



The IARU Region 3 Newsletter

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Editor's Note

Thank you to all those who have contributed to this edition of the Region 3 Newsletter.

This quarter has been very eventful, with a volcano eruption in the Philippines, major bush fires in Australia and more recently the outbreak of COVID-19 virus in many countries that has required unprecedented responses. Some restrictions to combat COVID-19 may be in place for a period of six months. Amateur radio had a role to play in some of these events; see news items in this newsletter. Many Radio Club meetings and Hamfests have been postponed or cancelled. In response, Clubs are now engaging in on air radio nets to keep in contact with their members and others. Amateur radio is well placed as a hobby activity while “social isolation” policies are in place.

Reminders:

World Amateur Radio Day is on Saturday 18th April, all day. See: Article; “WIA celebrates World Amateur Radio Day and 110 Years Anniversary”.

IARU HF Contest will be held on the second full weekend of July, beginning 1200 UTC Saturday and ending 1159 UTC Sunday (**July 11-12, 2020**).

Request

The IARU R3 would like to receive digital photos of amateur related activities to be used in its media related publications. Please contact the “Editor” if you can assist.

Next Newsletter

Societies are invited to submit news items that may be of interest to readers. The deadline for the next edition is 30th June 2020.

73 Peter, VK3MV

A Word from the Chairman

Dear IARU Region 3 colleagues,

We have been watching the developing situation on COVID-19 with increasing concern.

It is my regret to announce that the 1st IARU Region 3 YOTA Camp 2020 planned to be held in Rayong, Thailand, from October 1st to October 3rd, 2020, has been postponed due to COVID-19 spreading. Radio amateurs throughout the world share the concerns of everyone about the seriousness of the COVID-19 outbreak. Governments all over the world are advising “physical distancing” and “self-isolation” to slow the spread of the virus and to give health services the opportunity to minimize its impacts on all of us.

It is essential that the global COVID-19 pandemic must be taken into account when planning participation into multiple-operator practice in the events such as contests, field days, ARDF, ham fair, etc.

Radio amateur offers a unique way for us to maintain our social contacts while remaining physically separate from each other. Many member societies are activating local repeaters and other emergency communications networks to be prepared should the need for their services arise.

Now is a good time to get on the air to exercise our equipment, our skills, learn something new by trying a new band or mode, and expand our circle of friends.

We need to act responsibly to reduce the risk of exposure to our fellow amateurs, our families, and everyone else that we may come in contact with.

The IARU Region 3 asks that all member societies and radio amateurs to modify or suspend any in-person activities while this ongoing health emergency continues.

We hope all amateurs enjoy the amateur radio in accordance with the instructions and guidelines on COVID-19 issued by the responsible authority of each country.

Thank you and 73 de Wisnu YBØAZ
Chairman of Directors of IARU Region 3

Statement By IARU President Tim Ellam, VE6SH, About World Amateur Radio Day

“As I write this the world is in the midst of battling the COVID-19 crisis. A few short weeks ago many of us could not imagine the levels of isolation that we are now dealing with and the sacrifices of many on the frontlines of the pandemic. As we have done in past challenges to our society, Amateur Radio will play a key part in keeping people connected and assisting those who need support”.

“Having come off my own 14-day isolation after returning from an overseas trip, I am touched by the kindness of strangers who assisted me when I was unable to leave my house. It strikes me Amateur Radio operators, who give so much during these times of crisis, are not limited to assisting over the air. Amateurs are true volunteers and I would encourage everyone to assist in the community as they are able to. “My wish for this World Amateur Radio Day is for everyone to stay safe, follow the advice of medical professionals and use Amateur Radio and your skills to help us through this crisis.”

Tim Ellam, VE6SH, IARU President

Coronavirus: IARU Contests

Radio amateurs will share the concerns of everyone about the seriousness of the COVID-19 outbreak. Governments all over the world are advising “social distancing” to slow the spread of the virus and to give health services the chance to cope

Field days bring radio amateurs together and therefore represent an environment where social distancing is difficult to achieve. We must

recognise that many radio amateurs are in the older, higher risk age groups. IARU Region 1 therefore asks national societies which promote field days and multi-operator contests to reconsider their position on these events for the next few months of 2020. Field days are essentially team contests, and so IARU will not sponsor the Region 1 HF-CW Field Day in June. It is a matter for national societies to decide whether and how they continue with their national field day events.

IARU Region 1 believes more generally that multi-operator contests are not consistent with the principle of "social distancing" and should not be promoted at this time.

The position on other IARU events in 2020 which involve multi-operator categories is under review.

Single operator contests, however, remain a great way for those forced to stay at home to enjoy the magic of amateur radio!

Don Beattie, G3BJ
President IARU Region 1
<https://iaru-r1.org/>

WIA celebrates World Amateur Radio Day and 110 Years Anniversary

"Celebrating Amateur Radio's Contribution to Society"

From Saturday, April 18th, 2020 and for a period of six months, The Wireless Institute of Australia will be activating a special on-air event to celebrate World Amateur Radio Day and the WIA's 110 Years Anniversary.

