

International Amateur Radio Union Region 1

Working for the future of amateur radio

VHF – UHF - μWave Newsletter

Edition 86 17 May 2020 Jacques Verleijen, ON4AVJ

Editorial

We are living strange times with the COVID-19 virus. It will change many of our habits, but we have a hobby that can keep us together and staying safe by #STAYHOME. But as radio-amateur it has also consequences. We also need real social contacts and until further order in most of our countries mass events, competitions and meetings are not allowed. This has also consequences on our activities, like you will see in this newsletter. Keep it safe and hopefully we can come back to normal life as soon as possible.

Jacques ON4AVJ

IARU-R1 25th General Conference 2020

If everything will be normal our General Conference will be held in Novi Sad (Servia) from 11 until 16 October. We will take more time to discuss more strategic matters, such as grown of the hobby, getting more involvement from youth, etc

Therefor the EC decided to have eventually some online streaming sessions, so that the discussions in the different commissions(C3, C4, C5, C7) could be limited to maximum one day.

This new way to proceed does not mean that those items are not important, on the contrary... We need to discuss this and like I already wrote also topics such as new digital modes, sharing(see further), contesting and bandplanning.

I invite all MS (and user communities) to send their contributions to our IARU-R1 secretary, before 10th July 2020 to secretary@iaru-r1.org.

All documents will be available on the conference website in due course. More info will follow in the next newsletter. The EC of Region 1 will decide soon how we will move forward about the procedures and timing for our General Conference

VHF Contest News

IARU_R1 contests and Multi-operator categories in 2020

In Corona times the contest working group discussed this item via mail. The advice was that we need to comply with most of the guidelines of our countries. Therefore this year there will be no Multi-operator categories during de 50/70 MHz IARU-R1 contest in June. We know that some countries are less strict that others about social distance and other restrictions. Those kind of restrictions could be in advantage of some multi-op stations, and this would not be fair.

We advise all Member Societies to promote this year the Single operators to participate to this contest.

About the 144MHz contest in September and the UHF/SHF/ μ Wave contest in October the decision will be taken a month in advance if Multi operators will be allowed.

IARU-R1 ATV Contest

The IARU Region 1 ATV Contest will go ahead on the weekend of 13/14 June. However, due the COVID-19 crisis not all participants will be able to reach their portable sites, and some may feel that they are at a disadvantage in only being able to operate from home due to National restrictions. To address these concerns, the contest will be run with 2 sections:

- Section 1 will be for participants operating from their registered home QTH. No change of operating location will be permitted during the contest for entries in this Section.
- Section 2 will be for participants operating away from their registered home QTH at any time
 during the contest. So, even if you operate from home on one day and a portable location
 on the second day, if you want to add the scores under the rover rule, you must enter
 Section 2.

Please use the normal entry spreadsheet <u>https://wiki.batc.org.uk/images/d/d5/ATV-contest-log-callsign-20190608.xls</u> and state in the address box whether you are entering Section 1 or Section 2.

Dave, G8GKQ, ATV Contest Coordinator.

Award ceremony 2020

Normally the Contest winners from 2019 would be celebrated on the HAM fair in Friedrichshafen, like we did the last past years. Unfortunately this virus took control and the fair is cancelled for 2020. But DARC will make a virtual HAMFEST, and there will be place for a virtual prize giving ceremony. More info will follow.

All awards will be send by (snail)mail to the winners.

IAC - Italian Activity Contest

Since 2005 ARI holds each year a monthly Activity Contest on the bands from 50 MHz to Microwaves, copying the NAC (Nordic Activity Contest) periods and bands.

1 st Tuesday	144 MHz	19-23 local time
2 nd Tuesday	432 MHz	19-23 local time
3 rd Tuesday	1296 MHz	19-23 local time
4 th Tuesday	2,3 GHz & Up	19-23 local time
1 st Thursday	50 MHz	19-23 local time

Due to the same periods, we have also a good activity in many foreign countries; we should remember that apart NAC there are also LY-AC, SP-AC, PA-AC, and UK-AC as well. Stations from Germany and the Czech Republic usually are active too to try some dx on the bands with Italian stations, and it is not rare to have some good Sporadic E openings on 50 MHz during the spring/summer months.

