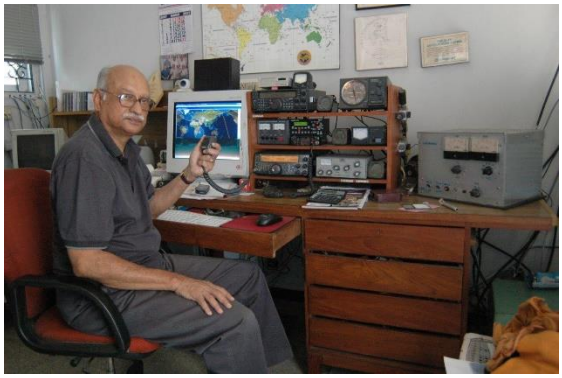
Ham RADIO News

Newsletter of the Amateur Radio Society of India (Indian Affiliate of IARU)
Oct 2014 Issue

President's Message



We have a new government at Delhi, and that means new officials to be dealt with for our amateur radio work. Several times over the past years we have had to deal with change of officials and brief them again and again about our concerns and requests.

However this time there is a totally fresh change of guard and from all accounts this government is keen to do away with vexatious and obsolete regulations, which only waste the time of officials without achieving anything.

ARSI has very quickly taken the cue, and submitted a letter listing the most serious of our concerns, namely the redundant security clearance for new licenses, where months and sometimes years pass by and in many cases, paperwork is lost forever.

The letter was hand delivered to the Hon. Minister for Telecommunications by OM Chandru, VU2RCR when the minister came to Bengaluru to preside over a function.

Many other steps are also being taken to address the various other aspects that require change. Please send us your suggestions as we will be meeting the officials in Delhi very soon.

We will be meeting at Hyderabad for the next Hamfest and from all accounts, it is going to be one of the biggest with many new approaches. Let's join in really large numbers and make it a memorable event.

As usual ARSI will, at the Hamfest, distribute certificates to the winners of the many contests which we conduct to get more hams on the air.

73

Gopal Madhavan VU2GMN

From the Editor's desk

Another quarter has passed and there is no noticeable change in the propagation on the HF bands.

The sun's current space-weather cycle is the most anaemic in 100 years, scientists say.

Our star is now at "solar maximum" the peak phase of its 11-year activity cycle. But this solar max is very weak, and the overall current cycle, known as Solar Cycle 24, conjures up comparisons to the famously feeble Solar Cycle #14 in the early 1900s, researchers say.

Enjoy another issue of HAM RADIO NEWS filled with Tech news, DX news and tit-bits, and local news and activity – but I would appreciate it if members forward more news and articles for publication!

73

Ganesh VU2TS

World Radio Day 2014

It was call for the love of radio, for the lovers of radio, on the World Radio Day 2014 - February Thirteenth. VU2UUU (Kaustav) - a SWL and a Ham, at very short notice, came up with an idea for celebrating World Radio Day at Roots Café, Gurgaon, full of green forest area. Twenty One SWLs and Hams actively enjoyed and participated with portable radio sets, antennas and state-of-the-art communication receivers. An evening full of radio listening events, frequency monitoring – broadcast as well as ham bands followed with plenty of eyeball networking.

Novice hams and SWLs awaiting their ticket were thrilled listening to VU and DX hams on portable radio set matched with temporarily erected antenna for the radio day. Several onlookers and staff of the Roots Café too got bugged due to presence of radio and antenna and tried understand our activities and enjoyed.

VU2YK (Rahul), VU2ATN (Atanu), encouraged novice hams and SWLs with their interesting memoirs and shared their experiences. Rahul, VU2YK set up a portable radio station with a QRP rig and make-shift antenna and tuned interesting DX stations. An echolink bridge was also established by Kaustav tht facilitated occasional 2M bridging from the location to the Echolink Repeater set-up at Kaustav's QTH. SWL Mitul Kansal, who has national record for "MOST PRIZES IN INTERNATIONAL RADIO CONTESTS" in India Book of Records, rejoiced while listening to DX ham. To everyone's surprise, VU2JAT (Rakesh) drove 300 kms from Bareilly in Uttar Pradesh to Gurgaon for participating in Radio Day celebrations.

Special invitee Shri B. R. Chalapathi Rao, Senior Director (Retired), All India Radio, was kind enough to join us and shared his lifelong experience and love for radio. Shri Hoshiar Singh, a Director at DoT, also awaiting his license thanked for organizing the Radio Day event. SWLs Manohar, Maneesh, Mayank, Tarun, Sunil, Vedant, VU2KD (Soffi), VU3SFF (Sudip), Meera-XYL of VU2YK, VU2TUM (Puneit) alongwith XYL Neha, VU2VUV (Tarveen), VU3RAZ (Rahul), VU2PUI (Partha), actively participated to make it successful. Eshaan – QRP of VU2UUU & VU2VUV enjoyed listening to FM radio station bands and lovingly became youngest SWL of the World Radio Day group.

Everybody thanked VU2UUU – Kaustav for this innovative way of World Radio Day celebrations.

73, Rajesh VU2OEC

The JOTA-2014 is slated for October 18/19 when more than half a million Scouts, Guides and Cubs worldwide will exchange greetings with one another via Amateur Radio – ARE YOU READY?

Please forward a report on your JOTA station along with photographs for publication! /Ed

Hartwig Kauschat –DL7BC (VU2HBC)

– Eyeball with DELHI HAMS

DL7BC – Hartwig Kauschat with reciprocal call sign VU2HBC agreed for an eyeball with Delhi Hams. As the rain God surprised in the evening of 26 Feb 2014 with sudden downpour, DL7BC arrived for an eyeball at Den of local hams, that is, Powergrid Club in Gurgaon. Sixteen hams and shortwave listeners heartily welcomed Hartwig Kauschat.

With a brief introduction, DL7BC shared with us his activities in his home QTH. DL7BC with reciprocal license VU2HBC blended with VU hams during eyeball like old timers. There were many joyous and hilarious moments like VU2UUU's first name "KAUSTAV" and DL7BC's family name "KAUSCHAT" sounding similar.

VU3WJM – Rahul, VU2ATN – Atanu and VU2ASB – Ashok enjoyed eyeball QSOs about achievements of Hartwig in contests.

