

Newsletter of the Amateur Radio Society of India (Indian Affiliate of IARU) April 2013 Issue

## President's message



#### Dear Members,

As this issue goes to press, ARSI will be starting the process for the nextAGM.

As has been the practice when we hold the AGM at different locations, this time it will be in Pune and the formal notice will be sent out in due course. We hope a large number of our members will participate, especially from the Western and Northern Regions as earlier most AGM's were in the South.

We have information from VU2JAU OM Jayu, that preparations are on in full swing for the upcoming Hamfest in Gwalior, which is also going north this time. Their webpage is being launched and an event was held in Gwalior on the 18th April, 2013 to

commemorate the Amateur Radio Day coinciding with the founding of IARU. This will be something to look forward to.

We have been receiving encouraging news that renewals of licenses and even issue of new licenses are now happening very quickly and it is very good news. There have been a lot of changes at WPC right from the top to bottom and ARSI will keep in touch with the new incumbents.

I wish you all good holidays in the summer- those with youngsters would have just finished their examinations and will be looking forward to some relaxation before the next round of admissions etc. starts.

73 Gopal Madhavan VU2GMN

## From the Editor's Desk



April 18th is WORLD AMATEUR DAY – and also the 88th anniversary of the founding of the IARU amateurs all over the world are doing their best to popularize this unique hobby. I remember, when I had just received my ticket I spoke to a professor of radio communications in a well-known scientific Organisation asking him if it was possible for me to speak to his students about amateur radio. To my shock, he was not at all interested in the idea, and said that radio-amateurs have fun "talking to other people across the street" and so it was a waste of time, blah blah

Even now there are people who are professionally involved in radio communications but are not aware of this extraordinary hobby. It is therefore our duty to speak to our neighbours and the general public whenever we get a chance, to showcase our hobby; arrange a demonstration and let them get a feel of what we are actually up to.

> 73 Ganesh VU2TS



## SPECIAL EVENT STATION TO CELEBRATE 150 YEARS ANNIVERSARY OF SWAMI VIVEKANANDA



A Special event station to commemorate 150 years of Swami Vivekananda was set up at SardhShati office, Naisarak, Gwalior. The call sign allotted was ATS150 . It was operated from 11 January to 20 January 2013. The station was operated by Jayu VU2JAU, Shubham VU3SXN, Harsh VU2HRR and Aniket VU2LOL.

The station was operated on 7, 14 and 21 mhz on CW and SSB modes. It was a great experience to the newly licensed hams to operate with so many stations at the same time. Many visitors came to enquire about the hobby and to see how it works. A special QSL card is printed.

The team had so many QSOs with lots of countries. Every one enjoyed the

operation. The equipment used was ATLAS 210 X hooked up to an inverted vee.

The photographs shows the station in operation.

[First time I heard/worked a VU special call with only numbers for suffix! -Ed.]

Gwalior is going full steam in producing new amateurs thanks to Jayu VU2JAU. The ASOC exam was held on 20th September 2012 and results announced in February 2013.

31 took the exams, 22 have passed successfully and awaiting their tickets.3 for General Grade and 19 for Restricted Grade.



Anil VU3UDK - Team VU3UNO - at B.R.HILLS - VHF Hilltopping



Aniket checking out the bands...



# GURGAON HAMS GEAR UP FOR HOME BREW ACTIVITY





VU2UUU and his portable HF yagi



Gurgaon Hams gear up for series of home brew radio activities due to sudden spurt in the population of hams. Five SWLs passed the Amateur Radio Examination (General/Restricted). Old timers thought it pertinent to trigger home brew activities among the new hams and all Novice hams were welcomed for an eyeball at Powergrid Club. The novice hams are VU3UUU (Kaustav), VU3VUV (Tarveen - XYL of VU3UUU), Neha (XYL of VU2TUM), Mayank, Bhupinder, Sandeep, Ashwini along with few SWLs, i.e., Sunil, Anand, Anurag, Navneet - the prospective hams.

Partho with his XYL - both radio lovers - surprised us with his new home brew 20 m

receiver. VU3UUU (Kaustav) & VU3VUV (Tarveen) also displayed newly assembled Transceiver BITX, thus, encouraging the new comers. By evening, the same day, VU3UUU made a QSO with UV ham & got 59 report with only 50 watts and a home brew Delta Loop Antenna.

