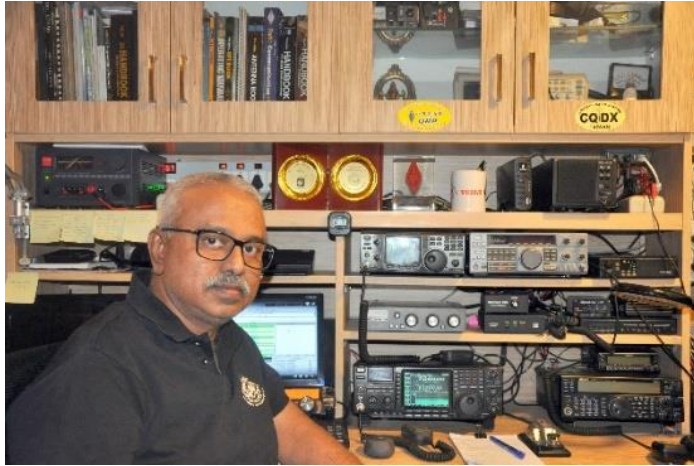




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PRESIDENT'S MESSAGE



Seasons' Greetings to all from ARSI It is an honour for me to serve this association, and I am excited to be a part of this vibrant and passionate community. Amateur radio is more than just a hobby – it's a way of life, a way to connect with others, and a way to serve our communities.

As Radio Amateurs, we are privileged to have access to the latest technologies and innovations in the field of radio communications. But we must never forget that ham radio is ultimately about people – connecting with others, building relationships, and making a positive impact on the world around us.

I wish to encourage all of our readers to become more involved in the amateur radio community. Join ARSI apart from your local club, participate in contests and events, and mentor and inspire new hams. By working together, we can ensure that the ham radio community continues to grow and thrive for generations to come.

I am excited to see what the future holds for our community, and I look forward to working with all of you to make ham radio an even more dynamic and vibrant part of our lives.

73, de Ramesh Kumar VU2LU

FROM THE EDITOR'S DESK



Happy New Year to all!

The July and October issues of the newsletter were not published; this issue is a combination of three quarters – you can see that by the number of pages, HI.

The Annual General Body Meeting of the ARSI was held in October and our President Ramesh Kumar VU2LU continues for another term – new secretary and other office bearers were elected. Congratulations to the new team!

Hope you all enjoy reading this issue of the newsletter; the editor welcomes news, information and articles with photographs for the future issues.

73 - Ganesh VU2TS

The Annual General Meeting of the ARSI was held in Bengaluru on 01 October 2023, the following have been declared elected for the two-year term 2023-2025.

President: Mr. Ramesh Kumar K G, VU2LU, Bengaluru

Secretary: Mr. Krishna Kumar R., VU2YUU, Bengaluru

Treasurer: Mr. Madhukar K R, VU2MUD, Bengaluru

Governing Council Members:

Mr. Venkatesh S, VU3IMV, Bengaluru

Mr. Vijay Kumar Yadav, VU2YVK, Bengaluru

Mr. Rajani Mohan, VU2HW, Noida, UP

Mr. Nyjil George, VU3ZNG, Bengaluru

Following the AGM, the first *Committee Meeting* was held on 11 October 2023, and the following were nominated for the term 2023-24:

Chairman: Mr. Gopal Madhavan, VU2GMN, Chennai

QSL-Manager: Mr. Ramesh Kumar, VU2LU, Bengaluru

Contests & Awards Manager: Mr. Girish G D, VU3GDS, Bengaluru

WPC Coordinator: Mr. Virender Kumar Arya, VU2VAB, Delhi

Monitoring-coordinator: Mr. Sanil M Deep, VU3SIO, Kozhikode

News Letter Editor: Mr. T.S. Ganesh, VU2TS, B. R. Hills, Chamarajanagar Dist., Karnataka

Web Master: Mr. Sanjay Madhavan, VU2SJD, Chennai

Mailing List Manager: G Sarvanan, VU2ETS, Mysuru

73, Ramesh Kumar VU2LU

MEET OUR REGIONAL CO-ORDINATORS

VU2EXP - Rajesh P. Vagadia - Gujarat State

Rajesh Vagadia VU2EXP is a satellite operating enthusiast and is active on HF and VHF also. His QTH is in Rajkot

VU2PTR - Thyagarajan P. - Tamil Nadu State

Fondly called as Thyagu, OM Thiagarajan is an old timer ham and an excellent home-brewer. He is very active on all the bands and regular on the Ham Radio Nets.

VU2UUU - Kaustav Saha - Delhi & NCR

VU2KWJ - Jatin Shah – Maharashtra

ARSI Mumbai Meet - 28 May 2023

Following the successful ARSI regional meet in Chennai during early Feb 2023, we proposed a similar meet in Mumbai coordinated by our Mumbai regional team consisting of Jatin VU2KWJ and Huzefa VU2HIT.

ARSI being the only member society of the IARU-Region-3 from India, the purpose of the regional meetings is to bring this awareness among its members and all hams in general. We wish to propagate how each member's contribution and association with ARSI will strengthen its reach and voice with the regulatory authorities in India (WPC) and our position in the international Radio Amateur forum.

