The Executive Committee (EC) meeting of the International Amateur Radio Union Region 2 (IARU R2) was called to order by President Santoyo at 2330UT. Mr. Santoyo welcomed the attendees:

- President, and Area C Director, Ramón Santoyo, XE1KK
- Vice-President and Area D Director, José Arturo Molina, YS1MS
- Secretary and Area A Director, George Gorsline, VE3YV
- Treasurer and Area B Director, Jay Bellows, KØQB
- Area E Director, Tommy Chen, 9Y4T
- Area F Director, Gustavo de Faria Franco, PT2ADM
- Area G Director, Carlos Beviglia, LU1BCE
- Dave Sumner, K1ZZ, IARU Secretary representing the International Secretariat
- Reinaldo Leandro, YV5AM, R2 former President and R2 Awards Manager
- Sterling Mann, N0SSC
- Ward Silver, N0AX
- Kermit Carlson, W9XA IARU CISPR Representative
- Ed Hare, W1RFI R2 EMC Coordinator

**Agenda Items:**

2. Meeting Agenda was reviewed and approved.

3. Youth Outreach
   
   Mr. Mann and Mr. Silver reviewed their proposal (attached) to start a series of incubator initiatives to explore how to reach young amateurs and prospective amateurs. Key is that these various efforts may or may not yield any interest, and importantly, identify thought leaders to nurture these. Unlike previous attempts, which have failed to attract interest in the past, these must be allowed to grow organically and “hands off” without the traditional coordination or involvement from older amateurs or formal structure. After an interesting and instructive discussion on current youth activities and social media, the EC approved the following:
   - Sterling Mann, N0SSC, is appointed as R2 Liaison for Youth.
   - Initial funding from PARF (Promotion of Amateur Radio Fund) will be available when an expenditure plan is received and approved. Further funding requesting may be forthcoming as things develop
   - A Terms of Reference be drafted for this new position including a funding process [v20.3.1]

4. IARU EMC Representative at CISPR
   
   Mr. Carlson, with Mr. Hare’s additional comments, gave a very detailed review of the WPT/EV (Wireless Power Transfer for Electric Vehicles) as the most critical of EMC issues currently under study. While WPT operates magnetically at 75-90 kHz, it does so at extremely high power levels (11 KW) and has potential for harmonic radiation in the HF bands. He described the need for more accurate, representative, and up-to-date understanding of noise levels in various environments to demonstrate potential impacts of WPT on HF activities. As WPT is designed to be used for home charging of vehicles, it could present a devastating source of noise to neighbouring amateurs. Prior to the pandemic, R2 had agreed to pay travel costs for Mr. Carlson to attend the CISPR meeting in September, now no longer required.
Mr. Hare requested that EC members provide him with EMC contacts with as many Member Societies as possible. [v20.3.2]

5. IARU Update
Mr. Sumner submitted a written report (attached) which included commentary on ITU-R WP3L. IARU has submitted two papers which indicate that noise measurements being proposed as baselines for determining level of interference are faulty and new, appropriate and real-world measurements should be used.

6. Review of OPEN Action Items deferred to end of meeting.

7. Financial report
Mr. Bellows summarized the previously circulated (August 12) Treasurer Financial Report. Current account balances are checking $43,330 and savings $245,576. Given the significant reduction in expenses due to no travel expenses, he requested that EC consider the implications of this for next year’s budget and on overall financial strategy to be a discussion item at our next EC meeting.

8. R2 Coordinator reports (attached)
Workshops. The continued enthusiastic reception of the R2 Workshops is gratifying. The last workshop on advanced satellite operations attracted over 300 online participants and over 500 others have since viewed it online. The plan is to offer two per month, one Spanish and one English. Mr. Gabaldoni requested that EC identify possible future speakers in their regions. [v20.3.3]

Band Planning Committee. A beta release of WSJT added additional frequencies in the menu which could have extended FT8 activities into segments used by other modes. Mr. Penney contacted his R1 and R3 counterparts to form a team to work together to re-plan IARU guidance for the “digital” segments (e.g. 14.070-14.080) to accommodate the explosive growth of FT8 while minimizing impacts on operations of other modes (e.g. JTx, WSPR). They have met with and continue to work with K1JT and the other members of the development team to find a reasonable plan for accommodating operations on all modes. The EC acknowledged Mr. Penney’s leadership to create and manage a global IARU approach as an example of how regions can work together, quickly and decisively on issues that require real-time action.

EMCOR Coordinator. Report received with thanks.

CITEL Coordinator. Report received with thanks.