Before departure, VU3UUU invited all near to his car for a demo, which was total surprise for all. Slowly, he assembled several 4 feet sections of PPR pipes and formed a Portable HF Yagi Antenna, which one can carry in one's car boot or in a bag. Antenna mast was fixed with a portable base plate having support from a car wheel. Installation/Assembly time is 5 to 10 minutes and ready for DX from anywhere.

The old timers VU2ATN, VU2LAS, VU2TUM, VU2OEC along with new hams and SWLs applauded the surprise demo. All thanked with promise to meet again in near future with more low cost amateur radio projects like "Rupees Forty VHF Receiver", Antennas for new hams etc. etc. This was a typical Gurgaon Ham activity. There will be many such activities in future. 73.

[Thanks to Rajesh VU2OEC, our regional representative from Gurgaon]



## Report from Ganesan VU3GEK

The Quilon Amateur Radio League (QARL) had organized an radio workshop on 9th and 10th February, 2013 for assembling 40M HF SSB/CW receiver LRR40.

The workshop was held at MAX institute, Karicode junction, Kollam and I conducted the workshop, ably assisted by VU2TKZ.

We are thankful to OM VU2KGN President of QARL for organizing this event and to the Secretary VU2SYT and all the office bearers and the participating hams.

The Workshop was a grand success and all the receivers assembled were tested successfully.



Wonderful! Hope more clubs take up the cue and hold similar workshops!-Ed.

# VHF Hill topping

January 19th saw many amateurs climbing hills; literally all the hills in South India were covered and long distance VHF QSOs made by the minute. Of course, use of repeaters was not allowed. 18 Teams took part; the highlight was participation by a team from Sri Lanka - 4S7JL. Here is a list of teams that participated along with the points scored:

Team	No of QSOs	Points
1 VU2MCL	156	2520
2 VU3OBR	143	2488
3 VU2ICI	143	2401
4 VU2FBI	129	1884
5 VU2MHC	70	1527
6 VU3JHK	52	1121
7 VU3YFD	60	940
8 VU2GRM	62	541
9 VU3SPD	61	508
10 VU3UNO	22	317
11 VU2SVF	42	171
124S7JL/P	20	132
13 VU2AXL	21	101
14 VU2ABS	Lognotrcvd	
15 VU2AJO	Log not rcvd	
16 VU2PTH	Lognotrcvd	
17 VU2SEJ	Log not rcvd	
18 VU3ULL	Lognotrcvd	,

For many this was the first ever hilltopping, and participants got a good idea of the distances that can be covered from different hilltops.



For example, Chetz/VU3DMP has this statistics nicely worked out for the team VU2MHC:

Team Call VU2MHC Distance in Kms.	- BababudangiriHill No. of Contacts	s, Chikmagalur : MK73VK Area covered
0 - 50	5	Chikmagalur, Bangalore Mobile
51 - 100	0	None
101 - 150	9	Manipal, Mangalore, Manjeshwar (Kerala)
151 - 200	20	DevarayanaDurga, Bangalore, Payanoor, Kannur (Kerala)
201 - 250	17	Bangalore, B.R. Hills, DoddabettaHill, Calicut, Wayanad, Sultan Battery
251 - 300	1	KotagiriHills
301 - 350	8	VathalMalai, ThrissurYercaudHills, Shivmalia, Yellagiri
351 - 400	4	Puthenchira South, Cherthala, Kakanad (Cochin)
401 - 450	3	KodaikanalHills, PerumalMalai, IdukkiHills
451 - 500	1	Thirumalaivayavoor
501 - 550	1	Kilimanoor(Trivandrum)
551 - 600	1	Mala MukalHill top
Total Contacts	70	

Everyone enjoyed the event – and all are eagerly looking forward to the next hilltopping... [I had the pleasure of participating with the team VU3UNO – Ed]

### 7330 km contact on FO-29!

On Monday at 1338 UT Hector Martinez CO6CBF achieved a 7330 km contact on the amateur radio satellite FO-29, the furthest he has worked and close to the theoretic maximum for the satellite

Hector, who is in grid square EL92sd, worked David, EA4SG in IN80cp using SSB.

He used a Yaesu FT-817ND transceiver, 30 watt power amplifier, and a homebrew Arrow with a homebrew mast mounted amplifier. Everything was powered by two 12 volt, 7 amp gel cell batteries. Hector operated from on top of a tall building which improved his horizon visibility toward Europe.