The meeting was announced in early May on the social media and WhatsApp groups and soon we had about 90+ registrations for the meet. Jatin who is part of the team which organizes the CQ-Mumbai meet annually, at the K J Somaiya Institute of Technology auditorium, Sion, Mumbai, got in touch with the management of the college which has a large auditorium good enough to host even a Hamfest.



Welcome address by ARSI
Secretary



Keynote by ARSI President
Ramesh Kumar VU2LU



VU3CDI Prof Umesh Shinde
K. J. Somaiya Institute of
Technology Addressing the
gathering



VU2CHD Prof. Chandrashekar
Kulkarni
Thadomal Shahani Engineering
College Addressing the gathering

Incidentally, this college has a Ham Radio Club **VU2CWN** which they wanted to reactivate. The college management agreed to host our ARSI meet in their auditorium in collaboration with their

club, CROWN - Club for Radio Operations & Wireless Network, the college Amateur Radio club.



ARSI office bearers and the delegates of the ARSI Mumbai
Meet held on 28 May 2023

The management of the college was very kind enough to provide us the auditorium along with the complete audio-visual system. The members of the staff of the Dept. of Electronics were present in the meeting who are also responsible for running the club station VU2CWN. The meeting concluded with lunch at 13:30.

Recent announcement from K.J. Somaiya Institute of Information-Technology

K.J. Somaiya Institute of Information Technology, Sion, under the esteemed guidance of the VU2CWN 'CROWN' Amateur Radio club has announced the imminent launch of **Beliefsat-0**, a remarkable satellite crafted by the talented Ham students.

Beliefsat-0 is scheduled to launch on the first of January 2024 onboard PSLV-C58's experimental platform, **Beliefsat-0** boasts a cutting-edge UHF->VHF FM voice repeater, a VHF digipeater, and telemetry capabilities in the VHF band.

Frequencies for communication have been designated as 145.980 MHz in VHF the downlink frequency with the receiving CTCSS tone for it is 71.9Hz The bandwidth for it is 12.5Khz and 437.00 MHz in UHF is the uplink frequency with transmit CTCSS tone as 67.0 Hz with a bandwidth of 12.5Khz.

EMERGENCY COMMUNICATIONS DURING CYCLONE CRISIS

A report from the Porbandar station established to handle emergency traffic during cyclone Biparjoy crisis in Gujarat during June 2023.



To extend emergency communication during the recent **Biparjoy cyclone crisis** in Gujarat state (India), with support of GSDMA, GIAR Gandhinagar coordinated and installed statewide ham radio emergency network covering Jamnagar, Morbi, Porbandar, Dwarka, Nakhatrana & Bhuj. Control rooms were located at Gandhinagar & Ahmedabad. Our emergency station was installed at SP's Office in Porbandar. HF, VHF & Mobile van setup was made operational for local & distance communications.

Our radio setup consisted of HF IC-718, VHF Kenwood Base TM-281, VHF IC-1020 Base for mobile, HTs, PSU, Cables, SWR Meter, Nano VNA, toolkit etc stuff.

The antennas used were a 'Fan Dipole' for 40/20m, while along with it EFHW on 40-10m was kept ready for backup. 2m 5/8 ground plane Antenna installed for VHF & a amount GP Antenna installed on the car for mobile operation.

We were carrying essential stuff as well – such as Food, water, medicines, ropes, raincoats etc. Power backup battery was provided by local authorities.

All team members contributed their best during whole operation.

(Snehal Vagadia VU3WHO is my harmonic - using the opportunity to work & learn from this emergency as a team member).

After antenna & radio setup installation we were successfully exchanging emergency traffic on 7.045 MHz between Gandhinagar control, Morbi, Jamnagar, Dwarka, Nakhatrana, Bhuj & our Porbandar station. ARSI was notified for use of emergency frequency.

We could also work many other stations across VU land & some in DX. All VU stations extended great support for this emergency operation. We were also getting valuable guidance from WX expert community.

Our station was mostly QRV from 0630 IST to 0200 IST and beyond. We were monitoring our emergency frequency & conveying signal reports, WX Reports and relayed the other QSPs we received. We maintained complete log of our all contacts as per SoP. Our VHF equipped mobile car daily went

with two members from different locations and gave reports from ground zero via radio, accordingly we updated the control room with messages/reports and to specific station on HF.



It was a successful statewide Ham Network operation for Biparjoy Cyclone crisis coordinated by GIAR Gandhinagar.

Our station was visited by Porbandar Collector Shri K. D. Lakhani Sir, Superintendent of Police Dr. Ravimohan Saini Sir, Dy SP Rutu Raba Madam, WPI Maheshbhai Parmar Sir and WPSI Pratikbhai Patel Sir.

We provided the visitors with the details of GIAR and how they coordinated & deployed Ham radio team to different locations and organised the control room. I provided complete idea on our Porbandar station featuring HF, VHF, Mobile setup, how we use it and connect with Gandhinagar Control room and other emergency stations.

We showed our logbook highlighting numbers of QSO established with all emergency stations and other VU/DX stations whom we contacted. I also informed visiting dignitaries about other useful application of ham radio like APRS, Digital

communication & Satellite communication we use it as part of our hobby which could be utilized for emergency also.



