



# The IARU Region 3 Newsletter

## Issue 38 – Q1 2015, Released April 2016

### A word from the Chairman

Things have been rather quiet over the past few months after the conference in Bali.

The various committees are working on their respective assignments and we should see a lot of activity on all the items that require attention within the region.

A particular area which is being addressed is the format of the Region 3 band plans that differs from other regions. It was decided at the Bali conference that we should reformat the band plans to be similar to the other regions and that is being undertaken now. I would urge all societies to take a look at their country band plans and see if they can also be in a similar format.

A major issue for action is the large scale intruders on our amateur bands and an action plan has to be developed soon to deal with that. The issue is different in different countries and so some very systematic work is required.

Most societies are working with their respective administrations on getting access to the 5 MHz band in their countries. Many countries already permit access with some restrictions.

Our region had the usual share of natural emergencies with typhoons, earthquakes etc. taking place. Radio amateurs assisted wherever possible.

*Gopal VU2GMN*

### 2016 QRP Day - June 17

The interest in QRP activities is everlasting in amateur radio community worldwide.

QRP radio communications testify high ability of radio amateurs, and offers advantages concerning, among others, the reduction of QRM on the amateur bands.

The 10th IARU Region 3 Conference held in September 1997 in Beijing has resolved the following recommendations based on the document (97/X/14) submitted by NZART, which says;  
"That Region 3 Societies help to promote the IARU objectives for QRP operation, specifically:

- i) to support QRP operation on June 17 each year;
- ii) to foster QRP activities by their members;
- iii) to encourage regular publication of QRP articles in their national magazines;
- iv) to provide QRP sections in any national contests; and
- v) to assist other Societies with the promotion and development of QRP."

Accordingly, member Societies are requested to note the above resolution and take appropriate actions with reference to the holdings of the following events, for example, in order to contribute to more effective use of radio spectrum:

- 1) QRP Field Day;
- 2) QRP Contest;
- 3) Distribution of QRP Transmitter Kits and Reference Book; and
- 4) Workshop of QRP Operation.

*Secretary, IARU Region 3*

### IARU president speaks on Emergency Communications and Amateur Radio

International Amateur Radio Union (IARU) President Tim Ellam, VE6SH/G4HUA, says Amateur Radio is "probably more relevant today than it was 25 years ago." Ellam made the comment during an **interview** with Maximilian Jacobson-Gonzalez at the 2nd Global Forum on Emergency Telecommunications (GET-2016), held in late January in Kuwait and sponsored by the International Telecommunication Union (ITU). The event's slogan was "Saving lives."

"We're so dependent now on all kinds of systems of communications — everyone has a cell phone, everyone is used to using the Internet — but they're not used to what happens when those systems go down," Ellam said. "Amateur Radio is there. It relies on somewhat old fashioned technology, but there are also advancements in technology that we rely on."

Ellam pointed out that hams can use computer-based digital techniques to pass message traffic at very low power levels and under poor propagation conditions. "Amateur Radio has kept pace by developing new ways to communicate," he said.

Among the major challenges Amateur Radio is facing, Ellam cited the difficulty in some countries to obtain an Amateur Radio license. In addition, he said, some countries impose high duties on imported ham gear, and some make it difficult to erect appropriate antennas and support structures.

Ellam reiterated his focus on the value of the Amateur Service today when he spoke to two sessions at the GET-2016 gathering. "Amateur operators are on the ground. If they're not close to the site of a disaster, they might even be in it," he told a Leaders' Dialogue forum. "They're there. They're ready to go. For the first 24 to 48 hours you have people on the ground, ready to assist. They own their own equipment. They don't rely on commercial networks. If cellular service goes down, we can assist by using HF or VHF or UHF communications on a peer-to-peer basis."

Ellam pointed out that, although he's not an engineer and does not work in a technical field, he knows enough to get on the air using alternate power sources and a very simple wire antenna. "Don't forget the Amateur Radio services," he implored those attending the forum. "They're a great asset to you in times of crisis."

The ITU described GET-2016 as an international platform to discuss topics related to world-wide emergency telecommunication policy and disaster risk reduction.

*IARU*

### RAST April Meeting Report

The **Radio Amateur Society of Thailand** (RAST) report ISIS are building the first Thai ham radio satellite JAISAT-1 and the first Advanced Class examination will be held in June, 2016

The JAISAT-1 CubeSat is planned to carry a linear transponder and RAST say the satellite will be constructed by Innovative Solutions in Space (ISIS). In 2015 Thailand's regulator the National Broadcasting and Telecommunications Commission (NBTC) agreed to provide 9.3 million baht (\$258,218) in funding over two years for the RAST sponsored JAISAT-1 Project.

While the Thai radio regulations have provided for the Advanced license since 1987 it has been impossible for Thai citizens to get one until now because there

was no Advanced Exam. The only Advanced licence issued was in the 1980's to The King of Thailand, His Majesty King Bhumibol Adulyadej HS1A.