To mention a few, with a reciprocal license CN2BC Hartwig got 1st place Morocco – 1st place Africa – 5th place World – 1st place world overlay tribander/single element wire in CQ WPX Phone 2010. Contesting since 1990, DL7BC attained many such places in contests worldwide with reciprocals like TO7BC, V31HK, HB0/DL4ZBC/p.

SWLs Anurag, Hoshiar, Vedant, Anand keenly listened to the ham talks and shared their experiences.

Eshaan – harmonic of VU2UUU – Kaustav and VU2VUV – Tarveen, the youngest member of the group coloured some sketches, which were appreciated by one-and-all.

Aritro Dasgupta – harmonic of VU2ATN and lover of football shared with Hartwig his passion for the game.

VU2GTI – Gaurav luckily arrived on the day from Bengaluru, joined us alongwith his pal VU3CAV – Rajani Mohan. Both were really happy to meet all of us and DX ham after ages.

VU2UCC – Sunil, VU2KD – Soffi, VU3ORN – Ray, VU2OEC – Rajesh, along with others enjoyed as Hartwig shared about local club and a centralized amateur radio society in Germany. As compared to membership of the centralized amateur radio society in 1990s which was 90%, it came down to 70 to 80 per cent now-a-days.

Due to commercialization and easy availability of radio, collective effort and home brewing got discouraged. Local club members meet every Friday to encourage home brewing amateur radio kits and antenna workshop.

During contests or special events, members can go and operate radio to enjoy the hobby. Members who volunteer for tutorial classes for the novice are encouraged and their membership fee is waived off.

Hartwig also mentioned about regular HF/VHF/UHF nets in Germany. All of us got charged up and strongly felt to replicate the same here also.

After eyeball, Eshaan – harmonic of VU2UUU and VU2VUV on behalf of all presented a memento to DL7BC amidst huge applause. Everyone enjoyed delicacies at the restaurant of the club and appreciated/encouraged for organizing-such-events.

Before concluding, Hartwig showed pictures of local amateur radio activities on the website of the club. VU2VUV – Tarveen was delighted to know that few YLs actively participate in club programme.

As it was time for everyone to call it a day, we thanked Desi and DX ham for making it a memorable eyeball.

After returning to Germany. DL7BC expressed his thanks in the following message to us:

"It was a real pleasure meeting all the Gurgaon hams and friends from Delhi (and even from Bangalore, hihi). I had some nice talks with Tarveen VU2VUV and Atanu VU2ATN regarding how to attract young people into our hobby, and namely how we do it in our local DARC club chapter at my QTH. It was indeed nice to share some ideas, also about your local activities."

73
Rajesh Chandwani, VU2OEC
Regional Representative of ARSI for Gurgaon

The IARU Region 1 conference

INTERNATIONAL AMATEUR RADIO UNION

REGION 1

The IARU Region-I Conference was held in Albena/ Varna, Bulgaria- from September 21 to 25 2014

The conference was attended by delegates from the various societies in Region 1- there are over 80 countries in the region out of which 34 were present and an additional 21 represented by proxies .

A very extensive range of subjects were discussed by three committees which then reported to the plenary for ratification of the recommendations.

The main subjects we in Region 3 would be interested in were:

1.Harmonization of band-plans between the three regions to avoid the problems faced by operators when different segments of various bands are allowed in different regions.

2.The working of IARU through the three regions, to obtain a segment of the 5 Megs band to bridge the gap between 3 and Megs especially for disaster communications. This subject is being worked on worldwide and will be decided at the next World Radio Conference (WRC). The last time additional bands were allocated was when the 12, 17 and 30 meter bands were permitted by the WARC 1979 to be used by radio amateurs. Minor adjustments to other bands were done at subsequent WARC's at the request of IARU.

The office bearers for the next three years were elected with Don Beattie G3BJ of RSGB being elected President.

The Region 3 conference was followed by the meeting of the Administrative Council of IARU which consists of the IARU executive along with two representatives of the three regions.

Attending the meeting were IARU President Tim Ellam, VE6SH/G4HUA; Vice President Ole Garpestad, LA2RR; Secretary Rod Stafford, W6ROD; regional representatives Hans Blondeel Timmerman, PB2T, Dennis Green, ZS4BS, Reinaldo Leandro, YV5AM, José Arturo Molina, YS1MS, Gopal Madhavan, VU2GMN, Wisnu Widjaja, YB0AZ and recording secretary David Sumner, K1ZZ. Also present as observers were Ramón Santoyo, XE1KK, observer from Region 2 and Don Beattie, G3BJ, observer and President-elect from Region 1.

Also present as observers were Ramón Santoyo, XE1KK, observer from Region 2 and Don Beattie, G3BJ, observer and President-elect from Region 1.

Left to Right:

Reinaldo Leandro, YV5AM, - President IARU Region 2,
Don Beattie, G3BJ - President Elect IARU Region 1.
Tim Ellam, VE6SH/G4HUA, IARU President
Hans Blondeel Timmerman, PB2T - Outgoing President IARU Region 1,
Gopal Madhavan, VU2GMN - Chairman of Directors IARU Region 3

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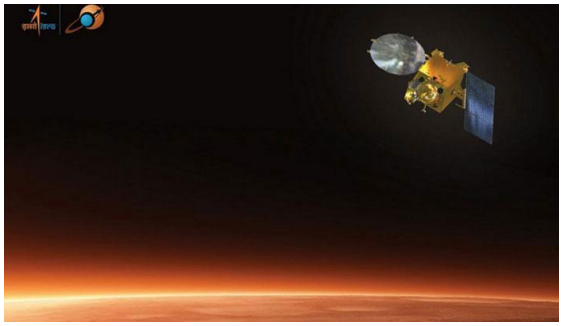
MARS ORBITER MISSION

India created history with Mangalyaan entering Martian orbit on Sept.24.