9. R2 Awards update and discussion
Mr. Leandro reported that the pandemic has helped create a surge in interest in the IARU R2 Award. He noted that the award certificate requires some redesign and updating of the IARU and Member Society logos. He asked for help from someone who has the design capabilities. Mr. de Faria Franco provided contact information of a suitable person to work with him. Mr. Leandro also noted that applicants have experienced difficulties in finding a suitable person to work with him. After discussion, the EC approved these changes. Mr. Leandro will update and circulate the R2 Awards materials accordingly. [v20.3.4]

10. Standard Operating Procedures Changes:
A change to Section XXI. Guidance for Hosting a General Assembly of Delegates to add to host society pre-conference planning direction to include necessary preparation and information on health emergencies and insurance. After discussion, the EC agreed to adopt the following, noting it is necessary and prudent.
“The host society, in coordination with the hotel, is required to have liability insurance and to develop an appropriate plan to inform attendees of emergency procedures and access to health care in both languages.

The host society must include a notice to all delegates of their personal responsibility to provide for personal health and accident insurance.”

Mr. Gorsline to update, provide the changed SOP for translation and to then post these on the R2 website. [v20.3.5]

11. EC Meetings Schedule.
Mr. Gorsline proposed a schedule for upcoming meetings, including changing the October in-person EC meeting to a series of virtual sessions in the same general timeframe. It was acknowledged that whether an in-person October 2021 meeting could not be determined at this time but should be reserved in EC members schedules to be finalized mid-2021. With these changes, the forward schedule of meetings is:

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Location</th>
<th>Date</th>
<th>UTC Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.4</td>
<td></td>
<td>Oct 22 Thurs Oct 24 Sat Oct 28 Weds</td>
<td>2359 General Business (2 hours) 1300 Coordinator Presentations (4 hours) 2359 if required (2 hours)</td>
</tr>
<tr>
<td>21.1</td>
<td></td>
<td>Feb 17 Weds</td>
<td>2359 General Business (2 hours)</td>
</tr>
<tr>
<td>21.2</td>
<td></td>
<td>May 19 Weds</td>
<td>2359 General Business (2 hours)</td>
</tr>
<tr>
<td>21.3</td>
<td></td>
<td>Aug 18 Weds</td>
<td>2359 General Business (2 hours)</td>
</tr>
<tr>
<td>21.4</td>
<td>TBD</td>
<td>Oct 23-25 Fri-Sun</td>
<td>Fri evening–Sun morning (TBD)</td>
</tr>
</tbody>
</table>

12. Other Business.
Mr. Santoyo requested that EC members consider additional online activities which R2 could undertake and also to identify those being done by Member Societies which could be made available to a broader audience. [v20.3.6]

13. Review of Actions arising from this meeting
Mr. Gorsline reviewed the OPEN Action Items and those raised in this meeting. These are in the attached.

14. Closing Remarks and Adjournment
Mr. Santoyo offered his warmest wishes to Mr. Leandro for once again being part of the R2 EC meeting and for continuing his work as R2 Awards Manager. There being no further business, Mr. Santoyo closed the meeting with his thanks to Mr. Mann and Mr. Silver for their work on Youth and ongoing commitment of support. He also thanked Mr. Carlson and Mr. Hare for their briefing. Meeting adjourned at 0205.

Attachments:
Youth Action Plan
IARU Update
R2 Coordinator Reports: Workshops, Band Planning Committee, EMCOR, CITEL
# Action Item List

**NOTE:** Sorted by Meeting Date.

## OPEN ITEMS

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
<th>Responsible</th>
<th>Due Date</th>
<th>Status</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>HP1.14</td>
<td>List of possible future R2 volunteers</td>
<td>All EC members</td>
<td>Feb 19 vEC</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>OA5</td>
<td>Start discussions on arrangements for 2022 GA RCA hosting</td>
<td>Mr. Santoyo, Mr. Gorsline</td>
<td>TBD – no later than Mar 21</td>
<td>Open</td>
<td>On-hold</td>
</tr>
<tr>
<td>v19.4.1</td>
<td>Video meetings with MS Area Directors</td>
<td>Area Directors</td>
<td>March 2020</td>
<td>Open</td>
<td>Begin contacts</td>
</tr>
<tr>
<td>v19.4.2</td>
<td>Video meetings with Coordinators Designated mentor</td>
<td>Designated mentor</td>
<td>March 2020</td>
<td>Open</td>
<td>First meeting held</td>
</tr>
<tr>
<td>v19.4.3</td>
<td>Recruit new Monitoring System Coordinator EC</td>
<td>EC</td>
<td>End Feb 2020</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>v19.4.8</td>
<td>Review financials for future GA</td>
<td>Mr. Santoyo, Mr. Bellows, Mr. Gorsline</td>
<td>Feb 20 vEC</td>
<td>Open</td>
<td>On-hold</td>
</tr>
<tr>
<td>v20.1.6</td>
<td>List of possible future R2 volunteers</td>
<td>All EC members</td>
<td>May vEC</td>
<td>Open</td>
<td>On-hold</td>
</tr>
<tr>
<td>v20.1.7</td>
<td>ARAC @RCP, invitees, date?</td>
<td>Mr. Santoyo</td>
<td>Fall</td>
<td>Open</td>
<td>Web enhancement development expenses</td>
</tr>
<tr>
<td>v20.2.1</td>
<td>Support for online Workshops</td>
<td>Mr. Bellows, EC</td>
<td>June 30</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>v20.2.4</td>
<td>Identify EC liaison for Spanish youth chat group</td>
<td>EC, Mr. Mann</td>
<td>May 31</td>
<td>Open</td>
<td>ASAP</td>
</tr>
<tr>
<td>v20.3.1</td>
<td>R2 Liaison for Youth ToR</td>
<td>Mr. Gorsline</td>
<td>Sept 30</td>
<td>Open</td>
<td>To include funding process</td>
</tr>
<tr>
<td>v20.3.2</td>
<td>Provide Mr. Hare with MS EMC contacts</td>
<td>EC</td>
<td>Sept 30</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>v20.3.3</td>
<td>Identify future Workshop speakers to Mr. Gabaldoni</td>
<td>EC</td>
<td>Sept 30</td>
<td>Open</td>
<td>In both languages</td>
</tr>
<tr>
<td>v20.3.4</td>
<td>Update and circulate revised R2 Award materials</td>
<td>Mr. Leandro</td>
<td>Sept 30</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>v20.3.5</td>
<td>SOP: update, translation, post</td>
<td>Mr. Gorsline, Mr. Molina</td>
<td>Oct vEC</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>v20.3.6</td>
<td>Identify additional online services for R2 to provide or assist MS to provide</td>
<td>EC</td>
<td>Sept 30</td>
<td>Open</td>
<td></td>
</tr>
</tbody>
</table>
# CLOSED ITEMS