We provided live HF demo by contacting the Gandhinagar Control room (Op. Vinubhai VU3JPD), Alternate State Control room (Dr. Jagdishbhai Pandya VU2JGI) & emergency station at Jamnagar (Op. Ghanubha VU3HMM) and exchanged situation reports with them. All the dignitaries were impressed with the network, and appreciated our efforts & services that we hams have offered voluntarily during this emergency.

There were several other visitors who took keen interest in our activity and visited our station - Home guard District Commandant Sureshbhai Sikotra, Dr. Yogeshbhai Soni, Advocate Tejasbhai Thanki, School admin Anilbhai Bapodra, Girishbhai Geria and some enthusiastic students visited our station & gained knowledge on Ham Radio.

We received excellent support from the Porbandar Collectorate, and SP's Office.

GIAR Gandhinagar did tireless efforts to coordinate whole statewide operation, Special thanks to Dr. Jagdishbhai Pandya VU2JGI, Pravinbhai Valera VU2CPV & Kaushalbhai Jani

VU2EHI for round-the-clock guidance/support extended to our station.

I also thank all the ham teams deployed at Jamnagar, Dwarka, Nakhatrana, Bhuj, Morbi and Control Room for their noble services and for giving prompt radio response whenever contacted. Congratulations to all.

I take a special note of the encouraging support & cooperation received from Shri Pritik Patel Sir (PWSI) from SP's Office Porbandar.

73

Rajesh P. Vagadia VU2EXP

Rajkot - Gujarat

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www.grz.com/db/vu2exp



THE END-FED HALF-WAVE ANTENNA RE-VISITED

The BANGALORE AMATEUR RADIO CLUB conducted an open-air workshop for *homebrewing* the BALUN for the End-Fed-Half-Wave antenna.. Seventeen members participated In workshop. VU3GWN and VU3UZD were the instructors guiding members on how to wind the balun, After winding the balun and Soldering 100Pf 15KV cap, the Baluns were tested with an Antenna Analyzer. VU3JIM, and the BARC GC team helped them to box and test the completed baluns. Four of them were duly tested and found that they showed SWR 1.5: 1 on 40, 20, and 10 Meter bands.

VU3GLS SREEDHAR
General Secretary, BARC

THE BIG CQ AWARD

It is my pleasure to announce "**The BigCQ Award**" winner for 2023 based on the CQ contest record for 2022 published at CQWW.com/CQWWRTTY.com website and minimum scoring requirements mentioned at <http://arsi.info/the-bigcq-award-for-cqww-contest/>

Please join me in congratulating the following Hams

"THE BIGCQ" AWARD 2023					
CALL	MODE	CATEGORY	POWER	BAND	SCORE
VU2CDP	CW	Single operator-Assisted	High	All	25,78,945
VU2XE	CW	Single operator-Assisted	Low	All	15,12,352
VU2DED	SSB	Single operator-Assisted	Low	All	8,26,946
VU2IBI	RTTY	Single operator-Assisted	Low	15M	1,27,924
VU2FGQ	CW	Single operator-Assisted	Low	15M	62,034
VU2FGQ	RTTY	Single operator	Low	15M	49,552

Uniquely designed plaques will be sent to the winners in the next couple of weeks.

VU2IBI, Prakash Srinivasan
Contest and Awards Manager – ARSI

Greetings from the ARSI Contest Team

It is that time of the year again - pack your rigs, antennas, camping gear and grab anything else you need to stay out in the lap of nature. The annual ARSI hill topping and field day contest is approaching. And this time, it has been planned for you all to take advantage of the conditions that are normally good to make VHF Long distance contacts.

Please note that the contest will be held on 27th - 28th January 2024. And it is a long weekend too - so make it extra special by taking your families out too!!!

More details on <https://arsi.info/hill-topping/>

Please share this in all your groups, nets and clubs - let us get as many participants possible and give the Contest Team nightmares when dealing with the logs!! HI !

73,

ARSI Contest Team

The CW NET is on every morning between 07:30 and 08:30 local time on 7015 KHz. Members are requested to check-in and exchange reports and hone their CW

FOX HUNT CONDUCTED BY PUNE HAMS – VU2RCP



Pune Hams VU2RCP supported The Govt College of Engineering Pune **Fox Hunt 2023** in their annual event **Mind Spark**. VU3ZNE OM Parth who is just 17 years old, the youngest member of Pune Hams - conducted an antenna workshop and the fox hunt.

Over 40 students participated in the event, making it a grand success. Preparation for Fox Hunt started with an Antenna Workshop last week (*3 Element Yagi-Uda Antenna*) It was a Hands-on workshop for the teams who used the beams on the day of fox-hunt.

Students were excited to learn topics such as **Smith charts** and **antenna tuning**. They learned everything about Yagi Antenna and about various measurements like directivity, gain, SWR, front-to-back ratio, etc After that, they assembled 8 Nos. Yagi antennas in the College Workshop.



Students also had the hands-on activity of Radio Direction Finding. The Fox for the Fox Hunt was made by the students, one using Raspberry Pi (*Thanks to Mangesh VU2OOM*) and other using Arduino and Baofeng UV-5R.

With the knowledge gained by students during the workshop, the fox hunt event was conducted on 28 October 2023. As accommodating 30+ students was a tough task, groups with 2 to 4 students in each group were formed. Due to the limitation of Handsets and Antenna, there were 2 rounds conducted for selecting the two winners.