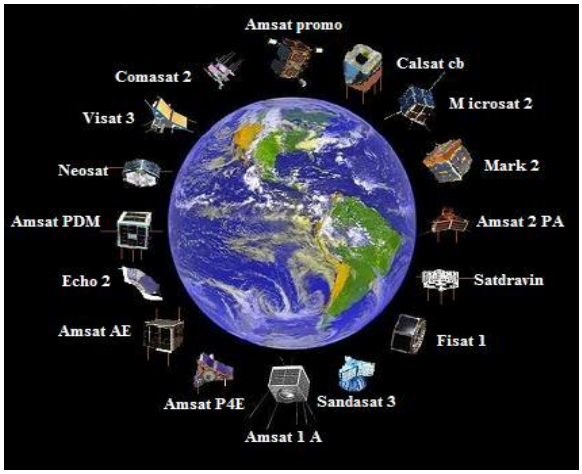
CONGRATULATIONS to the ISRO and all the scientists and others involved in the MOM project for successfully putting the spacecraft in MARS ORBIT.



With this spectacular success, ISRO joins an elite group of only 3 other agencies worldwide to have successfully reached red planet,

We now join the United States, European Space Agency and the former Soviet Union in the elite club of Martian explorers.

Further, we are the first Asian country to reach Mars and the first in the world to enter Martian orbit in the maiden attempt. MOM has already started sending high quality images of Mars..



AMSAT NAMES

VU2GUR

CONGRATULATIONS to Guru – on his FB working the satellites with a very simple setup: He has worked through 8 Satellites with more than 2000 QSO's and has recorded and reported reception of the Digitalker aboard FO-29. The Impressive list of satellites and the number of stations contacted are :

UO-14 – 35 VU + 5 DX = 1137 QSOs
SO-35 – 13 VU + 7 DX = 90+ QSOs
SO-50 – 4 VU + 1 DX = 15 QSOs
AO-51 – 25 VU + 20 DX = 235 QSOs
VO–52 – 44 VU + 8 DX = 525 QSOs
SO-67 – 3 VU + 2 DX = 7 QSOs
HO-68 – 7 VU + 4 DX = 11 QSOs.

ISS – ARISS – SPACE STATION – 20 VU + 2 DX + 1 DIRECT TO V/V REPEATER = 54 QSOs.

VO-52 HAMSAT SK - Message from Mani VU2WMY

Dear-Friends,

With heavy heart, I sadly convey that our little angel 'HAMSAT VO-52' would no more be able to offer her services to the 'Amateur Radio Fraternity. HAMSAT VO-52 succumbed in Space on 11th July 2014, while she was on her 49,675th orbit, due to the failure of on-board lithium ion batteries that have met their end of-life.

Although her desires were to be at work with other systems and sub-systems working normal as per the latest telemetry received, the on-board computer recurring to 'Reset' mode due to the failure of batteries is preventing her to do so. Hence, it is decided not to expect any more meaningful and reliable services from HAMSAT VO-52.

Since 11th July, every best possible effort has been put in by the spacecraft controllers here in ISTRAC Bangalore to revive her back to life and to help her with work load, so she won't be swamped when she returns, but with no luck. Though it is hard, the HAMSAT VO-52 designers and controllers insist that the time has come to let the little angel free in space to go drifting on her own from their care and custody.

Thus, today 21st July 2014, ISRO have decommissioned 'HAMSAT-VO52' officially.

We all here in ISRO do definitely hope that 'HAMSAT VO-52' worked tirelessly and was a good friend to the 'Amateur Radio Fraternity' around the World. We are sure that HAMSAT was loved by all who worked through her. Though, we are deeply saddened by the loss of HAMSAT VO-52, but she will never be forgotten and far from our hearts, minds and memories.

HAMSAT VO-52 will always be remembered by all of us here in ISRO as one of the greatest satellites-of-ours.

Dear HAMSAT: looking at the sky, we all say 'Good Bye' to you. You'll be greatly missed. Rest-In-Peace.

Nevertheless, at this point of time, on behalf of the World Amateur Radio Fraternity, we thank each and every one who contributed to the great success of 'HAMSAT'.

Particularly, our sincere thanks to the Chairman ISRO, Dr. K. Radhakrishnan, past chairmen Dr. Kasthurirangan, Dr. G. Madhavan Nair, Director-ISAC Dr. S.K.Shiva Kumar, past ISAC Directors Dr. P.S. Goel, Dr. Shankara, Dr. T.K. Alex, Director-ISTRAC Shri. B.S. Chandrasekhar, scientific secretary Dr. Koteshwar Rao, Project Director-Shri. J.P. Gupta, Deputy project Directors, Mission Director-Shri. R.Suresh, Operations Director-Shri. Parimalarangan and each and every person directly or in-directly contributed.

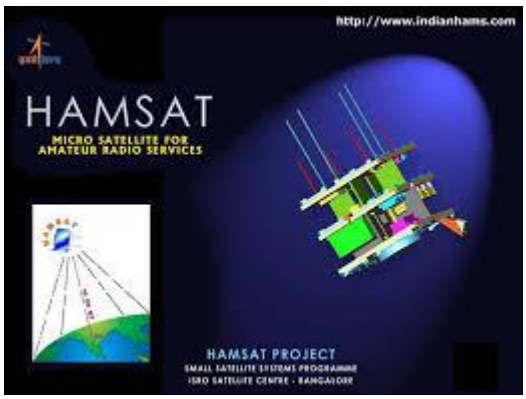
Last but not least, we also thank AMSAT-INDIA and in particular, late Shri. Nagesh Upadhyaya-VU2NUD, Shri. B.S. Gajendra Kumar-VU2BGS, Shri. Prathap Kumar-VU2POP, Air Commodore. Subramanian-VU2UV, Shri. V.P. Sandlas-VU2VP, Dr.R. Ramesh-VU2RMS, Shri. Nitin-VU3TYG, Mr. Williams Leijenaar PE1RAH and each and every member.

Message from Mr. R. Suresh, Mission-Director

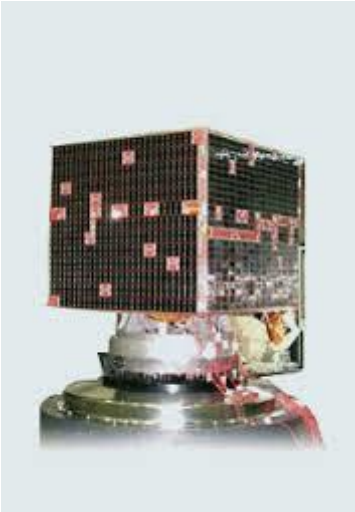
"HAMSAT, the first small satellite by ISRO has been decommissioned after nearly a decade of service to the World Ham community.