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<tr>
<th>Item</th>
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<th>Due Date</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>v19.4.4</td>
<td>Invite Mr. Archangelo to report on WRC19</td>
<td>Mr. Gorsline</td>
<td>Feb 20 vEC</td>
<td>Done</td>
<td></td>
</tr>
<tr>
<td>v19.4.6</td>
<td>investigate thumbs for recent document access better document access</td>
<td>Mr. Molina</td>
<td>Feb 20</td>
<td>Done</td>
<td>For consideration as future enhancement</td>
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<tr>
<td>v19.4.10</td>
<td>Inform CTU of Mr. Chen replacing Mr. Donawa as R2 representative</td>
<td>Mr. Gorsline</td>
<td>25 Nov 19</td>
<td>Done</td>
<td>Mr. Chen to provide draft</td>
</tr>
<tr>
<td>v19.4.13</td>
<td>Set date for San Jose EC</td>
<td>Mr. Beviglia</td>
<td>End Nov 19</td>
<td>Done</td>
<td>Calendar of EC meetings updated</td>
</tr>
<tr>
<td>v19.4.11</td>
<td>YOTA month follow up</td>
<td>Mr. Gorsline</td>
<td>22 Nov 19</td>
<td>Done</td>
<td>Ongoing YOTA in R2</td>
</tr>
<tr>
<td>v19.4.5</td>
<td>Invoice for web site for end fiscal year</td>
<td>Mr. Bellows</td>
<td>End Dec 19</td>
<td>Done</td>
<td>Paid</td>
</tr>
<tr>
<td>v19.4.7</td>
<td>SOP changes translate and post</td>
<td>Mr. Molina</td>
<td>End Dec</td>
<td>Closed</td>
<td>See v20.3.5</td>
</tr>
<tr>
<td>v19.4.9</td>
<td>Letter to ITU Secretary General on ECW</td>
<td>Mr. Santoyo</td>
<td>End Nov 19</td>
<td>Done</td>
<td>+ Invitation to Zoom ECW in May</td>
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<tr>
<td>v19.4.12</td>
<td>GA host society clarification and other requirements to be added to SOP</td>
<td>Mr. Gorsline</td>
<td>Feb 20 vEC</td>
<td>Closed</td>
<td></td>
</tr>
<tr>
<td>v20.1.1</td>
<td>ECW / Satellite Workshop</td>
<td>Mr. Gorsline</td>
<td>May vEC</td>
<td>Done</td>
<td>Online workshops</td>
</tr>
<tr>
<td>v20.1.2</td>
<td>Communicate with the camp organizers, copying ARRL</td>
<td>Mr. Gorsline</td>
<td>Feb 29</td>
<td>Cancelled</td>
<td></td>
</tr>
<tr>
<td>v20.1.3</td>
<td>YOTA camp Bulletin</td>
<td>Mr. Gorsline</td>
<td>Feb 29</td>
<td>Cancelled</td>
<td>Cancelled</td>
</tr>
<tr>
<td>v20.1.4</td>
<td>Youth Coordinators – review call for volunteers</td>
<td>EC</td>
<td>Feb 27</td>
<td>Done</td>
<td>Slack chats set up</td>
</tr>
<tr>
<td>v20.1.5</td>
<td>Youth Coordinator – call for volunteers bulletin</td>
<td>Mr. Gorsline</td>
<td>Mar 1</td>
<td>Done</td>
<td></td>
</tr>
<tr>
<td>v20.2.2</td>
<td>Additional signature on bank accounts</td>
<td>Mr. Bellows</td>
<td>August vEC</td>
<td>Closed</td>
<td>vEC 20.5</td>
</tr>
<tr>
<td>v20.2.3</td>
<td>IARU &quot;Who we are, what we do, support your MS&quot; video for Workshops</td>
<td>Mr. Gorsline</td>
<td>June 15</td>
<td>Closed</td>
<td>Produced by Mr. Bevliga and team</td>
</tr>
</tbody>
</table>
IARU Region 2 Youth Action Plan

Sterling Mann, N0SSC
Ward Silver, N0AX
6 July 2020

Goal: To promote community between young radio amateurs by facilitation of online and offline meetings between youth through spontaneous groups and member societies of IARU Region 2.

