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The IARU Region 3 Newsletter Issue 42 – Q1 2017, Released April 2017

Editor's Note

Thank you to all those who have contributed to this edition of the Region 3 Newsletter. I would to see more articles from Societies that may be of interest to other societies and regions.

Contributions may be sent to me at the email address at the of the Newsletter. Items appearing in newsletter may be used by societies to inform their members.

The deadline for the next edition is 30 June 2017.

73 Peter, VK3MV

A word from the Chairman March 2017

Representatives from all regions continue to work on several committees meeting in Geneva and elsewhere on the objectives IARU is pursuing for WRC 2019. Reports are coming from meetings with CEPT and CITEL also, where our delegates work hard to put forth amateur radio issues.

The major work being done now in Region 3 is the revamping of the band plans and the way it is presented to make it similar in all regions. The draft band plan will be finalized at the Directors meeting to be held in Tokyo in early September and then will be circulated to all societies in Region 3 for their comments and suggestions.

This is a very important matter and we hope that all societies will contribute towards this effort.

JARL will be holding their annual Ham Fair also in September this year (usually held in August) and we hope to see many society representatives there. Traditionally much new equipment will be released at that time and this year it is expected that SDR will be incorporated in many brands, like done by ICOM earlier.

We see a large number of small satellites being made and launched by universities and business entities world-wide. Most of them make use of frequencies within the amateur-satellite bands without proper frequency co-ordination and this is a matter of concern as amateur-satellite frequencies are being used for non-amateur use. All societies are requested to educate such users on the proper method for frequency coordination through the IARU satellite advisor.

Our secretary has sent out invoices for the subscriptions from societies to IARU and we hope that there will be a healthy increase in numbers reported!

I urge all societies to send contributions to our newsletter editor so that activities can be reported effectively

Gopal VU2GMN

IARU Region 3 Director Speaks at Peak Australian Hamfest

Director Peter Young, VK3MV, was invited to attend the annual Wyong Race Course Field Day and Hamfest. Young provided a talk on the **International Governance of the Amateur Radio Service and the Role of the IARU**. Young has provided this talk to the Hong Kong Amateur Radio Transmitting Society annual dinner, and at the JARL Tokyo Ham Fair last year. Young has also provided the talk to many radio clubs in Australia in the last 18 months. Comments made after these presentations were about "how many amateurs did not know all the work that was happening behind the scenes to protect amateur spectrum"

IARU Region 3

ITU: Characteristics of Amateur Services

IARU Secretary David Sumner K1ZZ has announced the availability of ITU-R M.1732-2 describing the characteristics of Amateur and Amateur-Satellite Services

Administrative Circular CACE/800 from ITU-R Director Rancy dated January 31, 2017 announced the approval of Recommendation ITU-R M.1732-2, the new revision of "Characteristics of systems operating in the amateur and amateur-satellite services for use in sharing studies."

Congratulations to everyone who contributed to the work in Working Party 5A.

A free copy can be download the document in PDF or Word format from https://www.itu.int/rec/R-REC-M.1732/en

IARU

Hong Kong now on 5 MHz

The local telecommunication authority in Hong Kong, OFCA, has now allocated 5351.5-5366.5kHz to the amateur radio service on a secondary basis.

The maximum power permitted is 15 Watt EIRP.

http://ofca.gov.hk/filemanager/ofca/common/Industry/broadcasting/hk freq table en.pdf

VR2XMC, G3PSM, OFCA

Australia one step closer to gaining 60 Meters

The latest Australian Radiofrequency Spectrum Plan – ARSP 2017 – was published on the Australian Communications and Media Authority's (ACMA) website on 3 January 2017. Changes have been made to the previous Spectrum Plan, principally those arising from the outcomes of the 2015 World Radiocommunication Conference – WRC-15

Of chief interest to Australian amateurs is the addition of the allocation of a 15 kHz band for the Amateur Service at 5351.5-5366.5 kHz, now widely known as the 60 metre band. This was approved at WRC-15 as a world-wide secondary service Amateur band. The WRC set different maximum radiated power specifications applying in different regions and countries, ranging from 15 watts effective isotropic radiated power (eirp) to 25 W eirp. The next step will be the amendment to the Australian Amateur rules that defines the technical operating conditions for this band. There is no indication as to when these changes will occur. So it looks like Australian Hams will have to wait a little longer (Edit)

WIA

US Implementation of two new bands

The IARU reports that the FCC issued a Report and Order that among other things implements the two bands gained at WRC-07 and WRC-12 at 135.7-137.8 kHz and 472-479 kHz. However, operation in those two bands will require advance notification that amounts to a new information collection requirement, and this requirement first must be approved by the Office of Management and Budget in the Executive Office of the President. So, the effective date is still unknowable.