A true masterpiece among small satellites, designed for a one year mission life, but exceeded all expectations by serving for almost 10 years. A truly autonomous

satellite, with “Zero maintenance“ in terms of Mission operations, it provided a springboard to test many new concepts such as BMU. LI-ion based power system, automatic Spin rate control and Auto SAOC for maintaining the Satellite attitude without any ground commanding.



HAMSAT - known as “OSCAR-52” among the Amateur HAM operators has been very popular because of its high sensitivity receiver and strong transmitter. Indian Radio Amateurs on many occasions conveyed to us that they have been greatly honoured to share the adulations showered on ISRO and INDIA by the International Radio Amateur for gifting this wonderful satellite "HAMSAT".



I take this opportunity to applaud the HAMSAT teams at ISAC, ISTRAC and other centre for their efforts and support, which has made ISRO proud among the HAM users across-the-globe.”

R.SURESH
MISSION-DIRECTOR
HAMSAT

India seeks relaxation of red-tape provisions

The world looks on developments in India with a new leadership promising a breath of fresh air throughout the administration to fix a stalling economy and stimulate business.

With a new government in place, your society has renewed its efforts to remove the old British colonial-style excessive red tape around Amateur Radio.

ARSI President **Gopal Madhavan VU2GMN** has long seen some very archaic rules and long standing issues that restrict the activity and obtaining a licence.

Gopal VU2GMN has outlined the concerns in a letter from ARSI to Ravi Shankar Prasad, Minister of Communications, Information Technology, Law and Justice. He wrote: "In India we are hampered by some very archaic rules, which were possibly formulated during the British times, when everything was done to restrict radio licenses being given to Indians.

"The most restrictive and time-consuming aspect is the "security clearance" that is being done before a licence is granted. In most cases, this takes months or even years, and often the paperwork is totally lost in transit between the various agencies."

The Indian Government has in the past suggested that Amateur Radio licences may be a terrorist tool and require a security clearance to have one. No security clearance is listed in the Amateur Radio regulations.

Many times in the past ARSI has told authorities that no terrorist is likely to go through the learning and licensing process to obtain an Amateur Radio licence when they can operate clandestinely with off-the-shelf equipment.

Gopal VU2GMN also the IARU Region 3 Chairman, said: "Every country has serious concerns about security, but they have not found it necessary to vet aspirants to Amateur Radio as is done only in India."

He had immediately sought an easing of issuing a new licences and whatever action is need to help grow the Amateur Radio population of 15,000 in a country of more than 1.2 billion people.

In the letter he pointed out that voluntary Amateur Radio contributes in terms of technical training, experimentation, and communication; and also had a public service role throughout the world in disasters and emergencies.

The Indian Government wants to do away with measures that bring no benefit, and ARSI would like to see Amateur Radio be part of that process.

Let's hope the authorities respond favourably.

ARSI NATIONAL FIELD DAY – DELHI HAMS

JUNE 8, 2014 E Storm @ 114.8 Kms/hour passed over Delhi-NCR, uprooting several trees/antennas. Temperature rose to a sizzling 47 degrees. But Delhi hams geared up for the ARSI National Field Day in air conditioned comforts of Powergrid Club – the usual eyeball venue in Gurgaon.

By 0415Z, VU2UUU (Kaustav), VU2ATN (Atanu), VU2MV (Venu), VU2FR (Francis), SWL Vedant, VU2OEC (Rajesh), SWL Eshaan, VU2VUV (Tarveen), installed the antennae for the day-long ARSI National Field Day. In total, two dipoles, one HF vertical and one portable mobile HF antenna were installed.

VU2UUU, Kaustav's ICOM radio matched with homebrew Doublet Dipole Antenna of VU2ATN, became the hot seat for participating hams. VU2MV (Venu) skillfully operated straight key to catch stations from Poland, Israel and so on.

Post-Lunch, tally of 8 QSOs (Phone/CW) in spite of poor propagation with very low height antenna marooned by high rise towers was morale boosting.

By 06:30 Zulu, team from APACHE LABS, Gurgaon (makers of ANAN Software Defined Radios), VU2MB (Bhanu) – representative of APACHE LABS and VU3WJM (Rahul) – ardent home brewer of Amateur Radios and designer of ANAN SDRs, joined us to establish their State-of-the-Art digital setup.

Thanks to Mr. **Abhishek Arunoday Prakash**, Managing Director at APACHE LABS Private Limited, Gurgaon, for agreeing to VU2UUU's invitation and deputing his team to participate in the ARSI National Field Day. The APACHE LABS team used ANAN-100D HF + 6M 100 Watt All Mode SDR Transceiver matched with Dipole Antenna. The ANAN SDRs brilliant performance was applauded/appreciated by all.

VU2KIZ (Kailash) drove 200 kms all the way from Jaipur to be part of the field day. VU2HO (Ray) [old call sign VU3ORN] joined us by tea time in spite of heat and hectic m/QTH schedule. Harmonics of VU3WJM, VU2YK (Rahul) too joined us with their XYLs.

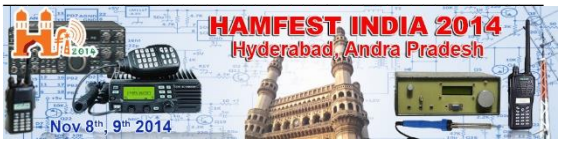
At 1130 Zulu, VU2YK took over and logged several QSOs on 20 m band. Several rounds of QSOs were exchanged by participating hams with Lonavala National Field Day Team, which consists of 5 hams.

VU2UUU also operated 10 mtr QRP Station setup in his car from the grounds of Field Day. VU2YEP (Karan) too supported with his HF Mobile setup from Delhi and actively participated in the ARSI National Field Day.

Special thanks to ARSI for taking initiative and permission from WPC.

Wonderful day celebrated in the spirit of radio, ended by 1330 Zulu with a tally of 23 contacts. It is not the count but the 21 OMs, YLs, harmonics, SWLs, two HF radios, 2 SDRs, 2 Tuners , 2 Dipoles, 1 Vertical 10 Mtr, WON THE SHOW.

Rajesh Chandwani, VU2OEC
Regional Representative of ARSI for Gurgaon



GWALIOR

ASOC Exam was conducted at ABV IITM, on 7th August 2014 – 39 students appeared, now awaiting results..