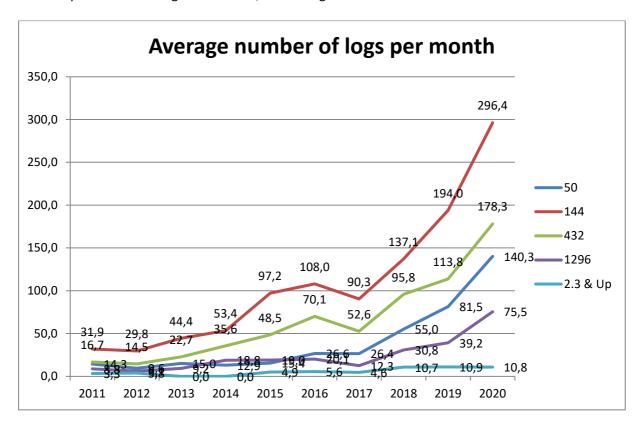
During the last three years, we changed the rules in our Activity Contest, with a bonus for rare Italian locators worked to increase the activity also in the areas where there are fewer operators on the bands.

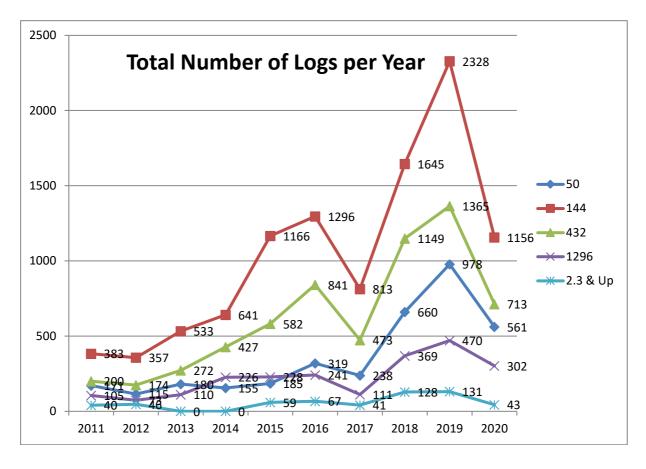
The main and successful thing was the introduction of a Club classification: we divided Italy into three areas based on different levels of activity due to population and orography.

Since then many clubs applied an own strategy to cover all bands (we give different weight to the bands, trying to achieve a better number of participants not only on 2m but mainly on 23cm and microwaves); our rules comprises that one club to assure points needs to be present with at least 2 members on the same band.

Further, we had a multiplier for each month where a club makes a presence, in this way we try to have participants for the entire year and not only in the best propagation periods.

You can see from the following graphs how much the activity is grown since 2011 (data for 2020 are till April, we can guess one-third of the total), you can see that in 2017 there was a decrease due to not well performed management of IAC, that brought to disaffection to the events.





I would like to highlight that in particular on 70cm and 23 cm bands the numbers are higher which we usually have in any other contest, even in IARU Region 1 contests; in these first 4 months of 2020 the average number of logs received is :

50 MHz
140 logs
144 MHz
289 logs
432 MHz
178 logs
1.3 GHz
75 logs
2,3 GHz & Up
11 logs

usually, logs are around 35-40 % of the total number of active stations.

Radio clubs are pushing a lot to increase activity within their members, in this way also who was mainly active on HF bands started to be active on 50 MHz and Up.

In particular, the clubs started to create groups of members active not only in the popular 2m band but also on 23cm, to achieve a higher score.

We created also some Telegram/Whatsapp channels, where people can alert each other of activity on VHF & Up; we see that this helped a lot in particular on 10 GHz, where almost every day we have someone making QSO using any kind of propagation (AS-RS-TR).

Further, some clubs did some learning courses to "train" the operator in the use of logging software, propagation tools, making of antennas, and operating technique in general.

All these facts brought several newcomers on the bands and we decided to create a ranking of merit for Rookies (licensed for less than 3 years) or Youngsters (under 26).

In April we broke our all-time records, probably due to lockdown, anyway, we will try to consolidate those numbers:

50 MHz	144 MHz	432 MHz	1.3 GHz
198	378	230	86

In 2020 also USKA started its own Activity Contest SwAC, and we encourage all the other countries to be on the air in the same periods.

Alex IV3KKW

ARI VHF & Up Manager

Youth contesting program (YCP)

In this program youth members from IARU R1 member societies are invited to take part in a contest from so called "Top-Gun" stations. These young HAM's will learn how to operate the contest station, improve their contest skills and will aim for the best results together as a team.

A youngster will probably be coming for the first time to the host country and will get the chance to experience this country and share amateur radio knowledge with local youngsters.

Until now only the HF contest stations participated at this program.

Maybe it would also interesting for youngster to see how our big stations on VHF are organising the IARU-R1 VHF contests.