Hector says "We had just a 88 seconds window. Satellites are always fascinating! Thanks very much to David for this great contact and new grid! "

Hector is looking for other FO-29 contacts in the UK and Europe. His email address for skeds is: co6cbf at frcuba.co.cu

FO-29 information http://amsat-uk.org/satellites/fuji-oscar-29-jas-2/

First Cuba to EI contact on FO-29 http://amsat-uk.org/2013/04/04/6955-km-contact-on-fo-29/





## BRIEF NOTES ON TOROID CHARACTERISTICS by R. Jayaraman, VU2JN

The following notes are not meant to represent a comprehensive article on toroids.

1. Toroids are circular rings made of Powdered-iron or Ferrite, for use as the 'former' for winding inductors and transformers that do not interact with nearby metal objects, and do not radiate an electromagnetic field. The core cross-section may be square or circular.

2. Both Powdered-iron toroids and Ferrite toroids are passively magnetic. Powdered-iron toroids conduct electricity, so are painted for insulation. Ferrite toroids do not conduct electricity, and are not painted. This difference helps in identifying them.

3. Both types are available in various diameters, typically:

P-iron toroids: 0.25", 0.37", 0.50", 0.68", 1.06", 1.57", 2.00"

Ferrite toroids: 0.23", 0.37", 0.50", 0.68", 0.82", 1.14", 2.40"

Ferrite toroids are usually thinner than powdered-iron toroids of similar diameter.

4. Ferrite toroids have very high permeability, but saturate easily, so cannot transmit power. They are preferred for low-level tuned or broadband circuits. Powdered-iron toroids have lower permeability, but can carry larger currents without saturation. They are preferred for tuned or broadband circuits in RF power amplifiers, filters, antenna tuners, baluns, etc. Powdered-iron toroids are painted and colour-coded.

5. Both types are available in various 'mixes' having different permeability ( $\mu$ ) and recommended upper frequency (f). The types that are of interest to hams are:

P-iron toroids: Mix 1 -  $\mu = 20$  col. code Blue f = 8 MHZ

Mix 2 -  $\mu = 10$  col. code Red f=20 MHZ

- Mix 6  $\mu$  = 8 col. code Yellow f = 30 MHZ
- Mix 10  $\mu = 6$  col. code Black f = 60 MHZ

 $\label{eq:mix12-} \begin{array}{l} Mix\,12\mathchar`=3.5 \ \mbox{col. code Green} \ f=150\,MHz \\ Ferrite toroids: Mix\,43\mathchar`=450 \ \ f=4\ MHZ \ (tuned),\ 30\ MHz \ (broadband) \end{array}$ 

Mix 61 -  $\mu = 125$  f = 25 MHZ (tuned), 200 MHZ (broadband)

6. Powdered-iron toroids are named with the prefix T, whereas Ferrite toroids are named with the prefix FT. Examples:

T-37-2: powdered-iron core, 0.37"o.d., mix 2.

FT-50-43: ferrite core, 0.50"o.d., mix 43.

7. The inductance of a toroidal coil is given by the expression:

 $L(in \mu H) = N2.A_L / 10000$ 

where N is the no. of turns, and the  $A_L$  value (unit  $\mu$ H) depends on the dimensions of the toroid as well as its permeability.

8. For a particular toroid diameter, the  $A_{\scriptscriptstyle L}$  value is proportional to

the permeability and the cross-sectional area of the core. AL values for some common toroid types are:





Туре	μ	AL (unit µH)		Туре и	AL (unit µH)	
T-37-2	-	10	40	FT-37-43	850	420
T-37-6		8	32	FT-37-61	125	55
T-50-2		10	50	FT-50-43	850	523
T-50-6		8	40	FT-50-61	125	68
T-68-2		10	57	FT-68-43	850	540
T-106-2	10	135		FT-82-43	850	557
T-157-2	10	140		FT-114-43	850	603
T-200-2	10	120		FT-240-43	850	1249

A 20-turn test winding on a T-50-2 toroid would show an inductance of  $2 \mu$ H. A similar winding on a FT-50-43 toroid would show an inductance of  $21 \mu$ H.