The first round was quite interesting, as there were two foxes hidden at random places by the VU2RCP group. The first fox (*Raspberry Pi*) was located within 5 Minutes and 51 seconds by Mr Harsh and Mr Atharv. Everyone was surprised to know how

quickly they found the fox so we decided to hide the second fox at a not so easy to access location.

The second fox (*Baofeng*) was located in 21 minutes by Mr Anand and Mr Bhavik. VU2RCP group felicitated the First prize winners.



Apart from the Fox Hunt event, we at VU2RCP encouraged Faculty members and students to prepare for the ASOC examination and reform the prestigious VU2COE Radio club to enhance the study of radio technology.

The event was a great success and all the participants, faculty members, and hams had a lot of fun and learning.

The Govt College of Engineering, Pune hopes to organize more such events in the future to promote the spirit of competition and camaraderie among the students.

*Reported by **Parth Darade VU3ZNE***

ARSI QRP FIELD DAY CONTEST 2023

The QRP FD and Contest combo was held between 24th and 25th June 2023

Special call **AT3POG** operated by Shyam VU3UZD, Arvind VU3CIQ, Rajesh VU3TBU, and Guru VU3GWN took the first place with a total of 523 points that included extra points for setting up the FD shack outdoors using solar charged battery.



Congratulations!

The second place went to Gaurav **VU3OSA** – also a field day station.

There were four stations operating from home – Ram VU2GRM, Kaushik VU2KTW and Jos VU2JOS took the first, second, and the third place in that order. The fourth station was Dharmajit VU2KWK.

.....

CHENNAI, TAMIL NADU

The Members' meeting of **MARS Amateur Radio Society** was held on 4th Nov. 2023 (Saturday) at 6.30 p.m at "Vivekananda Hall" P.S. High School Campus, Mylapore, Chennai. It was an august gathering that enabled many of the members to have an eye ball QSO amongst themselves and to exchange pleasantries with fellow ship.

The President, OM. P.Thyagarajan, VU2PTR welcomed the gathering. The Secretary OM. N. Deepan, VU2DPN requested the members to observe one minutes' silence as a mark of respect to OM. Parthasarathy, VU2DQP and OM Durai Raj VU2NDR who became silent key.

The technical session followed and OM. Dr. C.Shanmugham, VU2CSM introduced the speaker, OM. Dr. Kaviyarasu, VU2UAV for the technical session to the audience. Dr. Kaviyarasu, an Assistant Professor in the Division of Avionics, Department of Aerospace Engineering, MIT campus, Anna University, Chennai gave an excellent presentation on the title "Communication during Space Missions" with special reference to Chandrayaan 3 mission. The vital role played by electronic communication in space missions and the technicalities associated with it were elegantly presented. It was not an exaggeration to say that the talk was very pleasant and Dr Kaviyarasu carved a niche for himself as an able communicator and it was further proved by his polite and patient answering to questions from the members.

Another technical session followed soon after it, and that was equally well handled by none other than OM. Balasubramanian (Bala) VU3TBR and he had chosen the digital communication

theme and a magic box developed by him for his presentation. OM Rajesh VU2OW introduced the speaker.



Deepan VU2DPN Thyagu VU2PTR Balu VU2DZD

Yes. The title for Bala's delivery was “DMR Magic Box”. The simple gadget that he has developed was shown to the audience, its functions were explained, and a demo was made. From his presentation, it became clear that the gadget could serve those Hams who could not come on air because of financial constraints to procure costly TRXs. The members got their doubts clarified to their utmost satisfaction.

An important session followed the technical sessions. Acknowledgment and appreciation always result in encouraging the individual's involvement further. In accordance with that, the

Prize Distribution for the VHF Net Check-In contest followed, and all winners of all categories received their Prizes.

The meeting came to an end with a Vote of Thanks delivered by the Secretary OM Deepan VU2DPN.

73, Thyagu VU2PTR

Special Event Station - International Lighthouse & Lightship Weekend Celebration - 2023.

Date: 18 to 21 August 2023

AT5KLH - Kachchhigadh Light House

ILLW # IN0028 ARLHS WL0L # IND 142

This is the second Light House of Gujarat state which will be activated after Veraval Light House (AT3VLH) activated by Rajesh Vagadia VU2EXP & Sakshi Vagadia VU3EXP (OM and YL harmonic).

To celebrate International Light House & Lightship Weekend 2023, beautiful **Kachchhigadh Light House** located at world-class **Shivrajpur Beach** (*Blue Flag awarded beach of Gujarat state -an indication of its high environmental and quality standards.*) was activated by active Ham Radio Operator Rajesh Vagadia VU2EXP and his team member VU3EXP Sakshi Vagadia. Kachchhigadh Lighthouse is just few miles away from famous Shree Dwarkadhish Temple at ancient city Dwarka, where Dwarkadhish Temple dedicated to Lord Krishna, is the main attraction Pilgrims visit the temple to seek blessings and witness the region's rich religious and cultural heritage.

Official permissions to operate Ham Radio Station from Kachchhigadh Light House was received from authorities DLL/DGLL. We also got Special Callsign AT5KLH for our Lighthouse activity from Ministry of Communication, DoT, WPC Wing, New Delhi. We are thankful to both the authorities for their support and encouragement.