Summary

- Establish and publicize the position and events
- Acquire and make available Zoom license for up to 100 attendees and unlimited meetings
- Identify young hams willing to host an in-country online “meet up” and grow from their interest
- During remainder of 2020:
  - Support up to 10 online meetings or events
  - Support up to 3 on-the-air events with young operator theme
  - 75% of IARU R2 member societies establish youth liaison function

Create: Position of Region 2 Liaison for Youth in Amateur Radio – functions include:

- serve as Region 2 contact for individuals, groups, and organizations;
- make introductions and connections between interested groups and organizations;
- help locate or arrange for IARU resources for events and organizations;
- provide publicity assistance for events and organizations;

Needs from IARU Region 2:

- Zoom video conferencing account (100 attendees, unlimited meetings)
  - Alternative – Jitsi meet, google meet/hangouts are free alternatives, but Zoom is well-known
- Web page and social media presence for IARU R2 youth themed activities
- Scheduling and notification system for events, nets, meetings, etc
  - A public Google calendar, email lists (Groups.io), notifications on Slack/Discord/social media
- Group contact info tracking
- Prize budget and donors

Plan Details:

- Survey of youth
  - Conduct individually or during events and meetings
  - We want to identify strong leaders and facilitators centric to each group, to avoid failure to thrive
  - Get answers to the question “what do you want to do?” and “what aspects of amateur radio are important to you?”
- Facilitate free online “meet ups”
Meet ups
- Initially small, single-country groups (similar cultural interests and a common language)
- Hosts are individuals with an interest, not necessary to be affiliated with any society or club
- Not necessary to be affiliated with or managed by a formal society
- Small meetings, as low as 5 people up to 20
- Can be varied in duration from as short as 1 hour, up to a whole day
- Format and schedule left flexible as desired
- As single-country meetings mature, expand to regions depending on interest
- Post-COVID, organize in-person gatherings, independent or at ham events

Meeting elements (can be combined as needed)
- Meet-and-greet periods
  - Initial and concluding periods
  - Icebreakers
  - Breaks for free-chat (with a moderator)
- Speaker/Special Guest
  - Suggest speakers from YOTA Region 1 and 2, “famous” people (astronauts, celebrities, notable people, etc.), or fellow youth with a slide presentation
  - Include speakers and presentations from activities with common interests as amateur radio (sciences, maker, robotics, balloons and aviation, etc)
- Q&A
  - Meeting dedicated to answering participants questions
  - If no questions, pull interesting questions from Amateur Radio Stack Exchange, r/amateurradio subreddit, and/or perform surveys prior to and during the meeting
- Workshop
  - Participants take part in a real activity (scavenger hunt on WebSDR, antenna build, pileup contests)
    - Virtual YOTA Day (region 2) is a good example
  - Mini “university” format (contesting, technical topics)
- Training
  - License classes
  - Train the Trainer sessions
- Offer small prizes during these meetings
  - Random selection “door” prizes
  - Higher value prizes to people who provide the most, win workshops, ask good questions
  - Require registration including contact information and completion of survey
- Culture/geographically centric small groups
- Establish talking or messaging forum to keep interest between organized activities
  - Slack isn’t effective, Discord server might be better
  - Publish Echolink, allstarlink, D-STAR, Yaesu System Fusion, DMR (etc) nodes and talk groups, and HF frequencies

- On-the-air activity
  - Each group sponsors an on-the-air event, such as a QSO party, sprint, special call signs
  - Create special QSL cards (either print or electronic) to commemorate (IARU to assist)
  - Leverage online technologies (scoreboards, live streaming, etc.) for added fun (innovation encouraged)

- Use established youth groups to spread awareness of meetings and survey
  - Establish partnerships with groups such as YARC, YACHT, YOTA R2, ARRL Section Youth Coordinators, individual IARU R2 Member Society YOTA contingents, et al. to help publicize events and acquire participants
  - Local online youth groups such as in Illinois, Philadelphia, Nevada as contacts emerge
  - Ham Radio YouTube personalities
  - IARU R2 Youth Slack
  - Encourage partnerships with established clubs (contest clubs, POTA/SOTA, etc)

- Encourage IARU Region 2 Membership societies to establish a youth liaison function
  - Provide point of contact to society
  - Acts to provide resources and contacts, not as an organizer or control
  - Initially focus on introductions and publicity
  - Youth functions are likely to be independent of organization at first
  - Budget support is likely low at first, concentrating on online and on-the-air activities
  - Provide help with regulatory bodies for special event call signs, etc
Despite the disruption caused by the COVID-19 Pandemic, there has been a good deal of activity on the band planning front.