Still, the FCC action was long awaited and is a significant step forward. I want to take the opportunity to thank everyone on the WRC reflector who was involved in these achievements in 2007 and 2012.

Dave Sumner, K1ZZ, IARU Secretary

ARDF activities - 18th World ARDF Championships

The 18th World ARDF Championships were held from 3rd to 9th of September, 2016 in Albena, Bulgaria, beachfront of Black Sea near the city of Varna. 34 countries/societies took part in them and the number of competitors were 343 (first classic game). Together with team leaders, officials, visitors, assistants and helpers the total number participants exceeded 500. Participants from Region 3 were 92 people including 5 countries/societies (WIA, CRSA, CTARL, JARL, KARL).

11th IARU Region3 ARDF

Championships

The 11th IARU Region3 ARDF Championships will be held from 20th to 25th of August, 2017 in Ulaanbaatar, Mongolia, organized by MRSF. MRSF has decided to have open Championships together with official



regional Championships. So, any ARDF competitors and visitors

as well as guests from all over the world are invited. If you are



interested in ARDF, please consider to join this Championships in this summer in Mongolia. You can find more information here, http://www.jarl.org/Japanese/1 Tanoshimo/1-5_ardf/reg3ardf2017/Information.html

IARU Reg.3 ARDF committee chairman,JF1RPZ Yoh Hiroshi Izuta

Tropical Cyclone Debbie – emergency communications in Queensland Australia

A Category 4 Tropical Cyclone Debbie hit north-east Australia inundating coastal and island resort areas last week. The severe weather system, the worst since 2011, made landfall between Bowen and Airlie Beach on March 28 and has damaged many buildings, destroyed millions of dollars in crops, hit vital infrastructure, dumped lots of rain and caused flash flooding.

Radio amateurs experienced in dealing with cyclones prepared by checking their radio gear, dismantling fragile antenna systems, running emergency power generators and doing checks on the local repeaters in Bowen, Mackay, Central Highlands and Townsville regions. Those radio amateurs that still had HF antennas checked into the 20m and 40m Queensland WICEN Nets, and other established nets.

On Monday March 27 final preparations were completed with the cyclone track confirmed and counter-disaster authorities (including some embedded Hams) at the ready for predeployment.

One of the affected towns, Bowen, had its VHF repeater on-air throughout despite lack of mains power in the town, thanks to the Bowen Radio Amateur Group and in particular Geoff Buchanan VK4JDW who had the repeater at his house. That antenna system survived 200kph winds and the repeater was powered by the household emergency generator.

Further inland the Central Highlands Linked Repeater System was functional however its northern coastal node, the Midge Point Repeater, went off-line due to power system and structural damage. Hams have been part of the recovery efforts with many embedded in the Queensland State Emergency Service, Queensland Rural Fire Brigade, care organisations and support teams for power companies. Throughout the area many radio amateurs still used emergency power to put stations on-air, and some had been blocked off by road damage or floodwater.

Many houses in the Queensland flood prone areas are built on stilts to avoid rising water. As the flood continues to move south the downgraded storm has left plenty of damage before reaching northern New South Wales to cause even more damage. The slow moving flood on the Fitzroy River will reach its peak later this week.

This report comes from information supplied by The Townsville Amateur Radio Club and WICEN Queensland Northern Region by Gavin Reibelt VK4ZZ.

Jim Linton VK3PC, Chairman IARU Region 3 Disaster Communications Committee.

Nayif-1 CubeSat launch announced

AMSAT-UK and AMSAT-NL are delighted to now be able to confirm that the **Nayif-1 1U** CubeSat, which has a full FUNcube payload, is was launched on an Indian PSLV launch vehicle at 03:58 UT on February 15, 2017. The flight, C-37, will be carry a total of 104 satellites into orbit.