Station Setup: HF: Icom IC-718, Icom IC-705

Antenna: HF Installed Inverted Vee antenna for tri band 40, 20, 15-meters.

Modes: SSB/Digital/Satellite-(FM/LEO)

VHF: Kenwood 281A base; Antenna: GP Antenna

Satellite Setup:

Rigs: IC-705, Pair of Dual Band HTs; Antenna: Arrow II, IOio homebrewed antenna.

Accessories: PSU, ATU, EFHW 40m-10m backup antenna, LiFePO4 Power Pack 12Amp for Digital operation.



VU2EXP Rajesh at the station

We continued to educate Students at Light house also. We invited group of 50 primary/secondary students with two teachers to the Light House during our AT5KLH activation. The basic concept of Light house was explained to the young students. Our Radio setup & antenna were displayed. We split all students in 4 groups and demonstrated VHF communications with help of our team member Sakshi Vagadia VU3EXP & SWL Rushabh. Students were excited to exchange greetings with

their friends via the *walkie talkies*. Sakshi also briefed them about the Student Outreach Program offered by ARISS. We had a nice Group photo with all students & In Charge / staff of Lighthouse.



During the station activation period we avoided going anywhere on the Beach side, but on last day we went there to have some beautiful snaps. We also went on top of Light house tower and enjoyed 360° degree panoramic view of the region. We enjoyed working radio in close proximity of nature.

We thank to Shri P M Dhaakte Sir & Jasim Alam Sir & Ajubha for the support they extended to us during our activation.

Thanks to my team Sakshi VU3EXP, SWL Rushabh & SWL Kiran for all help & assistance.

Special thanks to Kevin VK2CE for giving us wonderful opportunity to enjoy Light house activation every year.

Total QSOs 579

by Modes: SSB: 38 QSOs, Digital: 533 QSOs, Satellite: 8 QSOs (via ISS, AO-91, TEVEL-6, SO-50)

Note: Special Satellite Sked QSO done with 4J6D via TEVEL-6

All the logs have been uploaded to LOTW & eQSL & QRZ Logbook.

73, Rajesh VU2EXP

Rajkot - Gujarat

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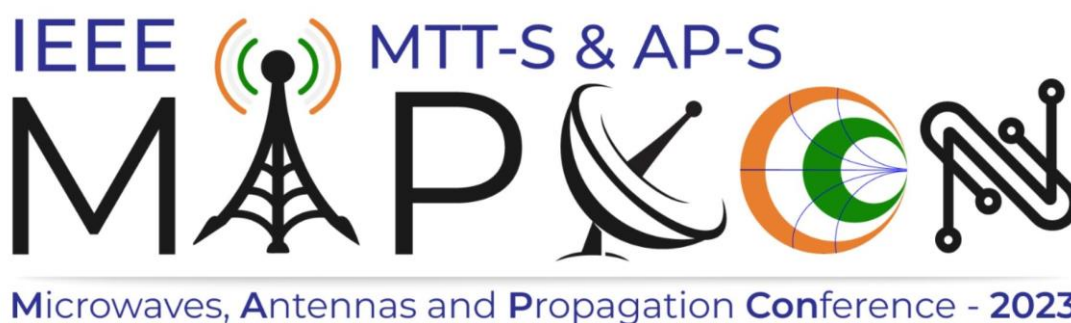
www.qrz.com/db/vu2exp

Amateur Radio & Satellite Communication was promoted in the prestigious MAPCON 2023 Conference at Ahmedabad - Gujarat INDIA from 12 to 14 December 2023.

It was an international platform for sharing of research, technologies in the field of microwaves and antennas, wherein many national/international eminent personalities shared their vision, expertise and knowledge. **MAPCON-2023** carried various technical sessions, invited talks, workshops, tutorials, special sessions, student design competitions, industry sessions and state of the art Exhibition. Participants included researchers and leaders of IEEE Antenna & Microwave community, defence & Space industry partners & Startups, Academia and eminent

speakers from Government organisations like ISRO, SAC, IN-SPACE et.al.

Rajesh Vagadia VU2EXP (Regional Coordinator of AMSAT-INDIA) was invited by Shri Rajeev Jyoti Sir (Director IN-SPACE) & MAPCON 2023 Committee for MAPCON Exhibition and promote Amateur Radio & Satellite Communication for educational purpose. Rajesh Vagadia VU2EXP & team member Shyama Vagadia VU3WHG (*B.Tech. - ICT a 4th semester student of Marwadi University, Rajkot*) successfully participated in the MAPCON Exhibition for 3 days from 12 to 14 Dec 2023.



We were allocated a decent sized stall of 3mx3m with standard facilities. It was a huge event - renowned exhibitors/leaders from different industries took part in this exhibition. We were the invited exhibitor for educational awareness on Amateur radio & satellites. We properly planned & carried a range of Amateur Radio equipment to display from CW keys to portable satellite communication ground station! We were aware that visitors would be from different segments such as; professionals, researchers, Scientists, Industrialist, IIT Students etc. Every person could have interest in different Amateur radio stuff or application so we exhibited whole spectrum of stuff incl HF, VHF, UHF Radios, HTs, SDR Radio, RTL-SDR, Base Station,

Antenna, PSU, Coax, Connectors, Test Instruments, SWR Meters/RF Power Meter, NanoVNA, Antenna Tuner, Diplexer, Logbook, Call Books, QSL Cards, Awards, Cube Satellite model etc stuff to give close idea of the Ham Radio equipment we use in our radio shack and field!