Now this program is cancelled/referred due to COVID-19, but if there are big VHF/UHF stations who want to participate in 2021, please contact Lisa Leenders, PA2LS.

50 MHz band plan working group

In the last newsletter (no 85, March 2020) we indicated this would be chaired by Murray G6JYB, assisted by Jann DG8NGN. However we have had very few proposals so far. In some respects the more strategic task should not just be about band planning, but also about spectrum access and innovation to enhance overall 50 MHz activity as discussed below:-

50 MHz Spectrum Access

On 31st March 2020 the 'Final Acts' of WRC-19 were finalised and published. These can be downloaded free-of charge form

https://www.itu.int/pub/R-ACT-WRC.14-2019

The Final Acts are legally due to come into effect on 1st January 2021, but there is no need to wait until then. So the first priority item for several Member Societies is to ensure they have

- a) Full access to the band appropriate to their country (usually 50-52, or 50-54 MHz)
- b) Ensure that if applicable the Primary status is implemented in part or all of the band
- c) Ensure that there are no bandwidth restrictions (especially above 50.5 MHz) that may inhibit innovative use (see below).

Some extracts from the final acts indicate those countries where action may be needed to engage with your regulator:-:

- Part of RR 5.166A: Austria, Cyprus, the Vatican, Croatia, Denmark, Spain, Finland, Hungary, Latvia, the Netherlands, the Czech Republic, the United Kingdom, Slovakia and Slovenia, the frequency band 50.0-50.5 MHz is allocated to the amateur service on a primary basis.
- Part of RR 5.169A: Angola, Saudi Arabia, Bahrain, Burkina Faso, Burundi, the United Arab Emirates, Gambia, Jordan, Kenya, Kuwait, Mauritius, Mozambique, Oman, Uganda, Qatar, South Sudan and Tanzania the frequency band 50-54 MHz is allocated to the amateur service on a primary basis. In Guinea-Bissau, the frequency band 50.0-50.5 MHz is allocated to the amateur service on a primary basis. In Djibouti, the frequency band 50-52 MHz is allocated to the amateur service on a primary basis

The above are in addition to those African countries who already had their names listed prior to WRC-19 in RR5.169

• Part of RR5.169: in Botswana, Eswatini, Lesotho, Malawi, Namibia, Rwanda, South Africa, Zambia and Zimbabwe, the frequency band 50-54 MHz is allocated to the amateur service on a primary basis. In Senegal, the frequency band 50-51 MHz is allocated to the amateur service on a primary basis.

It is important to note that the full versions of the various ITU radio regulation footnotes are designed to avoid interference to other services in the band, BUT they do not specify any power or bandwidth limit. That is a choice made by your regulator and one that member societies should be aware of when approaching their administration.

Please note that David Court EI3IO also remains a key contact on this matter.

50 MHz Innovation & Planning

Whilst the national situation may vary across Region-1, as per the last newsletter, our focus when calling for proposals is the 50.5-52 MHz area which almost all of Region-1 will have access to as illustrated below:

50	50.5	51	51.5	52	52.5	53	53.5	54
	Narrow BW and Beacons	Key area fo	or review /	proposals		Wideband	all-modes	

The narrowband segment will continue to prioritise weak signal operation (up to 2.7kHz bandwidth). Mathias Klug, DH4FAJ has been coordinating the growing Synchronised Beacon Programme. Please contact him if you are likely to join it, so he can coordinate the frequency and timeslots.

For the current and newer countries with access to 52-54 MHz, we have already got that band plan updated for wideband modes up to 500kHz BW such as data and DATV. The key priority there is to continue innovative technology development and raise activity.

In 50.5-52 MHz the traditional use has been mainly NBFM (simplex and some repeaters). It has a relatively small number of Internet gateways and used to have older Packet radio as well. Despite the high domestic noise levels and relatively large antennas that can occur in the band, this is where we are keen to encourage developments which might include:-

- Novel Compact Antennas
- Wideband mode developments which can tolerate the variations in 6m propagation perhaps for 32-64 and/or 128-256 kilobits per second
- Short range digital links. Note that TDD rather than FDD may be preferable, as it avoids the need for complex filters/cavity duplexers etc
- Review/deletion of multiple SSTV/Image frequencies (50.51 and 50.55)
- Review of the number of 6m gateways and repeaters in your country current and future demand (not all of which may be on current IARU frequency defaults)
- Reports of current experiments. For example in the UK BATC has been trialling reduced BW DATV in lower VHF bands
- Overriding the current 12kHz BW limit in the main band plan to accommodate the new developments above

For maximum benefit we want you to think about a more strategic development approach, rather than classic band planning. It can therefore be appreciated that avoiding 12.5 or 25kHz bandwidth limits in national licencing will be helpful, perhaps in exchange for a modest power limit in this segment, compared to the narrowband DX segment.