9. There are no clear-cut rules on the RF power that Powdered-iron toroids can handle. In circuits meant only for impedance transformation, they can be allowed to get moderately warm. In circuits where there is a DC flow or some selectivity is also desirable, the power has to be reduced. So, a particular toroid is usable at the highest power in a balun, and at progressively less power in an ATU, a broadband PA stage, and a tuned PA stage. Approximate ranges are: T-68-2: 40/10 W; T-106-2: 120/30 W; T-157-2: 200/50 W.

Note: The AL values for Ferrite-core toroids given in the Table have to be multiplied by 10 in order to make them compatible with the inductance formula given.

Compiled by: VU2JN, Feb. 2013.



## "If you can't hear 'em, you can't work 'em." (A Primer for the DX Hearing Impaired)

- 1. Noise is usually worse on the low-bands (160M and 80M) during the summer.
- 2. The Jobs of Transmitting and Receiving Antennas.
- 1. Transmitting. A transmitting antenna should efficiently radiate all the power supplied at the desired elevation angle and azimuth. The power radiated should be concentrated so as to achieve gain. You want to be loud!
- 2. Receiving. A receiving antenna should "hear" only signals from the desired angle and azimuth. You want to be selective!
- 3. Gain and directivity are not the same.
- 1. Gain is defined as the ratio of the maximum radiation intensity in a given direction to the maximum radiation intensity produced in the same direction from a reference antenna (such as the fictional isotropic radiator).
- 2. Directivity is defined as the ratio of the maximum radiation intensity to the average radiation intensity.
- 3. The main difference between gain and directivity is the losses inherent in the antenna. Gain is lower than directivity by a factor which matches antenna efficiency.
- 3. Noise.
- 1. It is all relative. Even a QRP signal, in the clear, with low noise, is easy to copy. Strong competing signals and high background noise make it impossible to copy a signal buried in the QRM.
- 2. Sources of Noise.
- 1. Over the ether on the real antenna. The noise and signal arrive together. There is no real fix at the antenna.
- 2. From the coax as an antenna. Get rid of common mode currents with good engineering practices good connectors, common mode chokes, grounding of shields, and coax placed on or under the soil.
- 3. From the mains as an antenna. Install line filters at the chassis input, and earth equipment cases.
- 4. Thermals inside the receiver. Run the receiver RF gain as low as possible. Replace overheating resistors, and other noisy components.
- 3. Direction. Noise can be concentrated, or uniform, in distribution. Do a survey for your QTH. Know where your noise "devils" live. You may find your QTH has its own in-house devils in TVs, computers, power supplies, gas discharge lights, bad connections, etc. Get rid of your QTH noise.
- 4. Combinations. Your antenna directivity, local noise, and number of propagation hops determine how well you will hear another station.
- 4. Signal to Noise
- 1. Definition of SNR. This is the ratio of the power of the desired signal to that of the unwanted signal (noise), usually expressed in dB measurement as  $S/N = 10 \log (PSignal/PNoise)$ .
- 2. Required SNR. In dBs these minimums for communications are:

10

- 1. CW 0+
- 2. SSB
- 3. AM (ham) 15 (3 KHz BW)
- 4. Broadcast 26(5 KHz BW)
- 3. Turn up the power. Turning up the power will help the other station hear you, but won't help you hear him. Good listeners are better than loud talkers.
- 4. Antenna Merit Measurements. The two systems of ranking of low-signal, highperformance, receiving antennas are:
- 1. RDF Receiving Directivity Factor is the measure of the difference between the

#### **OFFICE BEARERS**

#### President

Gopal Madhavan, VU2GMN "Shreyas Apartments" 128 Greenways Road, Chennai- 600028 Phone: +91(44) 2493 7724 E-mail: vu2gmn@gmail.com

Vice President

Ved Prakash Sandlas, VU2VP C9-9109, Vasant Kunj New Delhi 110070 Phone: +91 (11) 2613 2130 E-mail: vpsandlas@vsnl.com

#### Hon. Secretary

K. N. Rajaram, VU2KKZ #27 Shrungar Shopping Complex Mahatma Gandhi Road Bangalore, Karnataka 560001 Phone: +91 (80) 2558 6006 E-mail: secy.arsi@gmail.com

#### Treasurer

Govind Girimaji, VU2GGM No. 36, Poorna Sheha Colony Chikkal Sandra Bangalore - 560 061 Phone: +91 94484 90465 E-mail: ggirimaji@gmail.com