Nayif-1 has been developed by the Mohammed bin Rashid Space Centre (MBRSC) and American University of Sharjah (AUS). The UAE's first Nanosatellite was developed by Emirati engineering students from AUS under the supervision of a team of engineers and specialists from MBRSC within the framework of a partnership between the two entities, aiming to provide hands-on experience to engineering students on satellite manufacturing.

The spacecraft includes a U/V linear transponder and telemetry transmitter. It employs enhanced oscillator circuitry and includes an active attitude determination and control system.

As with previous missions carrying FUNcube payloads, AMSAT-UK would very much like to receive as many reports from stations around the world, especially during the first few minutes and hours after launch. The first signals may be heard in North America during the mid-evening hours (Local Time) on February 14 onward.

There is a mission specific Telemetry Dashboard for this project and this can be downloaded from http://download.funcube.org.uk/Nayif-

1 Dashboard 1038 installer.msi

and, in a similar way to the FUNcube-1 Dashboard, this will be capable of uploading the telemetry received to a central Data Warehouse.

Guidance Notes for the installation of the Dashboard, integration with a FUNcube Dongle and the Data Warehouse have been prepared for the Nayif-1 mission. These can be downloaded from

https://funcubetest2.files.wordpress.com/2017/02/nayif-1 dashboard notes release 1-0b.pdf

A file to test that the Dashboard and Warehouse configuration are working correctly can be downloaded from http://download.funcube.org.uk/nayif1_testfile.funcubebin

The operating frequencies for the spacecraft will be: Telemetry

145.940 MHz using 1k2 BPSK to the FUNcube standard. SSB/CW Transponder Uplink on 435.045 – 435.015 MHz Downlink on 145.960 – 145.990 MHz

Initial operations of the spacecraft will be in a low power "safe" mode where only the telemetry transmitter is activated.

More details about the launch, exact deployment time and prelaunch TLE's will be made available as soon as they become available; in the meantime we will really appreciate your support!

AMSAT-UK: https://amsat-uk.org/

Australian university students to launch satellite in 2018

Students at the University of Melbourne are well advanced on a program to build a nano-satellite, with the Wireless Institute of Australia assisting in the IARU frequency and other coordination processes. Through the Melbourne Space Program (MSP) affiliated with the University of Melbourne, all is moving ahead for a hand-over of the nano-satellite in November and a launch as early as January 2018. Funding comes from the University of Melbourne, while the Melbourne Space Program is an organisation that holds the licensing, and other matters related to the launch.

In a media release, the MSP revealed that plans are well under way with rideshare provider SpaceFlight with a contract signed for a November hand-off and its launch as early as January 2018.

It has involved a group of ambitious students, seeking to understand and help redefine the Australian space sector through innovation in education, economics and policy, as well as engineering.

Australia is the only Organisation for Economic Cooperation and Development (OECD) nation without a space agency. In 1966, University of Melbourne students built Australia's first satellite that was launched in 1970 as Australis Oscar 5, to be tracked by 200 radio amateurs in 27 different countries.

The Melbourne Space Program has about 70 active members who are students ranging from 1st year university to masters level and post-graduate.

The key objectives include being the first students to launch an Australian nano-satellite, create education, research in space, collaborate with academia and industry, and promote gender parity in the STEM (science, technology, engineering and mathematics) and Arts disciplines.

Work was continuing launch Australia's first nano-satellite and more news is expected in coming months.

Fred Swainston VK3DAC/VK4FE, WIA STEM Coordinator

IARU Region 3 Directory

Official R3 Directory. Further information can be found on the Region 3 website: http://iaru-r3.org/secretariat/

Society Update Officials and Contact Information

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://iaru-r3.org/ under member societies. Some details have not been amended or updated for a number of years and have non functional data.

Current details can be forwarded to the Secretary of Region 3 for updating of the web information.

Newsletter details:

The Region 3 Web Site: Go to: http://www.iaru-r3.org.

Editor: Peter Young, Director IARU Region3.

E-mail: petervk3mv at tpg.com.au

Region 3 Societies can submit articles for inclusion to the next bulletin by 30th June 2017.

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P. O. Box 73, Toshima, Tokyo 170-8691, Japan.

E-mail: secretary@iaru-r3.org

Tel: +81 3 3988-8753 Fax: +81 3 3988 8772

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IARU Region 3