Informative posters, banners & all our radio stuff along with live presentation on Big TV screen was kept at our stall to give a glimpse of our amateur radio activity. The educational approach from our team helped most visitors to satisfy their queries and gain knowledge on various topics of our fascinating hobby. IIT Students and faculties from different institutions showed keen interest in Amateur radio club activity and Student Satellite programme. Many Scientists, professionals & communication expert appreciated our presence to spread awareness for our scientific hobby keeping us engaged to learn experiment & enjoy the core theme of MAPCON i.e. Microwave (RF here), Antenna & Propagation!



Rajesh VU2EXP and Shyama VU3WHG

Chief Guest of the event and former ISRO Chairman A. S. Kiran Kumar Sir did visit the exhibition/our stall and spent some time understanding our Amateur radio & AMSAT-INDIA activities. We put it into their kind notice of two Amateur Radio payloads collaborated by AMSAT-INDIA (1) HAMSAT - VO52 launched in 2005 carrying linear transponder (2) AISAT Digipeater integrated in 4th stage of PSLV Rocket body, launched in 2019 (experimental initiative from ISRO). We also highlighted the role of The Amateur Radio Society of India (ARSI) and its activity. Shri Kiran Kumar Sir took note of our educational activities. We presented a book '**The Gateway to Ham Radio**' to him. (book credit to VU2JIM).



Visitors to the stall



Former ISRO Chairman A. S. Kiran Kumar

We also gave a warm welcome to Shri Rajeev Jyoti Sir (Director IN-SPACe), and thanked him for supporting & providing the stall to us to create awareness on our *radio & satellite activity*. He spared a good time at our stall and appreciated our efforts and the range of working radio stuff we highlighted for all visitors. Sir also took good note for our small portable Satellite ground station consisting of a tripod, dual band Arrow II antenna, 2 HTs for receiving/transmitting in full duplex configuration,

Headphone/mic, audio recorder, tracking device, with manually aiming arrangement for Azimuth, elevation & polarisation! This was the least expensive yet working ground station for Amateur radio (FM/LEO) satellites throughout the **MAPCON 2023** Exhibition HI! We presented the book '**Gateway To Ham Radio**' to Shri Rajeev Jyoti Sir. (*Book credit to VU2JIM*).

We had great interaction with many exhibitors, researchers, professors from various institutions and exchanged views that a lot more radio & satellite activities / projects could be worked out for the benefit of the society. We simply conveyed how common people from all walks of life can become Ham radio operators and gradually improve their skill to have digital communication, contesting, activating - special callsign and how they enjoy IOTA, Lighthouse, Hilltop, ARISS SSTV event, tracking & working OSCAR Satellites! And all this activity is enjoyed by global Amateur radio operators. This simple yet effective message appeals to most visitors.



Sri Hanumanth Rayappa - ISRO



Sri Nikhil Arora - IN-SPACE

We also had gracious presence of Shri Hanumanth Rayappa Sir (Director, Satcom PO, ISRO HQ), Shri Vaibhav Sir (ISRO), Shri Milind Mahajan Sir (SAC/ISRO), Sanjeev Kulshrestha

(SAC/ISRO), Shri Nikhil Arora Sir (IN-SPACE), Shri Pratik Mevada Sir (SAC/ISRO), Prof. Gangaprasad Pandey (PDEU, Gandhinagar) etc. We had good talks on various Amateur satellites & projects. For specific queries, from ISRO Scientists, on our previous AMSAT-INDIA missions, I connected to Maniji VU2WMY & Nitin VU3TYG for precise explanation, I thank both of my AMSAT fellow friends.

During exhibition we had very good *eyeball* with hams including Prof. S.P Bhatnagar Sir VU2SPF, Jinofar Bhujwala VU2JJJ, Manojbhai Suthar VU2EHY, VU3RGP Rakesh & Jayshankar VU2JAA. I am thankful to VU2SPF & VU2JJJ for all the support they extended.

I specially thank my niece & team member Shyama Vagadia VU3WHG (*B.Tech ICT 4th semester, Marwadi University, Rajkot*) for all support & assistance from the beginning . Shyama also remains a member of the Student Satellite project team from Marwadi University and a student member of IEEE Gujarat Chapter. For her it was also a memorable experience to meet all living legends of the Indian space & research organisation of India (ISRO). I thank Shri B. A. Subramani Sir VU2WMY, Nitin Muttin VU3TYG & all members of AMSAT-INDIA for detailed follow up, guidance and support to make our participation notable.

I also thank Ramesh Kumar VU2LU & Krishna Kumar VU2YUU from ARSI for their respective guidance & support.

73 - Rajesh Vagadia VU2EXP
Regional Coordinator, West India Zone AMSAT-INDIA

Celebration of Sir J.C.Bose's 165th birth anniversary

It was 165th birth anniversary of Sir JC Bose, Father of Radio on 30th November 2023 celebrated by **Pune hams VU2RCP** at the MMCoE Auditorium Pune between 3:00 and 4:00PM. More than 200 students and faculty attended.