The three license classes in Thailand are:

- Basic (Novice) with 100 watts on 28 MHz and 60 watts on 144 MHz
- Intermediate with 200 watts output on all bands
- Advanced with 1,000 watts output

*Radio Amateur Society of Thailand*

### Southeast Asia Net (SEANET) to be reactivated

The **Southeast Asia Net** (SEANET) will be reactivated next week by the members of **RAST**, Thailand's national amateur radio society.

Beginning on Monday, April 11 a Thai net control station will invite stations to check into SEANET from across the Southeast Asian region on 14.320 MHz from 12.00z (7 p.m. in Bangkok and Jakarta) onwards. Subsequently, the net will be conducted twice a week, every Monday and Friday, when a Thai net control station will invite stations around the region to check in on a country-by-country basis.

Later this year the Radio Amateur Society of Thailand under the patronage of His Majesty the King (RAST) will host the 2016 SEANET Convention in Pattaya, a popular beach resort on the Gulf of Thailand, from November 18-21 and RAST President Jakkree Hantongkom (Jack), HS1FVL along with directors of the society believe that it is important to ensure that the net on 20 metres continues to be conducted regularly

Amateur radio stations anywhere in the world are welcome to check into SEANET, whose main role is to be on standby to handle any medical or emergency traffic. In the past SEANET has helped sailors and crew members on yachts in distress while also serving as a guide to propagation conditions and being a meeting point for hams in the region where they can meet friends before QSYing away from the net frequency for a QSO.

SEANET began operating on 14.320 MHz in late 1963 and the first SEANET Convention was held in Penang in 1971. Since then the convention has been an annual event while the net had been manned by volunteer net control stations from around the region. However, the net activity had declined and it no longer meets regularly and this initiative by RAST hopes to redress this by conducting the net at least twice a week.

It is still possible to register to attend the 44th SEANET Convention in Pattaya and full information can be found at the SEANET 2016 website: [www.seanet2016.com](http://www.seanet2016.com)

Any amateur radio station can check into the net and the net control operator begins by calling for check-ins from countries in Southeast Asia, followed by elsewhere in Asia and the Pacific, then in Africa, the Middle East, Europe and North, Central and South America.

For more information about RAST and amateur radio in Thailand, please check out the [English-language website](#) while there is also a [website in Thai](#).

*Vice President, RAST*

### Satellite package carrying Amateur Radio payloads released into orbit from ISS

A package of two satellites carrying Amateur Radio payloads has been deployed into orbit from the International Space Station (ISS) as part of a collaborative Texas A&M and University of Texas at Austin research effort.

Built by Texas A&M students, **AggieSat4** (AGS4) will release UT's **Bevo-2** CubeSat in about a month, once it is far enough away from the

ISS.

Both schools received support from NASA's Johnson Spaceflight Center (JSC) for the design, construction, testing, and launch phases. The goal of the overarching LONESTAR (Low Earth Orbiting Navigation Experiment for Spacecraft Testing Autonomous Rendezvous and Docking) program is for the two satellites to individually rendezvous with each other and perform docking and undocking maneuvers. "The overall objective is to find ways for small spacecraft to join together autonomously in space," **Helen Reed, KD7GPX**, professor of aerospace engineering and director of the AggieSat Lab at Texas A&M told NASA. "We need simple systems that will allow rendezvous and docking with little to no help from a human, which will become especially important as we venture farther out into space. Applications could include in-space assembly or reconfiguration of larger structures or systems as well as servicing and repair."

The AggieSat team received its first beacon signal from the satellite at its Texas A&M Riverside Campus ground station. The AggieSat4 team is asking any Amateur Radio operators receiving the beacon signal to send any data to the AGS4 team via email to, [aggiesat@tamu.edu](mailto:aggiesat@tamu.edu). AggieSat4 will transmit 9.6 kbps FSK telemetry and 153.6 kbps FSK on 436.250 MHz. Once it's placed into its own orbit, Bevo-2 will transmit on 437.325 on CW and 38.4 kbps FSK.

Both satellites were launched to the space station during a December 6, 2015, resupply mission. Earlier last week, Astronauts Tim Peake, KG5BVI, and Scott Kelly made preparations to deploy the sizeable LONESTAR phase 2 mission satellite package from the ISS, using the SSIKLOPS deployer. The satellite mission also will demonstrate communication cross links, data exchange, GPS-based navigation, and other tasks. AggieSat4 will capture images of the Bevo-2 release. The satellites were independently developed by student teams at the two universities. Both teams were responsible for development plans for their satellite and had to meet established mission objectives.

The Bevo-2 Satellite was designed, built, and tested in the Texas Spacecraft Lab (TSL) at the University of Texas at Austin. "This whole experience is very exciting," TSL Director **Glenn Lightsey, KE5DDG**, said last fall as undergraduate and graduate students were in the final stages of their project. "It's great to have a research program where our students can build satellites that fly in space."

Reed and Lightsey are co-investigators for the LONESTAR 2 project.

*The American Radio Relay League*

### Japanese Ham Radio satellite launch

ChubuSat-2, ChubuSat-3 and Horyu-4 was launched on, Feb 17 into a 575 km, 31 degree inclination orbit.