#### Editor

T. S. Ganesh, VU2TS B.R.HILLS KARNATAKA 571313 Phone: +91(8226) 244034 E-mail: ganesh@watapi.com

#### QSL Manager

Ananth G. Pai, VU2PAI Post Box No. 730 Bharath Bagh, Kadri Road, Mangalore 575 003. Tel : +91 98441 13030 E-mail : vuqslbureau@gmail.com

Monitoring Systems Coordinator B. Manohar Arasu, VU2UR MIG 6 80 Feet Road, KST Bangalore Karnataka 560060 Phone: +91 93426 67388 E-mail: vu2ur@rediffmail.com

Contest and Awards manager Prasad Rajagopal, VU2PTT Post Box No. 7523, Bangalore 560 075. Tel : +91 98450 72165 E-mail : vu2ptt@gmail.com

The address of the society to which all correspondence should be sent is:

K. N. Rajaram, VU2KKZ #27 Shrungar Shopping Complex Mahatma Gandhi Road Bangalore, Karnataka 560001 E-mail: secy.arsi@gmail.com



maximum forward gain of an antenna and the average gain of the antenna (usually in dBs). Average gain is calculated by EZNEC.

- 2. DMF Is similar to RDF, but uses the back hemisphere only.
- 3. RDF is best choice where the noise is uniform (from all directions).
- 4. The usual range for RDF is from 5 to 15 dBs; the higher, the better.
- 5. Don't be too concerned with VSWR, losses, etc., in a receiving antenna.
- 5. Choosing an Antenna.
- 1. What is not considered. This note does not consider what can be done with filters, passband manipulations, signal processing, noise blankers, noise limiters, noise cancellation, etc. These may help, but try them later.
- 2. Characteristics.
- 1. As a comparison standard, I selected a K9AY (really an array) antenna with MININEC ground (RDF = 7.5), as it is readily buildable, and has a good DX "takeoff/incident" angle. Only one support is needed.
- 2. For another example of a specialty receiving antenna see the K6STI at http://www.robkalmeijer.nl/techniek/ electronica/radiotechniek/hambladen/qst/1995/09/page37/index.html.
- 3. Resonant or Non-resonant. Consideration should be given as to whether your receiving antenna has to work on several bands.
- 4. Time, Size, Cost, Benefit. How much land, cost, effort, and engineering you are willing to give?
- 3. Take your pick. A very long beverage, or an array (usually beverages or verticals) are the top contenders. More, and longer, elements, are better.
- 4. How Much is Enough?
- 1. Many operators use receiving antennas with an RDF of between 5 and 12 dBs. It is possible to achieve a RDF of 15 dB.
- 2. One dB is not much difference unless it is the 1 dB above the noise floor. On CW, that 1 dB is the difference between a confirmed QSO, a QSL card, and listening to the noise.
- This note <u>ISNOT</u> all you need to know. For more information see the articles by Greg, W8WWV, (RDF Metric) at http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/RDFMetric.htm/, and (several notes) by Tom, W8JI, at his website. WWWW8JI.com/. Also see Section 7-8, et seq., of Low-Band DXing, Fifth Edition, by John Devoldere, ON4UN, available from ARRL.
- 6. Will a specialty receiving antenna (or array) be the biggest improvement for your station? I hope this note makes you inquire.

73 from Shillong. Jim, W4GFX.

Do you

know:

[You may contact Jim at <elkins1936@gmail.com>, or call 0 98560 40368.]

Type III solar radio bursts are produced by electrons accelerated to high energies by solar flares. As the electrons stream outward from the sun, they excite plasma oscillations and radio waves in the sun's atmosphere. When these radio waves head in the direction of Earth, they make themselves heard in the loudspeakers of shortwave radios around the dayside of the planet.

# **The Michael Owen Plaque**



IARU Region 3's highest scoring single operator at the IARU HF Championship in July will receive the Michael Owen Plaque.

In announcing the new plaque, the Wireless Institute of Australia aims to encourage excellence in IARU Region 3 contesting in memory of his vast work and dedication.

Michael Owen served both the IARU and the WIA over many years. He was involved with the Amateur Radio Service since the 1960s, starting in Victoria, moving to the Federal arena, and served as IARU Vice President from 1989-1999.