The main Speaker was Mr. Vishwas Kale, MD, Vijayesh Instruments Pune. Vilas Rabde VU2VPR introduced Ham Radio and activity of Pune Hams VU2RCP.

Mr Kale said, So far world was under the impression Marconi is the inventor of Radio. Now it is proved, Sir JC Bose is the father of Radio. Please watch the following Video on *Sir JC Bose*

<https://youtu.be/BMG86iZ8wCM>

73 & 88

Vilas Rabde VU2VPR 9822502078

System for Emergency Assistance, Response, and Communication Hub

In a momentous event on December 11, 2023, the **National Institute of Technology Karnataka, Surathkal (NITK)** proudly presented the System for Emergency Assistance, Response, and Communication Hub (**SEARCH**) at its campus. This cutting-edge technology, tailored for the coastal areas of Dakshina Kannada, signifies a significant leap in emergency response capabilities.

SEARCH's dedication ceremony showcased not only a technological milestone but, more importantly, highlighted its far-reaching benefits to society.



The heart of SEARCH lies in its Control and Command Center, ingeniously housed within portable container cabins. Developed through a transdisciplinary project led by the Centre for System Design (CSD) at NITK Surathkal, SEARCH integrates state-of-the-art UHF/VHF/HF radio stations and autonomous aerial/marine vehicles. Dr. Pruthviraj U, the Project Head of SEARCH and Professor in Charge of Transdisciplinary R&D, alongside key faculty members such as Prof. K V Gangadharan, Dr. Mohit P Tahiliani, and Dr. Sreevalsa Kolathayar, played pivotal roles in bringing this innovation to life.



At the SEARCH site, various antennas, including Hex Beam HF Antenna, Spider Beam HF Antenna, Dual band VHF/UHF Diamond Antenna, Triband JK Yagi Antenna, and a 40m Yagi antenna, and Potty Dual feed Antenna facilitate robust Amateur Radio communication. These antennas further enhance the system's capabilities for seamless communication during

emergencies. Additionally, the system incorporates features for educational research and development, such as Flight and Sea vessel tracking.

SEARCH's significance extends well beyond disaster response. The system's applications include monitoring water and air quality, observing coastal erosion and accretion patterns, and assessing the health of mangroves. Additionally, SEARCH provides crucial coastal data to Coastal Regulation Zone (CRZ) officials, contributing to informed decision-making in environmental-management.

Furthermore, SEARCH functions as an educational hub, catering to a diverse audience comprising industry professionals, district administrators, academics, students, and HAM/Amateur radio enthusiasts like VU2TAO, VU3LGQ, VU3LHV, VU3LGA, VU3CJX, VU3FCC, VU3FLQ, VU3CMY, VU3FCT who are also students and staff of the Institute operating under Team callsigns VU2REC and AT3K. The collaborative efforts of regional clubs, particularly the Mangalore Amateur Radio Club (MARC) and Manipal including key HAMs like VU2XE, VU2SBJ, VU2ABU, VU2VTI, VU2RDQ, VU3LMP, VU2MZR, and VU2JIX underscore the system's effectiveness in ensuring communication during emergencies.

The realization of SEARCH owes much to the support of NITK alumni, exemplified by generous donations from individuals like Mr. Rangan Ramasamy and Mr. Yajnanarayana Kammaje. Their commitment reflects a deep sense of giving back to the institution that has significantly shaped their professional journeys.

The dedication ceremony witnessed the presence of Prof B Ravi, Director NITK Surathkal, distinguished alumni like Mr. Rangan Ramasamy, and Mr. Yajnanarayana Kammaje, and esteemed

alumni such as Ram Bhandare and A S Karanth. Colonel Anilesh Kaushik, the Officer Commanding the NCC Office, added prestige to the event.

As SEARCH unfurls, it not only marks the commencement of a new era in emergency response capabilities but also stands as a testament to NITK's indomitable spirit and the visionary commitment of its alumni. Beyond its technological prowess, SEARCH represents a celebration of innovation, education, and community spirit, fostering a profound sense of responsibility that resonates at both societal and national levels.