The 2016 R2 Band Plan was updated by the BPC to reflect the inclusion of a 15M satellite sub-band approved at Lima last year. It also included editorial changes to better characterize the plan as a voluntary guide so that national regulators understand that departures from the plan are permitted where necessary. The proposed changes have been approved by Brazil, Canada, Mexico and Uruguay, while Bermuda and the USA have indicated that they have no objections. Due to the limited response to the proposed changes however, it has been forwarded to the EC for approval at that level.

The BPC provided a comprehensive update to the Future Spectrum Committee’s Activity Above 148 MHz Report in February 2020. It included extra details on the 1240-1300 MHz band to assist with IARU efforts to ensure Amateurs can coexist with the satellite navigation systems that also use that part of the spectrum. That month the BPC also replied to inquiries about the compliance of Colombian repeaters with the R2 Band Plan.

In May the undersigned replied to a private proposal by Martti OH2BH to dramatically expand the HF spectrum available for FT8. When additional FT8 frequencies that were added to a Beta version of a WSJT software update threatened to disrupt other users, the undersigned joined forces with Grant VK5GR and Tom DF5JL to form a committee to review the HF digital modes. It will conduct a fundamental review of the different HF digital modes, and how they can be best categorized and arranged to share the limited spectrum available. This is the first time that all three IARU Regions have joined together to directly coordinate band planning. A media release outlining the committee’s work is attached as Annex A.

In March the undersigned was invited to join the VHF+ Committee as the R2 representative. The purpose of the committee is to coordinate the IARU’s response to threats to Amateur spectrum above 144 MHz. The committee has already assisted the national societies in Brazil and South Korea, and is now working on an effort to quantify actual usage of the 144, 440 and 1240 MHz bands. A copy of the letter the committee sent to all IARU Member Societies is included as Annex B.

Band Planning in Region 2 is now a continuous process. Initiatives such as the HF Digital Mode Review and VHF+ Committee demonstrate that the IARU is becoming more proactive in dealing with issues affecting Amateur Radio, and more relevant to the average Amateur.

Alphonse Penney
VO1NO
Chair – R2 Band Planning Committee
IARU Media Release

HF Digital Mode Review

The International Amateur Radio Union (IARU) is pleased to announce the formation of a committee made up of representatives of all three IARU Regions to review the digital mode segments on the high frequency (HF) amateur bands. This is the first time that all three Regions have joined together to directly coordinate band planning efforts.

The committee was formed in response to the perceived overcrowding of the HF digital mode band segments, especially the FT8 frequencies. It will conduct a fundamental review of the different HF digital modes, and how they can be best categorized and arranged to share the limited spectrum available.

Part of the review will include discussions with the various digital mode stakeholders. The committee has already met with the WSJT development team led by Joe Taylor, K1JT. Meetings with other organizations will be scheduled as the committee’s work progresses.

The main aim is to develop solutions that reduce congestion within very popular mode segments while preventing mutual interference between incompatible modes to the greatest extent possible. The proposed band plans will have to be approved by Member Societies in each Region before being implemented.

Questions about the committee’s work may be directed through the appropriate Member Society’s IARU representative to the IARU Secretary.
Dear Presidents and IARU liaison officers,

Re: Demands on amateur spectrum above 144 MHz

As you know, the radio frequency spectrum is a finite resource. Although we as amateur radio operators have been very successful in gaining and retaining access to substantial parts of this spectrum in the past, there is increasing pressure to reassign or share amateur frequencies to satisfy the demands of commercial interests. It is almost inevitable that we will have to make concessions in the future.

In the past this pressure was generally exerted through the International Telecommunication Union (ITU) at scheduled World Radiocommunication Conferences. This permitted the International Amateur Radio Union (IARU) to respond in a coordinated manner to best defend our allocations. There is now a trend for national regulators to bypass the ITU and unilaterally seek to reassign amateur bands. This has two serious consequences:

- Individual Member Societies are left to defend amateur radio in their country without the benefit of the resources and experience of the IARU; and
- There is a risk of fragmenting the amateur allocations and losing the globally harmonized allocations, thereby hindering international communications.

The nature of the demand for spectrum by commercial interests is such that our VHF, UHF and microwave frequencies face the greatest threat. We use these bands for both short and long-distance communications, including repeaters, data backbones, weak signal, EME and satellite communications. They are also invaluable for experimentation. While it is relatively easy for us to prove that there is substantial activity on the lower VHF/UHF bands, the same cannot be said for our higher bands. They are busy during special events such as contests, but can appear unoccupied at other times. This can lead national regulators to believe that the bands can be reassigned to other radio services.