Every year on April 18th, Radio Amateurs worldwide take to the airwaves in celebration of Amateur Radio and to commemorate the formation of the International Amateur Radio Union (IARU) on April 18th, 1925.

World Amateur Radio Day is the day when IARU Member-Societies can show our capabilities to the public and promote global friendship among Amateurs worldwide.

The theme of World Amateur Radio Day (WARD) is "Celebrating Amateur Radio's contribution to Society" and this is especially relevant given the important role Amateur Radio will play as the current global crisis unfolds.

The Wireless Institute of Australia, as different IARU Societies around the world decided to join a special event in which we encourage as many Amateurs as possible to get on the air and contact as many WIA stations as possible, and in addition, to celebrate the 110 years Anniversary as the oldest Amateur Radio Society in the world.

- WIA official stations will operate across Australia from 12:01AM EST, on April 18th. (1401z, 17th).

The WIA official station call signs are VK1WIA, VK2WIA, VK3WIA, VK4WIA, VK5WIA, VK6WIA, VK7WIA, VK8WIA, and V1110WIA.

- Those contacting one or more of these Special Event Stations will be eligible for a special commemorative certificate noting their participation. QSL confirmation will be available using eQSL and LOTW.

WIA

Emcomm Activation in Philippines

On 13th January, PARA advised that due to the Taal Volcano eruption in the Philippines, had caused ash fall and evacuation in the affected area over 100 km, and requested amateurs to keep clear of 7.095 MHz as used by the Philippines Amateur Radio Association (PARA) for Emcomm traffic.

Dani, YB2TJV
Emcomm Coordinator IARU R3

ABC Coverage of recent WICEN activity during the bush fires

"Old fashioned' amateur radio skills are proving useful during emergency incidents when traditional telecommunication channels break down." See full story:

<https://www.abc.net.au/news/2020-02-01/amateur-radio-skills-prove-useful-during-bushfires/11903200?pfmredir=sm>

During the recent bushfires, communications disruptions in some regions of Australia necessitated the activation of WICEN operators. Most communications systems were very robust but lacked fuel supplies to keep stations running. The Australian Defence force personnel were deployed to assist with logistic and communications support.

New HF Band Planning Discussion Group

The ARRL has created a new **HF Band Planning Discussion Group** which is open to both members and non-members

The ARRL say:

HF Band Planning Committee Chair Mike Raisbeck, K1TWF, will moderate the group, which will focus on the ARRL HF Band Planning Committee's recommendations and other band-planning activities. Earlier this month, the ARRL HF Band Planning Committee invited comments and suggestions from the Amateur Radio community on its report to the ARRL Board. At the Board's January meeting, the committee presented its specific recommendations in graphical form for each HF band and each US license class, with the goal of increasing harmony on the HF bands, particularly between CW and digital users. Those responding to the initial call for comments and suggestions are encouraged to cross-post their remarks to the new HF Band Planning Discussion Group.

The discussion group is at
<https://groups.arrl.org/g/ARRL-HF-Band-Planning/>

Other discussion groups are at
<https://groups.arrl.org/g/ARRL-Groups/subgroups>

Source ARRL
<http://www.arrl.org/news/arrl-creates-new-hf-band-planning-discussion-group>

Australian Cubesat project takes shape: Binar-1 and the Binar Space Program

The Binar Space Program (Binar) is a space hardware project for research and education within Curtin University's Space Science and Technology Centre (SSTC). The primary objective of Binar is the development of Australian space technology that enables planetary science research and sovereign Australian space industry activity.

The primary function of the communications link is to provide

telemetry for the on-orbit testing of hardware developed at Curtin for educational and scientific purposes.

The Binar Space Program team is primarily composed of graduate engineers working on higher degrees by research and undergraduates seeking to develop their skills. This team is supervised and advised by members of the SSTC with previous experience building and operating space hardware and others who are currently part of the science teams for several major international missions including OSIRIS-Rex, Mars InSight and Hayabusa-II.

The Binar-1 satellite is currently in engineering testing and development of all subsystem's hardware is complete. Software development is ongoing. The Binar laboratories at Curtin have been setup with equipment for performing vacuum and vibration testing and a rigorous testing campaign began with the proof of concept models of each subsystem and continues with the engineering models.

The safety assessment for JAXA's phase012 has commenced with assembly drawings, procedures, requirements analysis, operations and mechanical analysis all submitted for moderation by Space-BD. Manufacture and testing of the flight model will commence on approval from the JAXA's safety assessment board.

Frequencies are assigned by the IARU's Satellite Co-ordination team and requires the support and endorsement of the WIA being the national body for Amateur Radio in Australia.

The Wireless Institute of Australia are pleased to support this most important project

Daniel-Cristian Busan (VK6BUS)

Successful 47 GHz ham radio moon bounce test

Mitsuo JA1WQF was able to successfully decode AI W5LUA's 47088.1 MHz QRA-64D signal that was bounced off the Moon on Feb 10, 2020. More tests are planned

AI W5LUA posted news of the achievement on the Moon-Net e-mail reflector:

These were one way tests with only me transmitting. At the moment Mitsuo is only running 1 watt but is actively working on a 10 watt amplifier. I run a 30 watt TWT which produces about 25 watts at the feed. The tube is a Hughes 932H driven by a Varian VPW2931 power supply modified for a second suppressed collector of the Hughes TWT. Both stations are running 2.4m offset fed dishes.