<https://maps.app.goo.gl/sDc8EE9W8CLyrtFH7>

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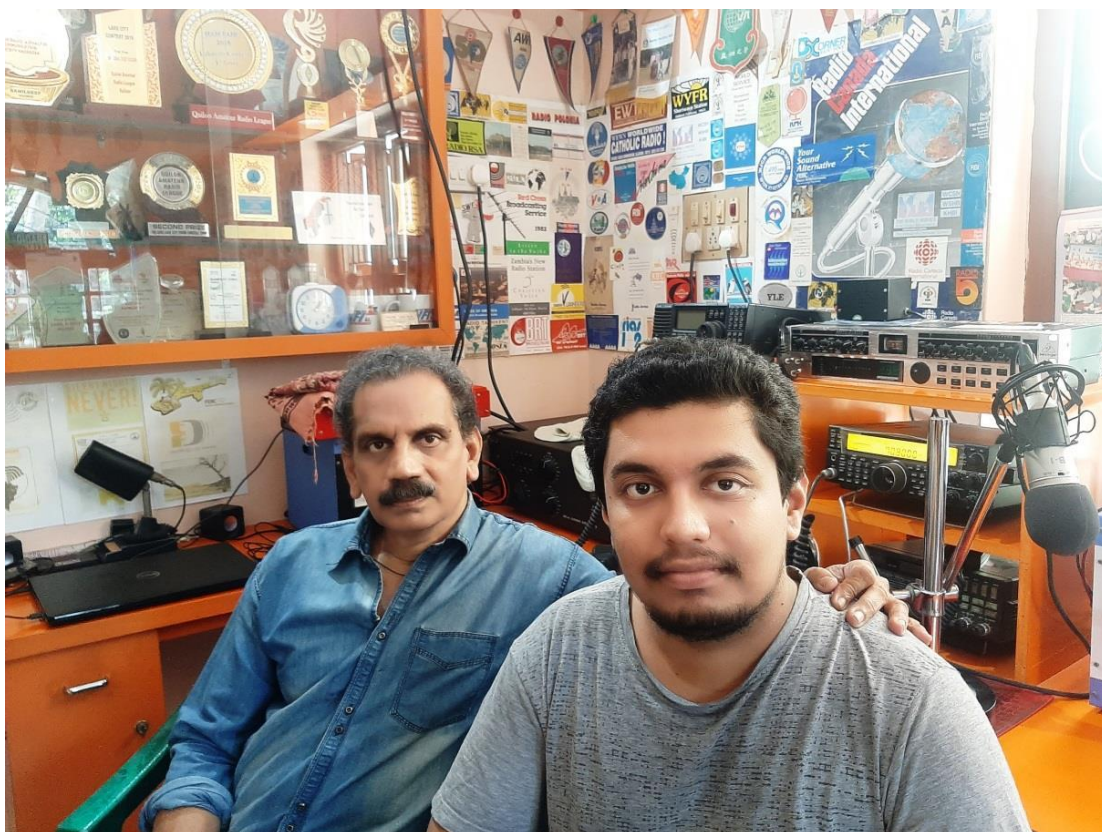


BCDX NET CELEBRATES 35TH ANNIVERSARY

By VU2JOS / AT5ØJOS

The BC DX net started in November 1988, with Sanil VU2SIO as net-control station, celebrated its 35th anniversary in November 2023.

The BCDX Net originated from a small group of visionaries, including Shanmughasundaram VU2FOT (SK), Victor Goonetilleke 4S7VK, Jose Jacob VU2JOS from Kerala, and others like Liyakath Ali VU2LIK (SK), Kasi Viswanathan VU2FFM, et.al. Initially named the SWL DX Net, it evolved into the BCDX Net, emphasizing the exchange of information on BCDX stations and promoting the hobby of radio listening.



Sanil Deep VU3SIO, Sharoon VU3XIO – Operators of BCDX Net in their shack.

Every Sunday at 0830 IST (0300 UTC), the BCDX Net comes alive on 7085 kHz in the 40 meter- band. Led by Net Controller M. Sanil Deep, VU3SIO, and Sharoon S. Deep, VU3XIO, the net provides a platform for Hams to check in, share information, and engage in the love of BC DXing. Over the years, the BCDX Net has attracted participants from India, Sri Lanka, Gulf countries, and beyond. What sets this net apart is its unique feature—after check-ins, the Net Controller presents times and frequencies of radio stations monitored, akin to a DX Newspaper readout for enthusiasts.

With the passage of time, the BCDX Net has grown, incorporating new voices like VU2KAK Anil, VU2ISR Harsha, VU3ITI Varadan, VU3DJQ Raman, VU2NGB Binu, VU2BNP Prahalad, VU3BGK Neel, VU2ICI Mohan, VU2MUD Madhu, and more. In many ways, it served as the "Facebook" and "Whatsapp" of its era.



BCDXers at Hamfest India 2019 at Kanyakumari: L-R Dr. T.Jaishaktivel VU3UOM, Jose Jacob, VU2JOS, Neelakandan V. VU3BGK, M.Sanil Deep VU3SIO, M.Shanmugasundaram VU2FOT

The net's significance is not only in its longevity but also in the recognition it has garnered. Special QSL cards were issued on milestone anniversaries, and articles featuring the BCDX Net appeared in various DX publications. Events like the BCDX Net Convention in 1991 and the Malabar Meet in 2018 marked significant milestones.

35th Anniversary Celebration: On December 3, 2023, at 0300 UTC / 8.30 am IST on 7085 KHz LSB, the BCDX Net celebrated its 35th anniversary. Since 1990, M. Sanil Deep has consistently controlled the net, and Sharoon S. Deep has been delivering DX tips since August 2016. The occasion marks an unparalleled 35-year legacy of uninterrupted radio enthusiasm.

73, Jos VU2JOS

Congratulations to Sanil VU3SIO who was featured in the LIMCA Book of Records, for the longest running DX Net on Amateur Radio / Ed.

SOME LAST MINUTE NEWS

Just heard that **the HADES-D** satellite has been commissioned and the FM repeater is active for general use. At the request of AMSAT-EA, AMSAT has designated HADES-D as **S p a i n - O S C A R 1 2 1 (S O - 1 2 1)**.

The repeater works with FM/FSK (MSK144 has been tested too) with an uplink frequency of 145,875 MHz and a downlink frequency of 436,663.5 MHz. We have been able to verify that the modulation is more appropriate by narrowing the bandwidth, so it is recommended to use NFM in those devices allowing it.

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