**LogSearch**

Home (Search) | Top Operators | Reference Report | Who's Who | Known Issues & ToDos  
 Manager Functions: Upload Log | Manage Awards | Manage Directory

## WWFF Log Search

For discussion, activation alerts or to report any problems or make suggestions in the WWFF Forum

**Service Status**  
 2014-03-17: UNFF-H award now available through LogSearch  
 2014-01-07: Home DXCC field now added - please check your profile to check i've got it right.

**Last Updated**  
 2013-11-01 19:43 - Brought up to date

**Known Issues**

- Log Search
  - Activator stats pagination not working - all activations shown on every page
  - Display of extended characters (eg Å, Ä, Å, Ä, Å, Ä) from directory (ironically, they do not display properly here, either)
- Awards
  - No known issues (yet!)
- Log Upload/Parsing
  - No known issues!

**Features to Add**

- Registration
  - [M] Password reset
- Awards
  - [M] New WWFF program award (WWFF-A, WWFF-H launched)
  - [M] Extend WWFF award for SWLs?
  - [M] Existing national awards
- Log Search
  - [M] Search call-sign may be a list? (max 4... enough?)
- Log Upload/Parsing
  - [H] Allow STATION/OPERATOR to be defined in the header (not ADIF compliant, but common, eg N1MM?)
  - [H] Duplicate checking
  - [M] Need to "sanity check" call-signs
  - [M] Need to "sanity check" dates
  - [L] Support Cabrillo (CBR) file format for upload
  - [L] Mode - parse and enumerate as PH, CW, DATA
- Stats
  - [M] Link each "stat" to a summary report (eg preview GCR)
- Directory Management
  - [M] Allow directory managers to update (certain) fields
  - [M] Allow national directory managers to propose new references
- Legal Stuff
  - Site info page
  - Site privacy policy
  - Change Log
  - Backup strategy

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 Credits | WWFF Website | WWFF Forum

**Tweets**

WWFF @wwff144  
 Welcome to UNFF and SBFF related programs joining #wwff #erratic

Andrew @250GFF/M6ADS @M6AOB  
 Apologies - I gave out the wrong reference for today's WWFF activation... it should have been GFF-292 (not 282)  
 13 Retweeted by WWFF  
 Expand

WWFF @wwff144  
 Look for Lars PHONO Gians, p from PAFF-049 and PAFF-05 Tuesday 24th December WWFF forum.wwff.co.uk/viewtopic.php Expand

WWFF @wwff144  
 Look out for some WWFF active Saturday morning EUTC... Mr VK6MB from VKFF-348 and J VK6NJ from VKFF-419  
 Tweet to @wwff144

## Manager functions

There are also three Manager Functions on the WWFF LogSearch system.

They are:-

- Upload Log
- Manage Awards
- Manage Directory

## Upload Log

This function allows country managers to upload logs to LogSearch.

## **Manage Awards**

This function allows country managers to confirm awards.

## **Manage Directory**

This function allows specific country managers to make amendments to references in their particular country.

## **How do I get my activation recorded in LogSearch ?**

As an Australian WWFF Parks activator it is highly recommended that you submit your activator log to Paul VK5PAS. Your log will then be uploaded to LogSearch.

Logs can be forwarded to.....

[simmopa@iprimus.com.au](mailto:simmopa@iprimus.com.au)

Hunters do not need to submit logs.



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## **So how do I send a log?**

Option 1 (ADIF file).

ADIF stands for Amateur Data Interchange Format. ADIF is an open standard for exchange of data between ham radio software packages

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<sup>42</sup> Image courtesy of <http://pamco-gov.com>

available from different vendors.<sup>43</sup> Almost all modern computer logging programs will allow ADIF export/import.

### Option 2 (CSV file)

A CSV/XLS upload is available for LogSearch. A template can be found in the Files section of the WWFF Australia Yahoo group. This needs to be saved as CSV before sending to VK5PAS. A single log file can be used for multiple activities/references.

## **What if I don't submit a log electronically ?**

To participate in the Australian (VKFF) program of WWFF, you do not have to submit an electronic log. It is highly recommended, but not mandatory at this stage. Paul VK5PAS, will still forward you Activator certificates.

However, you will not be able to track your progress on-line, nor will you be able to apply online for the global WWFF awards, and the various National awards on offer.



## **In summary**

## **The WWFF LogSearch facility is.....**

➤ **EASY to join**

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<sup>43</sup> <http://www.adif.org>

- **EASY to use**
- **and very CONVENIENT !**



Should you have any queries re LogSearch, or the WWFF program in general, please contact Paul, VK5PAS.

## **References**

The independent ADIF site, 4 Aug 2013, viewed 27<sup>th</sup> March 2014,  
<http://www.adif.org>

WorldWide Flora and Fauna, 2014, viewed 27<sup>th</sup> March 2014,  
<http://www.wwff.co>

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<sup>44</sup> Image courtesy of <http://www.clipartof.com>