Tnx: VU2JAU Jayu

POLLACHI

Pollachi Hams meet on the second Sunday of every month; 5:30 p.m. at the ROUND TANA park. Here is a pic from their August meeting. In spite of inclement weather seven hams and two swls gathered for the meet and had a one hour eye ball QSO and adjourned after a hot snack and tea.

Front: VU3OVA OM MAYIL, VU2DX OM SAIF, VU2WDP OM VIJAYAN
Middle: SWL KARTHIK, VU2VCR OM KANNAN, VU3CMI OM RAVI
Rear: VU3VGA OM VIGNESH, VU2NJX OM PATHY

Amateur radio station at COEP,Pune

Every year the College of Engineerintg, Pune's HAM Club organizes Ham workshop in Technical festival of College–" MindSpark".

The response for this Ham workshop is increasing exponentially every year from students of different colleges. This year too Ham workshop successfully accomplished its aim of motivating and encouraging the college youths to participate in Ham radio activity by spreading awareness about it. Many topics about wireless communication and Antennas were covered by the members of-Ham-Club.

A guest lecture by Vilas Rabde (VU2VPR) who also demonstrated Echolink added a cherry on cake.

De VU2COE – Rupesh Lad

AND NOW – A REFLECTOR-LESS YAGI

The LFA-R uses a compact LFA loop at the back of the boom and has no reflector element at all. The arrangement of phase presents itself in much the same way as it does within an HB9CV. However, this loop is completely joined (or course) all the way around. Only director element follow the driven so on a 5 element version (such as shown below) you have 4 directors rather than the traditional 3 directors a typical Yagi would have. This, along with the driven element being moved further back on the boom that the traditional Yagi means more gain can be achieved.

This extra performance does not come for free, the antenna has a much narrower bandwidth than you might be used to seeing with my designs. However, I have spent time on establishing non-conventional stability with the use of electrically connected elements and 'thicker' elements. Time had to be spent on establishing correction in order to replicate model but as you can see from the below software prediction and final analyser results, this has been achieved with near perfection.

The 4R5 - 5 element 70MHz LFA-R on a 3.45m boom providing over 11.4dBi gain

http://www.innovantennas.com/latest-news.html

ANDAMAN / NICOBAR DXPEDITION NOVEMBER 2014

The VU7AG team from last year led by Krish W4VKU (VU2VKU) would be signing VU4KV this November first from Campbell Bay, Great Nicobar Island (AS-033) followed by Neil Island, Andaman (AS-001).

The operators are -

1. Krish W4VKU (VU2VKU) – Leader
   Prasad VU2PTT
2. Pai VU2PAI
3. Nandu VU2NKS
4. Kumar VU2BGS
5. Chetan VU3DMP
6. Sangeeth A45WH (VU2WH)
7. Kiran VU3KPL
8. Aravind, VU2ABS and
9. Deepak VU2CDP

They have put together a website which has most of the information - www.vu4kv.info
More updates to follow in due course.

Russian Formula 1 Grand Prix - special event calls

Sochi hosts the **Russian Formula 1 Grand Prix** from October 10 to 12. The following stations will be active from Sept. 15 to Oct. 15 on all bands and modes representing the F1 teams:

UE16IR Infiniti Red Bull Racing
UE16MP Mercedes AMG Petronas F1
UE16SF Scuderia Ferrari
UE16LT Lotus F1 Team
UE16MM McLaren Mercedes
UE16SA Sahara Force India F1 Team
UE16ST Sauber F1 Team
UE16SR Scuderia Toro Rosso
UE16WR Williams Martini Racing
UE16MT Marussia F1 Team
UE16CT Caterham F1 Team

There is also a Ham Formula One award available.

http://f1award.ru/en/
http://f1award.ru/rulesen.pdf

NATIONAL RACING CHAMPIONSHIP VU2DVP

Poor propagation? *"No problem*", says Vidi VU2DVP – *"I'm QRL with motor-racing, and it's almost as exciting as working DX"* Hi

Just got news that Vidi came in third in the 2014 MMSC-FMSCI National Racing Championship (NRC) – for Indian touring cars - at the Buddh International Circuit in Greater Noida.

CONGRATULATIONS, VIDI – and here's wishing you all the best!

A MONTH IN CHENNAI

BY R.JAYARAMAN VU2JN

My one-mnth visit to Chennai in June 2014 proved memorable. Though I did not operate on the ham bands from Chennai, I was QRV on Echolink every day.

An eyeball chat with Venkat (VU2SV) and Thyagu (VU2PTR) took us back in time to the nineteen sixties and seventies. Venkat holds a special place in my memory, because my very first QSO in 1964 was with Venkat on 40 metres. At that time, Venkat was living on the outskirts of Chennai and, having heard the glowing tributes being paid to him by fellow-hams for his homebrewing skill, I made a pilgrimage to his QTH and learnt several useful tips on good-quality home brewing. Venkat is 2 years older than me, and has attained the milestone of 80 years age. Both of us are now past the peak of our homebrewing frenzy!

With VU2SV Venkat and VU2PTR Thyagu

Presently, Thyagu is one of the most active homebrewers in India who has to his credit several high-performance gadgets with a 'factory finish'. During our eyeball chat, Thyagu demonstrated the working of his new DDS VFO with automatic IF shift, suitable for use in a transceiver.

Thyagu demonstrates his new DDS VFO

An eyeball chat with Gopal Madhavan (VU2GMN), President of The Amateur Radio Society of India, proved to be very fruitful. Our absorbing conversation swung from our reminiscing on Gopal's uncle, the late Karan (VU2BY), the seniormost ham of Kerala whom I had met and worked several times during the nineteen sixties, to Gopal's narrating to me the efforts being taken by ARSI to secure allotment of a segment of the 5 MHz band which has been recently opened to hams.

With VU2GMN Gopal

I could have met more ham friends in Chennai but for my restricted mobility due to my knee problem. My heartfelt thanks to Venkat, Thyagu and Gopal for rendering my otherwise humdrum stay in Chennai memorable!

CQ Mumbai conducts eyeball meeting in Thane

When the subject is HAM radio and the day is Sunday, HAMs do not need anything more to motivate them. This spirit was demonstrated in plenty this Sunday, 14 September at Thane, when HAMs of different age groups came together for an eyeball meeting at Govindmani Hall near Upvan Lake in Thane.