In order to prevent our bands from being reassigned in a piecemeal manner, it is vital that Member Societies work with the IARU to coordinate responses to national regulators. We have a range of options that can be considered, including:
- Demonstrating that band reassignment or sharing is not practical;
- Coordinating ways to share our bands with other services;
- Narrowing our current bands to accommodate other services;
- Moving our current bands;
- Releasing our bands; and
- A combination of the above options.

We ask that you inform us of any such threats to amateur radio allocations in your country as soon as you learn about them. Please do not enter into any discussions on changes to specific bands with your regulator without speaking with IARU to allow for a coordinated response to be developed. In such a coordinated response we may then take into account developments elsewhere in the world to ensure that amateur allocations remain harmonized between countries and ITU Regions to the greatest extent possible. This coordination is vital if amateur radio is to continue to enjoy access to the higher frequency portions of the spectrum. You can contact the IARU at spectrum@iaru.org.

Thank you for your assistance in promoting and defending the amateur spectrum.

73
Tim Ellam
VE6SH
President
International Amateur Radio Union

Attachment: Worldwide Amateur allocations above 144 MHz
Worldwide Amateur Radio allocations above 144 MHz

Note that not all countries have the entire allocation for their Region. Allocations where Amateur Radio is the Primary user are indicated in bold print.

<table>
<thead>
<tr>
<th>Band</th>
<th>Region 1</th>
<th>Region 2</th>
<th>Region 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 M</td>
<td>144 - 146 MHz</td>
<td>144 - 148 MHz</td>
<td>144 - 148 MHz</td>
</tr>
<tr>
<td>1.25 M</td>
<td>220 - 225 MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 cm</td>
<td>430 - 440 MHz</td>
<td>420 - 450 MHz</td>
<td>430 - 440 MHz</td>
</tr>
<tr>
<td>33 cm</td>
<td></td>
<td>902 - 928 MHz</td>
<td></td>
</tr>
<tr>
<td>23 cm</td>
<td>1240 - 1300 MHz</td>
<td>1240 - 1300 MHz</td>
<td>1240 - 1300 MHz</td>
</tr>
<tr>
<td>13 cm</td>
<td>2300 - 2450 MHz</td>
<td>2300 - 2450 MHz</td>
<td>2300 - 2450 MHz</td>
</tr>
<tr>
<td>9 cm</td>
<td></td>
<td>3300 - 3500 MHz</td>
<td>3300 - 3500 MHz</td>
</tr>
<tr>
<td>5 cm</td>
<td>5650 - 5850 MHz</td>
<td>5650 - 5925 MHz</td>
<td>5650 - 5850 MHz</td>
</tr>
<tr>
<td>3 cm</td>
<td>10.0 - 10.5 GHz</td>
<td>10.0 - 10.5 GHz</td>
<td>10.0 - 10.5 GHz</td>
</tr>
<tr>
<td>1.2 cm</td>
<td>24.00 - 24.05 GHz</td>
<td>24.00 - 24.05 GHz</td>
<td>24.00 - 24.05 GHz</td>
</tr>
<tr>
<td>6 mm</td>
<td>47.00 - 47.20 GHz</td>
<td>47.00 - 47.20 GHz</td>
<td>47.00 - 47.20 GHz</td>
</tr>
<tr>
<td>4 mm</td>
<td>76.00 - 77.50 GHz</td>
<td>76.00 - 77.50 GHz</td>
<td>76.00 - 77.50 GHz</td>
</tr>
<tr>
<td></td>
<td>77.50 - 78.00 GHz</td>
<td>77.50 - 78.00 GHz</td>
<td>77.50 - 78.00 GHz</td>
</tr>
<tr>
<td></td>
<td>78.00 - 81.50 GHz</td>
<td>78.00 - 81.50 GHz</td>
<td>78.00 - 81.00 GHz</td>
</tr>
<tr>
<td>2.5 mm</td>
<td>122.25 - 123.0 GHz</td>
<td>122.0 - 123.0 GHz</td>
<td>122.25 - 123.0 GHz</td>
</tr>
<tr>
<td>2 mm</td>
<td>134.0 - 136.0 GHz</td>
<td>134.0 - 136.0 GHz</td>
<td>134.0 - 136.0 GHz</td>
</tr>
<tr>
<td></td>
<td>136.0 - 141.0 GHz</td>
<td>136.0 - 141.0 GHz</td>
<td>136.0 - 141.0 GHz</td>
</tr>
<tr>
<td>1 mm</td>
<td>241.0 - 248.0 GHz</td>
<td>241.0 - 248.0 GHz</td>
<td>241.0 - 248.0 GHz</td>
</tr>
<tr>
<td></td>
<td>248.0 - 250.0 GHz</td>
<td>248.0 - 250.0 GHz</td>
<td>248.0 - 250.0 GHz</td>
</tr>
</tbody>
</table>
CITEL had met 2 times during the first semester (both in May, 2020), all online due COVID-19 crisis. This new configuration reduced the scope of the meetings and technical discussions. They were focused to define the methods to perform online meetings and basic organization of the work during 2020-2023 study cycle.