My system noise figure is 4 dB and about 2.5 dB at JA1WQF. Both stations are using the "Constant Frequency on Moon" (CFOM) technique of frequency control which allows you to hear/see the other station and your echoes on the same frequency. I started out by sending single tones to Mitsuo which he copied well and then sent several sequences of calls and grid. Mitsuo was able to decode calls and my grid at 1146Z and 1234Z. Signal levels were -23dB and -25 dB. DTs were spot on and frequency was within 13 Hz. As a side note, the first EME on 47 GHz took place back in early 2005, with RW3BP working AD6FP (now K6MG), W5LUA, and VE4MA. VE4MA also went on to work AD6FP. It is nice to see a resurgence of EME activity on this band especially since we in the US are running the risk of losing the band to 5G interests.

The first EME QSOs that took place on 47 GHz utilized a program called MMCW which was a program written by a friend of RW3BP's. The MMCW program required 10 minute transmissions in order to enhance the signal to noise ratio for optimum decode. It is very encouraging to see a WSJT mode provide similar decodes with less than 1 minute transmissions.

More 47 GHz tests are being run in the next few days with Manfred DL7YC. We hope for similar success.

AI W5LUA

Source Moon-Net

<http://mailman.pe1itr.com/pipermail/moon-net/>

Ham radio QFH satellite antennas built at workshop

Radio amateurs built Quadrifilar Helicoidal (QFH) satellite antennas at a workshop in Indonesia organised by a local branch of the national amateur radio society **ORARI**

A translation of the ORARI website report reads:

On Saturday, February 22, 2020, South Jakarta Local ORARI Jakarta held a Homebase Antenna Workshop for LAPAN-A2 / LAPAN-ORARI Satellite Communications. The workshop was held at the Local ORARI Club Station in South Jakarta, with guest speaker Suryono Adisoemarta (Yono / YDØNXX).

The agenda of this workshop consists of theory and practice. Theoretical material includes the introduction of amateur radio satellites in general, the introduction of LAPAN-A2 / LAPAN-ORARI (IO-86) satellites and satellite tracking techniques. Whereas practical material includes making a Quadrifilar Helicoidal (QFH) antenna and communication with the LAPAN-A2 / LAPAN-ORARI satellite



Participants built QFH antennas at the ORARI workshop

The workshop was opened at 9:20 by Irsan YCØOST as Deputy Chair of South Jakarta Local ORARI. After opening, the program continued with the giving of theories about amateur radio satellites. In addition to the IO-86 satellite, there are also other amateur radio satellites that can be used such as AO-7 as the longest-running amateur radio satellite, AO-91, AO-95 and QO-100 which are geostationary amateur radio satellites.

After the theoretical material was finished around 11:30, the program continued with the practice material for making QFH antennas. The materials for making the antenna provided by the committee included copper capillary pipes, 1 1/4 PVC PVC pipe, RG-58 cable, BNC connector and paper clips. Meanwhile, the equipment for making antennas was carried by each participant, such as solder, scissors, pliers, drill, and others. The atmosphere became even more exciting, because in making this QFH antenna there were separate challenges, especially in the RG-58 cable connection to the antenna element.

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At 14:00, LAPAN provided a dedicated Voice Repeater slot on the IO-86 satellite for workshop participants to try out the antenna they made. But because the antenna is quite complicated, there is no antenna that can be tried on the Voice Repeater schedule. Mahesa Rani YD0OVE's antenna was first tried on the regular Voice Repeater schedule. The results are quite satisfying. With her capital Handy Transceiver (HT) and a hand-held QFH antenna, YD0OVE successfully received 14 amateur radio stations.

In this workshop, several guests were present including the President of AMSAT-ID Hakim YB0AN, Chair of the Central Jakarta Local ORARI Edy YC0EDY, and the South Jakarta Local ORARI DPP Beben YB0HJW and Fahlifi YF0BRR.

Source ORARI <https://tinyurl.com/IndonesiaORARI>

IARU Region 3 Contacts

Official R3 Contacts. Further information can be found on the Region 3 website: <http://iaru-r3.org/contacts/>

Society Update Officials and Contact Information

As a part of the move to new International and Regional websites, all IARU Member Society information will be hosted on the International Secretariat website. A request is extended to all Region 3 Society Liaison Officers or other responsible officers to ensure that all details about their society is up to date on the listings shown at <http://www.iau.org> under member societies. Some details have not been amended or updated for a number of years and have nonfunctional data.

Please send any updates to the IARU International Secretariat (secretary@iau.org) with a copy to the Region 3 Secretary (secretary@iaru-r3.org)

Newsletter details:

Go to the IARU Region 3 Web Site <http://iaru-r3.org/topics/newsletter>

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Region 3 Societies can submit articles for inclusion to the next bulletin by **30th June 2020**.

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