The event was attended by over 88 HAMs from Lodhivali, Mumbai, Nashik, Pune and Thane. While Mumbai and Thane HAMs formed a majority at the event, six enthusiastic practitioners of HAM radio from Nasik, seven from Pune and two from Lodhivali also travelled all the way to be part of the event. The oldest HAM from Mumbai, Sreeni (89) who lives in Bandra and is known by his call sign VU2PDN, also participated whole-heartedly at the event. He was seen networking throughout the period of the show.

Many informal activities are also conducted by local clubs in various cities like Mumbai, Nashik, Pune and Thane to bring together people practising the hobby.

At the CQ meet conducted in Thane, HAM Deepak Pathak, who's callsign is VU2CDP, gave a detailed presentation about the DX expedition. DX expedition is a competitive event, where a group of HAMs go to different remote locations (usually small islands) where there are no permanent hams - across the world and setup radio communication infrastructure for few days or a month. The DX activity is an extremely sought after initiative, because HAMs across the world are keen to have as many remote locations as possible on their call logs.

Entry to many remote islands across the world are restricted by the Government of those countries citing security reasons. However when a group of HAMs decide to chase a DX expedition, they make sure they complete it. Deepak took all the participants at the event through the trials, tribulations and finally triumphs of their DX expedition to Agatti, Lakshwadeep in 2013. Complete step-by-step details of the expedition can be read on this website.

After lunch, the discussion at the CQ meet turned to discussing home-brewing and the hardware part of the hobby. Mahesh Vhatkar, who has the callsign VU2IIA, led the discussion and he was assisted by Ajay Gupta, who's callsign is VU2DED. He spoke at length about

an interesting experiment he had conducted on digital transmitters.

OMs Charudatt, VU2UPX and Cryil VU2AY, had brought along many of their home- brewed electronic items to demonstrate to the attendees. OM Ashok Joshi, VU2ASH also spoke at length about different aspects of home-brewing at the event

While the sessions were in progress, some HAMs were seen enthusiastically meeting and exchanging QSL cards. Although the event formally ended at 4 pm, the crowd lingered on and discussions went on for a long time after the event was over. While everyone thinks social media is a recent phenomenon, HAM RADIO has been a social network that has been in existence since the early 20th century, and it is among one of the most specialized as well as educational, scientific and fun hobbies around.

Tnx: Preethi Chamikutti VU2PYC Kalyan W

ACHIEVEMENTS

Congrats to Nandu! The first VU to work all 50 US states- WAS -on all three modes and confirming via LoTW. The Triple Play award is yet another fine example of his dogged perseverance and DXing skills.

The latest list of winners can be viewed by logging into your LoTW account. Triple Play award is given for achieving WAS on CW SSB and RTTY via LoTW.

CONGRATS to Madhu VU2MUD on his getting DXCC on 15 meters..

Media summit on climate change, ICTs and disaster risk reduction

The Asia Pacific Broadcast Union, ITU, UNESCO and Ministry of Information and Communication of Indonesia are moving ahead to generate support for a joint world action of broadcasting unions and UN agencies to mitigate the climate change impact. The 2014 Jakarta Summit addressed the role of Media and ICTs in raising awareness of effective strategies and solutions for disaster risk reduction and economic sustainability. [ICT – Information and Communication-Technology]

The Summit is an offspring of the UNESCO International Conference on Broadcast Media and Climate Change (Paris, September 2009). It offers a platform for exchange of ideas and practices on:

- Social dimensions of climate change
- ICTs and the environment
- Broadcasters before and after disasters
- Cases in green technology implementation
- Increasing effectiveness of emergency broadcasts

Out of the twelve radio stations from the Asia Pacific region that took part in the trials, the only station from India was ALL INDIA RADIO

Bengaluru using its 500 KW transmitter on 15650 KHz.

Two channels have been exclusively dedicated for the present Trial of the disaster relief project in the 0200-1130 UTC Trial period. In other words the channels are outside the regular programme and frequency schedules of all participating stations. Any station that volunteers in the disaster relief Trial can use them but naturally the time-slots have to be coordinated.

The use of shortwave transmissions as a delivery platform has some important advantages: For example the transmitter of All India Radio located at Bengaluru that is also taking part in the Trial, and its transmitting antenna pointing in the South-East direction is capable of covering Malayan peninsula, Indonesia, Southern Philippines, then down towards New Guinea and North-Western Australia. This is the projected coverage diagram of AIR.

The antenna and transmitter facilities of other participants in the Trial are going to provide comparably large shortwave coverage areas. What is equally important, the transmitting facilities can be far removed by hundreds or even thousands of kilometres from the disaster zone suffering from the total communication and information blackout.

The Trial and Digital Radio Mondiale (DRM)

The digitisation of shortwave broadcasting should bring about other useful features to the International Radio for Disaster Relief project. A DRM presentation and demonstration was on the agenda of the Jakarta Summit on Day Two. In addition a special DRM radio programme is a part of the BBC/Babcock Trial time-slot from 0230 to 0530 UTC, that will explain what is the inbuilt emergency functionality of DRM and how alarm warning signals can override regular programming and carry the emergency messages instantly to communities living in large world regions.

The future of IRDR

The International Radio for Disaster Relief project is capable of becoming a permanent part of global shortwave coordination that is already in existence. The system is automated: It checks on any changes or additions in the database every ten minutes. If any changes are detected, the processing starts automatically, the global database is updated and any possible incompatibilities or "collisions" identified. The overview of the occupancy of the channels reserved for disaster relief will be available to all participants world-wide immediately at any point in time. Volunteering organisations will be able to start the relief broadcasting immediately after the real disaster strikes, and coordinate the time- slots among themselves.

Due to the unique long-distance propagation property of shortwave radio by means of multiple reflections from layers in the upper earth's atmosphere a transmitter can reach easily to both relatively near or most distant world regions. This is important where other platforms such as satellite, FM or Internet are unavailable because of high cost, geographical location, and lack of infrastructure or due to restrictions or disasters. Receivers are inexpensive and there are no access fees. Shortwave radio is important for travellers and isolated people and it reaches across the Digital Divide to the most disadvantaged and marginalised societies. This is in keeping with the Declaration and Action Plan of the World Summit on the Information Society.