The WRC-23 Agenda Items (AI) and topics were divided among CITEL Study Groups and the first rapporteurs were considered. Topics 9.1 were one of the most contentious, with 9.1.b (Studies on technical and operational measures to be applied in the frequency band 1 240-1 300 MHz to ensure the protection of the radionavigation-satellite service, space-to-Earth) allocated to Study Group SGT.5 (General regulatory, future work and other). This coordinator was listed as CITEL Rapporteur for this topic.

Other meetings: This coordination also was active during IARU R1 Spectrum and Regulatory Liaison Committee (SRLC) and ITU WP5 (Terrestrial Services) meetings. Both discussions lead to internal IARU R2 reflections toward future AIs actions, including AI 1.1 (Additional frequency bands identified for International Mobile Telecommunications) and 9.1.b, integrated with first draft and updated IARU WRC-23 Matrix structure. It was also followed the ITU Regional Radiocommunication Seminar 2020 (RRS-20) and CITEL presentation on Cooperative Regulation (in Spanish), both happened last July.

Respectfully submitted,

Flávio Archangelo, PY2ZX
Aug. 2020
San Pedro Sula, July 17, 2020

**EMCOR IARU R2 Report**

Dear IARU-R2 Executive Committee members,

Please receive greetings from the IARU-R2 Emergency Committee, in the following paragraphs, I will provide a summary of the activities carried out by MS and emergency communications groups of IARU-R2 in the last months of 2020.

**Hurricane season in the Atlantic**

The 2020 hurricane season started in June 2020 in the Atlantic. As of the date of this report, there has been no information about any relevant events that had affected any of the Caribbean islands, the Atlantic coast of Central America or the Yucatan peninsula.

**Dominica island**

The new ITU project for the installation of 7 new Winlink nodes in the Caribbean for emergency communications has suffered a delay due to the closing of borders because of COVID-19. However, through communication and coordination and several Internet video calls between ITU representatives, the Government of Dominica, and radio amateurs (Dominica Amateur Radio Club (DARC), Federacion Mexicana de Radio Aficionados (FMRE), Winlink development group (WL2K)), they were able to install the Radio Mail Server (RMS) node J73WI, in the PACTOR 2, 3, 4, ARDOP and VARA modes in frequencies in 3 radio amateur HF bands.

With the installation of this node in Dominica, the “ITU Winlink Project for the Americas” already counts on 2 RMS nodes in the Caribbean islands, HI8COE (Dominican Republic) and J73WI (Dominica), which could prove to be of great help during the current hurricane season if any of the islands would lose communications as a result of a hurricane, as it happened several years ago during hurricanes Irma and Maria in several islands in the Caribbean islands.

**Experiences in the Caribbean**

After hurricanes Irma and Maria and taking into account the lack of communications due to the failure of the conventional telecommunication networks provoked by these hurricanes in several islands of the Lesser Antilles, and after the experience lived during these hurricanes, several radio amateurs of these islands installed a VHF Winlink network to maintain data communication via Packet for the delivery of conventional e-mails and in IARU formats among the nearby islands that have VHF coverage. It is interesting to point out that every Wednesday they practice a specific type of message or mode in order to maintain the necessary skills in the users and the operation of the VHF Winlink network; this can consist of conventional e-mails, IARU-format messages, ICS-format messages or messages with photos or images attached. Besides, in one of these Wednesday exercises, they practice the establishment of peer-to-peer communications in the Winmor mode, in a specific 40-meter frequency and time.
Preparatory activities in South America

in South America, I have observed the installation of several simple RMS Winlink nodes, with any of its modes (VARA and WINMOR) in HF and (PACKET) VHF by radio amateurs in Venezuela and Colombia.

Conclusions

I consider that currently, **Mexico, Central America and the Caribbean Islands** count on a functional, robust and redundant communications structure in the Winlink network for the delivery of e-mail messages via radio, for emergency communications. However, I consider that it is still necessary for member societies to get a greater number of radio amateurs in their respective countries interested in the development of the necessary skills to act as users of the Winlink network in the diverse modes offered by RMS modes of the FMRE, and of ITU in Central American and the Caribbean for the transmission of data in emergency communications situation to serve their communities and countries in case of disasters that could be provoked by hurricanes and earthquakes in these areas.

Comments

The COVID-19 pandemic has restricted the mobility of groups of radio amateurs working in emergency communications to interact with the agencies that they provide support to during emergencies or disasters, a situation that could change the activities and projection of the radio amateurs in emergency communications.

I wish to thank the IARU-R2 Executive Committee for the support that they always provide to the emergency committee in their respective areas of Region 2. I wish all of you the best in your activities and that you always take the necessary biosecurity measures in order to be safe during the current situation that the entire world is suffering as a result of this pandemic.