23cm Band – Amateur and RNSS Coexistence

Work continues within CEPT to consider the 23cm band coexistence between the secondary amateur (and amateur satellite) service and the primary radio navigation satellite service (RNSS), principally the Galileo system. IARU contributions characterising the use of the band by the amateur service have been welcomed in the CEPT working group.

Up to now, the work could be characterised as scene setting and information gathering but soon technical studies will begin to develop the first analysis and evaluation of the coexistence opportunities.

Considering the profile of amateur service usage in the 23cm band, the IARU takes a view that the potential for large scale interference to RNSS is overstated but is working with all parties in a good spirit of cooperation.

It is vital that each IARU R1 member society ensures that their national administration is aware of the importance of this band to the amateur community so that the regulators can engage in the discussions in a constructive way for the amateur service. Contact the SRLC for detailed information. Barry

G4SJH

Think sharing

This is my personal opinion and does not involve an official IARU-R1 opinion. This is just a wakeup call for our upcoming conference, not only in C5(VHF &up) but also in C3(general matters).

As you know, our bands above 1.2 GHz are mostly wanted for new applications such as 5G, IoT, self-driving cars, etc. This is not for the moment a discussion point in the traditional committees such as ITU and the RTO's (CEPT, etc.).

In the political and economic committees in the EU, such as the Radio Spectrum Policy Group, who are interested in the commercial use of spectrum we are also active as observers. One of the topics in the coming years by the RSPG is not getting more band space, but how we can share the bands because the demand is high and supply is low.

As radio amateurs I think we need to be involved in this discussion and we need to think "out of the box"...

If you think sharing bands, you think first of all sharing frequencies, such has been done in the 70cm band with short range devices, who has no rights. But this has sometimes political consequences, where national regulators are pressured by their MP's to take action...

Therefore we need to establish good relations with our regulators to cover some of those sharing problems for now and certainly in the future.

Like the chairman of the RSPG said we need to think out of the box.. Not only about dedicated frequencies, but also for example:

- Directional restrictions: for example an ATV repeaters need to coexist with a military radar. If you can restrict the transmissions towards this direction, everyone is happy (maybe some OM' are then not so happy).
- Time restrictions are maybe also possible
- Mode restrictions
- Azimuth restrictions
- Elevation restrictions for EME for example
- ..

This cannot be done on ITU or CEPT level but need to be considered there where those kind of solutions could be possible.

I'm convinced that a consensus on this with our MS and other user communities could make this sharing option not to be seen as a threat for our bands, but also as an opportunity to keep them for us. But then we need to have a good relation with our national regulator, to solve national sharing problems.

Another problem is of course the possible financial bidding for the use of frequencies...

So this is only a teaser to make the discussion going on... Please think about it and react. I really want to make a topic about this in the coming up General Conference in C5 and C3 Jacques ON4AVJ

Useful Information

C5 Chairman: Jacques Verleijen, ON4AVJ C5 Vice chairman: Jann Traschewski, DG8NGN Contest co-ordinator: Alex Carletti, IV3KKW Beacons co-ordinator: Mathias Klug, DH4FAJ Satellite co-ordinator: Graham Shirville, G3VZV Spectrum specialist: Murray Niman, G6JYB

Website: https://www.iaru-r1.org/about-us/committees-and-working-groups/vhf-uhf-shf-

committee-c5/

Current Edition: v8.50: https://www.iaru-r1.org/wp-

Handbook: content/uploads/2019/08/Latest-VHF_Handbook.pdf

Newsletters: https://www.iaru-r1.org/about-us/committees-and-working-groups/vhf-uhf-shf-

committee-c5/vhf-newsletters/

Wiki http://iaruwiki.oevsv.at

Contest robot http://iaru.oevsv.at/v upld/prg list.php

Mailing list VHF managers and liaison officers

If you are not on this mailing list and you are a VHF manager of your country please send a mail to ON4AVJ@uba.be

Use of the IARU R1 C5 Wiki

If you are an official Member Society representative, but have no login and you want to participate to the discussions on the Wiki, please write a mail to ON4AVJ@uba.be.