The International Federation of Red Cross and Red Crescent Societies has supported the basic aspect of disaster risk reduction to provide information to the most vulnerable in their 2013 World Disaster Report: The report has pointed out that this population segment may not have the money or the knowledge to take advantage of the digital revolution. It has noted that with only 6 percent of people in low-income countries using the internet in 2011 the digital divide is still stark, and access to low cost media technology is really the key. Joelle Tanguy, the IFRC's under- secretary general for humanitarian values and diplomacy, told Thomson Reuters Foundation on the occasion of the publication of the 2013 World Disaster Report that the aid community is still only beginning to deploy technology effectively. "Our message is to take it on with a principled humanitarian view - understand its limitations, and make sure you are not forgetting the most vulnerable."

South and East Asia is the largest disaster-prone region of the world. That is why the management of the HFCC has decided to organise a trial of the IRDR project of co-ordinated shortwave broadcasting to disaster affected regions in cooperation with the Asia-Pacific Broadcasting Union. The analysis of the Global Schedule database that is co-ordinated and continuously managed on line has indicated that transmission facilities from at least 16 transmitter sites could provide

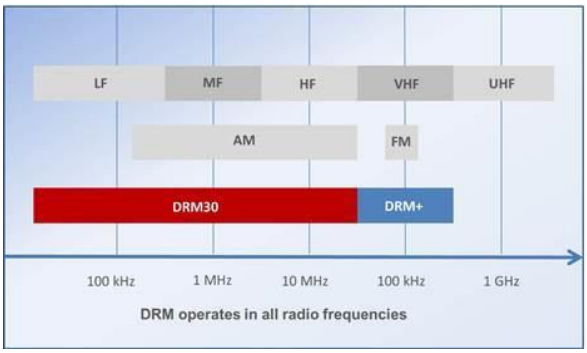
adequate coverage of the target region during the Trial.

The ABU organises a series of road-shows on Emergency Warning Broadcast System later in 2014 with the support of UN ESCAP (Economic and Social Commission for Asia and the Pacific) and it's Committee on Disaster Risk Reduction that is very near to the HFCC's International Radio for Disaster Relief Project. The HFCC has registered with the Prevention Web - of the UN Office for Disaster Risk Reduction (UNISDR) that is also the focal point for the implementation of the Hyogo Framework with the aim of exploring the possibility of inclusion of elements of communication and information flow to the affected populations there.

There is work under way in the radio communication sector of the ITU on the new report on "Broadcasting for public warning, disaster mitigation and relief" However the current developments do not guarantee that terrestrial shortwave radio is permanently incorporated to the agendas of UN institutions. We believe that the common understanding of all stakeholders is needed for its firm integration into the framework of global Strategy for Disaster Risk Reduction that also takes care of information and communication needs of vulnerable communities. This effort is reflected in the present Jakarta Trial of International Radio for Disaster Relief.

*[**What is DRM?** DIGITAL RADIO MONDIALE Is the universal, openly standardised digital broadcasting system for all broadcasting frequencies, including LW, MW, SW as well as band I, II (FM band) and III.*

This is a digital radio standard that has been designed by broadcasters, for broadcasters, with the active assistance and participation of both transmitter and receiver manufacturers and other interested parties (such as regulatory bodies). It has been designed specifically as a high quality digital replacement for current analogue radio broadcasting in the AM and FM/VHF bands; as such it can be operated with the same channelling and spectrum allocations as currently employed. An overview of the frequency-bands where DRM operates is shown in Fig. 1 below.



The DRM standard describes a number of different operating modes, which may be broadly split into two groups as follows:

- ***DRM30** modes, which are specifically designed to utilise the AM broadcast bands below 30MHz*
- ***DRM+** modes, which utilize the spectrum from 30MHz to 300MHz, centred on the FM broadcast band II*

DRM has received the necessary recommendations from the ITU, hence providing the international regulatory support for transmissions to take place. The main DRM standard has been published by ETSI. In addition, ETSI publishes the entire range of current DRM technical standards.

DRM has excellent sound quality plus the ease-of-use that comes from digital transmissions. The improvement brought by DRM30 over AM is immediately noticeable, and DRM+ removes the fading that mars FM reception. DRM can be used for a range of audio content, and has the capacity to integrate text and data. This additional content can be displayed on DRM receivers to enhance the listening experience.

DRM30 uses the existing AM broadcast frequency bands and is designed to fit in with the existing AM broadcast band plan, based on signals of 9 kHz or10 kHz bandwidth. It also has modes requiring only 4.5 kHz or 5 kHz bandwidth, and modes that can take advantage of wider bandwidths – 18 kHz or 20 kHz – allowing DRM to operate alongside AM transmissions in every market of the world. DRM+ is designed for the VHF bands, including the international FM band. In all VHF frequencies DRM+ occupies 100 kHz channels.

*The DRM system uses **COFDM** (Coded Orthogonal Frequency Division Multiplex). This means that all the data, produced from the digitally encoded audio and associated data signals, is shared out for transmission across a large number of closely spaced carriers. All of these carriers are contained within the allotted transmission channel. Time interleaving is applied in order to mitigate against fading. Various parameters of the OFDM and coding can be varied to allow DRM to operate successfully in many different propagation environments – the selection of the parameters allows transmissions to be planned that find the best combination of transmit power, robustness and data capacity.*

The DRM system uses MPEG audio codecs to provide high quality at low data rates. Extended HE-AAC and HE-AACv2 are available.

Apart from the ability to fit in with existing spectrum requirements, the DRM system also benefits from being an open system. All manufacturers and interested parties have free access to the complete technical standards, and are able to design and manufacture equipment on an equitable basis.

This has proved to be an important mechanism for ensuring the timely introduction of new systems to the market and for accelerating the rate at which equipment prices reduce.

This is also a significant consideration for broadcasters investing in DRM infrastructure, manufacturers' investing in receiver development and production, and even more for the listeners who will need to invest in the new DRM-capable receivers.] – Ed.

At The International Broadcasting Convention in Amsterdam on Friday 12th September the DRM Consortium launched the first DRM AM model receiver produced in India for India and for global use.