**Yasutaka Narusawa JR2XEA** has provided the following information on ChubuSat-2/3:

Nagoya University (NU) and Mitsubishi Heavy Industries (MHI) developed 50kg microsatellite ChubuSat-2 (NU) and ChubuSat-3 (MHI). These satellites have amateur VHF receiver and amateur UHF transmitter, and will be launched on Feb. 12 2016 from Tanegashima, Japan. Komaki Amateur SATCOM Club operates these satellites from Komaki, Japan.

After the satellite separation, each satellite will transmit UHF CW beacon message including battery voltage etc. which is very important information for our initial and critical operation. So we are very happy if you receive the CW beacon message and report to us  
email: [chubusat2@frontier.phys.nagoya-u.ac.jp](mailto:chubusat2@frontier.phys.nagoya-u.ac.jp)

In following web site, we show the information (frequency, format, TLE, etc.) about ChubuSat-2 and ChubuSat-3. If we have your report, we will show your report in this page.

[https://www.frontier.phys.nagoya-u.ac.jp/en/chubusat/chubusat\\_satellite2.html](https://www.frontier.phys.nagoya-u.ac.jp/en/chubusat/chubusat_satellite2.html)

Both satellite will provide the message exchange service. After the on-orbit checkout of the satellite(maybe one month after launch), you can use this service, sending your message with VHF uplink, then your message is written to the on-board memory. By sending inquiry message, anyone can read your message with UHF downlink.

ChubuSat-2 Satellite

Uplink: 145.840 MHz FSK 1200bps

Downlink: 437.100 MHz GMSK 9600bps and CW

ChubuSat-3 Satellite

Uplink: 145.840 MHz FSK 1200bps

Downlink: 437.425 MHz GMSK 9600bps and CW

Horyu-4

Uplink: 145.980 MHz & 1260.5 MHz , AFSK, DTMF

Downlink 437.375 MHz & 2400.300 MHz 1k2 AFSK,9k6 GMSK, S\_BPSK, CW

<http://kitsat.ele.kyutech.ac.jp/horyu4WEB/horyu4.html>

[http://www.amsatuk.me.uk/iaru/finished\\_detail.php?serialnum=434](http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=434)

<https://www.facebook.com/Horyu-4-Arc-Event-Generator-and-Investigation-Satellite-780188535364868/>

Information on the uplink/downlink format will be uploaded to above web site.

### Election Commission seeks support from Radio Hams

The Election Commission of India (ECI) has sought support from ham radio operators, who were applauded for their service during the earthquake in Nepal, in the upcoming Assembly elections in Bengal.

The Deccan Herald reports:

Amateur operators with high frequency radios will provide communications support to EC officials in areas with negligible or zero mobile telephone network. In a letter to **Ambarish Nag Biswas VU2JFA**, secretary of West Bengal Radio Club (Amateur), the poll panel has asked for support during the six-phase polls in Bengal, starting from April 4.

Ham radio operators will use their radio transmitters to create a line of communications, helping poll officials, poll observers and the central forces to keep in touch with each other, an EC official said.

Nag Biswas VU2JFA received a letter from the District Election Officer of North 24 Parganas, under orders from ECI, asking for communications support using Ham radio in "mobile shadow zones". These zones are communication blind spots, not covered by any cellular network tower. While the initial request is for polling on April 25 at North 24 Parganas, Nag Biswas said that he expects further requests to come in from other districts.

On April 25, Ham radio operators will set up a communications network, connecting 24 constituencies that fall under "mobile shadow" zones. "We've received a request to cover the blind spots in mobile telephony at 24 constituencies in North 24 Parganas," Nag Biswas said. The job of Ham radio operators will be to provide minute-by-minute information to the sector electoral office and district magistrate on incidents of violence and other untoward occurrences. "We'll also acquire data on poll percentage, EVM malfunction and such incidents at booths from polling staff and send forward updates to officials concerned," he said.

Nag Biswas added that before they are sent to these areas, EC will impart them with training as it is done for other polling staff. They will be reaching the constituencies two days in advance to set up their devices, batteries, and transmitters, necessary to have a workable

network.

*Source Deccan Herald newspaper*

### Nepal has an IRLP-enabled repeater

The 2-metre repeater in Kathmandu Nepal serves those with hand-held transceivers and has now been upgraded to become the latest IRLP node with worldwide access.

The repeater, donated through the **Radio Mala** group and the **Bay-Net** in California, was installed last year following the massive earthquake in the Himalayas. Bay-Net volunteers helped build, test and ship the repeater system that is at the Tribhuvan University with the callsign of **9N1SP**.

George Zafiroopoulos KJ6VU of Bay-Net reports that after testing, the IRLP node has worked well.

The new IRLP connection in Kathmandu Nepal has been assigned the Node number **5511**.

*IARU Region 3 Chairman,  
Disaster Communications Committee*

### IARU Region 3 Directory

Following the recent Regional 3 Conference in Bali there has been some changes to 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:**

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Region 3 Societies can submit articles for inclusion to the next bulletin by 30 June 2016.

**Publisher:** The International Amateur Radio Union Region 3

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