73

Cesar Pio Santos, HR2P
IARU R2 EMCOR
San Pedro Sula, 17 de julio de 2020

Reporte: EMCOR IARU R2

Apreciables miembros del Comité Ejecutivo de IARU R2, reciban de parte del Comité de Emergencias de IARU-R2 nuestro saludo:

En los siguientes párrafos describiremos a ustedes un resumen de las actividades realizadas por las SM y grupos de comunicaciones de emergencias de IARU-R2 en los últimos meses del año 2020.

Temporada de Huracanes en el Atlántico

En el mes de junio dio inicio a la temporada de huracanes 2020 en el Atlántico, y hasta los actuales momentos de escribir este reporte, no hemos tenido información que se haya desarrollado un fenómeno hidrometeorológico de importancia, que haya afectado alguna de las islas del Caribe; las costas del Atlántico de Centro América; o la península de Yucatán.

Isla de Dominica

El nuevo proyecto de UIT para la instalación de 7 nuevos nodos de Winlink en el Caribe para comunicaciones de emergencia, por el cierre de fronteras por motivos del COVID-19 ha tenido un retraso en el desarrollo del mismo. Sin embargo, mediante comunicación y coordinación, mediante varias sesiones de videos llamadas por Internet, entre representantes de UIT, Gobierno de Dominica, y los radioaficionados (Dominica Amateur Radio Club (DARC), Federacion Mexicana de Radio Aficionados (FMRE), Grupo de Desarrollo de Winlink (WL2K)); lograron instalar y poner en funcionamiento el nodo Radio Mail Server (RMS): J73WI, en las modalidades PACTOR 2, 3, 4; ARDOP; y VARA; en frecuencias de 3 bandas HF de radioaficionados.

Con la instalación de este nodo en Dominica, actualmente el “Proyecto Winlink de UIT para las Américas” ya cuenta con 2 nodos RMS en las islas del Caribe: HI8COE (Republica Dominicana) y J73WI (Dominica); que pudieran ser de gran ayuda durante la presente temporada de huracanes, en caso que alguna de las islas del Caribe pudiera quedar con sus telecomunicaciones convencionales interrumpidas por los efectos de algún huracán, como sucedió hace unos años el paso de los huracanes Irma y Maria, a través de varias islas del Caribe.

Experiencias en el Caribe

Luego de los huracanes Irma y Maria, y teniendo en cuenta la falta de comunicación por la caída de las redes convencionales de telecomunicación, provocados por estos huracanes en varias islas de las Antillas Menores; así mismo, con la experiencia vivida, luego del paso de estos huracanes; varios radioaficionados de algunas de estas islas, instalaron una red Winlink en VHF, para mantener comunicación de datos por medio de la modalidad PACKET, para el envío de email convencionales y en formatos IARU, entre islas cercanas que tengan cobertura en VHF. Nos llama la atención, que cada miércoles practican un tipo específico de mensaje o modalidad de comunicación, para mantener las destrezas necesarias en los usuarios y el funcionamiento de esta red Winlink en VHF, que puede ser: mensajes email convencionales; mensajes en formato IARU; mensajes en formato ICS; mensajes con imágenes o fotografías anexadas. También, durante uno de los miércoles, ellos practican el establecimiento de comunicación PEER TO PEER en la modalidad WINMOR, en una frecuencia específica en la banda de 40 metros, a una hora determinada.
Actividades de Preparación en Sur America

En America del Sur, hemos observado la instalación de algunos nodos RMS simples de Winlink, con alguna de sus modalidades (VARA y WINMOR) en HF y (PACKET) VHF por radioaficionados en Venezuela y Colombia.

Conclusiones

Consideramos que actualmente: Mexico, Centro America y las Islas del Caribe, cuentan con una estructura de comunicación en la red Winlink: funcional, robusta y redundante, para envío de mensajes email via radio, para comunicaciones de emergencias. Sin embargo consideramos que hace falta alcanzar que las sociedades miembros, paulatinamente puedan lograr un mayor numero de radioaficionados en sus respectivos países: interesados en el desarrollo de las habilidades necesarias para la utilización como usuarios de la red Winlink en las diversas modalidades que ofrecen las redes RMS de la FMRE, y de UIT en Centro America-Caribe, para el envío de datos en situaciones de comunicaciones de emergencias para el servicio de sus comunidades y países, en caso de desastres que pudieran provocar huracanes y terremotos en estas áreas.

Comentarios

La pandemia del COVID-19 ha restringido la movilidad de los grupos de radioaficionados en comunicaciones de emergencias para interactuar con las agencias que apoyan durante las emergencias o desastres; situación que pudiera cambiar las actividades y proyección de los radioaficionados en comunicaciones de emergencias.

Deseamos agradecer al comité ejecutivo de IARU R2 el apoyo que siempre recibe el comité de emergencias en sus respectivas áreas de la región 2; y deseamos a cada uno de ustedes lo mejor en sus actividades, así mismo, que siempre mantengan las medidas necesarias de bioseguridad, para estar a salvo, durante la situación actual que actualmente el mundo vive por esta pandemia.

Cesar Pio Santos, HR2P
EMCOR IARU R2