The AV-DR -1401 designed and produced by Communications Systems Inc under the brand name Avion Electronics of India (www.avionelectronics.in) is a digital DRM SW, MW, as well as analogue AM and FM receiver with stereo reception, offering some of the extra features that make digital superior to analogue: more choice in perfect sound (MPEG audio), multimedia applications and local interactive text and media (Journaline), automatic tuning by station, not frequency, emergency alert capability etc.

The receiver was unveiled at the first DRM 'Pit-stop' on Friday 12th September at the Ampegon stand (Hall 8:D35). It was subsequently showcased on Saturday 13th September at Thomson Broadcast, the second 'Pit stop' event (Hall 8:C35) and at the "tell and show" event organised by DRM Consortium member Nautel Ltd (Hall 8:C49). At their session 'Building to a Billion and Beyond', Nautel representatives and other Consortium companies from India and around the world gave an update on the digital project in India and participants could sample the excellent sound of the new DRM receiver model.

Ankit Agrawal, Director of Communications Systems Inc which produced the new model was thrilled with the interest created by the DRM radio: "Our receiver performed very well and its audio quality, extra features and ease of use received a lot of positive feedback. IBC participants particularly liked the extended battery life of the receiver and its emergency warning capability. With small adjustments we plan to make the receiver available for order in the next few months."

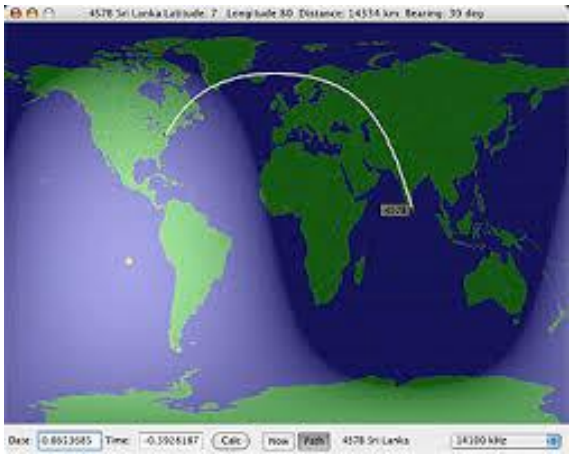
Ruxandra Obreja, the Consortium Chairman, says that: "We are very pleased with the exciting announcement on this new Indian receiver. With sufficient orders and support it could do very well and start the receiver ball rolling demonstrating that global, green and extremely cost-effective DRM is not just the future of digital radio but a reality for listeners now."

Other DRM members present at IBC are: Digidia, Fraunhofer IIs, GatesAir, RFmondial and Transradio.

Avion Receiver

[Tnx: www.drm.org]

Free 'Grey-line' software



Simon Brown G4ELI has released a simple Windows program which displays Grey-line, Geomagnetic Indices, Solar Data and Sunrise and Sunset. Download it from his website at

http://www.dit-dit-dit.com/Downloads.aspx

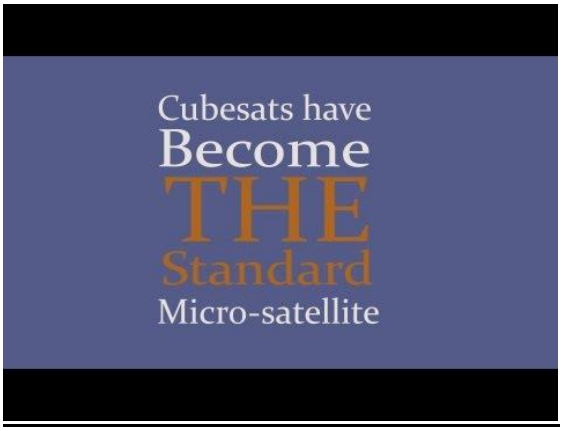
Adelaide radio heard 18,000 km away in Norway!

AM radio waves can travel amazing distances: a signal broadcast from 891 ABC Adelaide's Pimpala Transmitting Station at Reynella was received 18,000 kilometres away in the small seaside fishing village of Kongsfjord, Norway.

For the last 38 years Norwegian resident Arnstein Bue has been a keen radio scanner.

Every October since 1997, Mr Bue has travelled to Kongsfjord at the northern tip of Norway to scan the radio waves and learn about different people and cultures.

AN UPDATE ON CUBESATS



You will recall, I ran a piece on CUBESATS in an earlier issue. The popularity of CUBESATS is on the increase – and an estimated 200 CUBESATS are launched every year.

Being quite small – just a 10 CM cube and weighing not more than 1.30 KG, these are easily launched on a variety of rockets, giving students and amateurs a chance to carry out space experiments economically.

BUT – over the years the number of CUBESATS in space is going to be enormous and this means there are chances of their collision with larger spacecrafts/satellites. Actually the CUBESATS are supposed to be in space only for 10 years or so – but apparently many of them can last up to 50 years or more. Surely someone will think of this and take some measures to see that there is no danger lurking there in space! /-Ed

AMATEUR RADIO: GATEWAY TO WIRELESS COMMUNICATIONS

RSGB partners up with RFinder

The **Radio Society of Great Britain** (RSGB) and **RFinder** are pleased to announce a new business partnership agreement effective from the 1st August 2014.

The RSGB will be supplying the very latest UK repeater data for the RFinder which is a steadily growing worldwide repeater directory including IRLP, Echolink, AllStar, DStar, MotoTRBO, and even Winlink information.

RFinder currently has over 175 countries and 50,000 repeaters in the directory. Access to the World Wide Repeater Directory is provided by any version of the RFinder smartphone apps on Android, iPhone and iPad/iPod Touch. The same user-id enables access from any version of the RFinder app, the browser interface (web.rfinder.net), or through a growing list of third-party memory programming applications such as RT Systems radio programmers and CHIRP open source software.

More information about RFinder can be found at www.rfinder.net or on www.Facebook.com/rfinderwwrd

DEUTSCHLAND RADIO GOING QRT

After the recent closure of RADIO MOSCOW, I have just heard that Deutschland Radio will end broadcasting in the Medium and Long Wave-bands. I heard that on December 31, 2014, 'Donebach' 153 kHz, 'Sehlendorf' and 'Oranienburg' 177 kHz and 'Aholming' 207 kHz will close. Six more medium wave stations are planned to close on December 31, 2015. /-Ed

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