At the time of his death he was both the IARU Region 3 Chairman and WIA President. He passed away last September 22, aged 75.

The plaque in his memory is for any mode or bands and shall be awarded annually to the single operator scoring the most points in the IARU HF Championship, run for 24 hours on July 13-14.

Jim Linton VK3PC



**The 17th Kerala VHF Fox Hunt** was successfully conducted by the Quilon Amateur Radio Leage as part of World Amateur Radio Celebrations. The function was flagged off by Dr.Sreejayan, VU2JYN at 9.00 AM on 31/3/2013 near moffusil bus stand, Calicut. The following teams were declared as the winners:

1st prize - Team led by Shri Anil Kumar, VU2FA. Other members were Mr. Ajayakumar, VU2AJF and Mr. Shaji, VU2WIJ

2nd Prize - Team of Mr. Sunil, VU2ATB and Mr. Najeeb VU3PEB

3rd prize - Team of Dr.Abraham, VU2OJ and Dr.Rajesh, VU2LTV

Congratulations to the winners. They will be awarded CSD rolling shields and cash awards during Ham Fair, 2013 at Kollam on 21st April, 2013.

# LituanicaSAT-1 with Ham radio FM transponder to deploy from ISS

Members of the **Vilnius University Amateur Radio Club** of Lithuania have been involved in the development of LituanicaSAT-1 which will be the first Lithuanian satellite,

**LituanicaSAT-1** is scheduled to be delivered to the International Space Station (ISS) on the SpaceX CRS-3 mission towards the end of 2013 and be deployed from the ISS by the JEM Small Satellite Orbital Deployer

(J-SSOD) of the Japan Aerospace Exploration Agency (JAXA).

The satellite will use low cost open-source software and hardware for primary and secondary flight computers that will control the payload consisting of an onboard VGA camera, GPS receiver, UHF CW beacon 100mW, 9k6 AX25 FSK telemetry TX 2 watts and **FM Mode V/U transponder 150mW Voice Repeater.** 

Facebook https://www.facebook.com/Lituanicasat1

### 9M2SE - Malaysian Special Expedition Team

9M2SE (Malaysian Special Expedition Team) will operating and activating PerhentianBesar Island IOTAAS-073 on May 1st, 2nd and 3rd to promote Malaysia's beautiful island and also IOTA activities.

Our operators are, Piju 9M2PJU, Khairul 9M2KRZ, Rizal 9M2RDX and our special guest from Poland, Jacek SP5APW. Jacek will continue to operate till 7th May as 9M2/SP5APW.

Our operating equipment will be two 100 watts transceivers, a vertical antenna and a tribanderyagi. QRV from 40m to 10m CW, SSB and also digital. For QSL information, please read carefully on QRZ.com.

#### Some info on Perhentian island,

The Perhentian Islands (PulauPerhentian in Malay) lie approximately 10 nautical miles (19 km) off the northeastern coast of West Malaysia in the state of Terengganu, approximately 40 miles (64 km) south of the Thai border.

The name "Perhentian" means "stopping point" in Malay, referring to the islands' traditional role as a waypoint for traders between Bangkok and Malaysia. The islands were sparsely inhabited by fishermen for centuries, although tourism now accounts for most economic activity.

The Perhentian Islands appear on many maps of the nineteenth and twentieth century as 'The Station Islands'. This arises from the British colonial period, as an English translation of "stopping point".

Tnx Southgate ARC news

## Ham Radio Direction Finding for Beginners

This video covers beginner's tips and tricks on amateur radio fox hunting/ direction finding and includes details to build a DIY Yagi antenna.

The YouTube description says:

In the last 3 minutes of the video 4 young kids go out to rescue the poor lost Easter Bunny and his basket of candy. The Easter bunny is wearing a radio transmitter so this fox hunt becomes an Easter Sunday bunny hunt. The boys did great and had no problem learning to use a ham radio and directional antenna to locate the lost bunny.

Our fox, aka bunny, was the Byonics micro-Fox 15 which is a 15mw transmitter in the 2 meter ham band. This fox is sold by a company called Byonics: http://www.Byonics.com/

Watch Rescue the Easter Bunny - Ham Radio Fox Hunting for Beginners

The ToddFun site describes how to build a DF Yagi antenna

http://www.toddfun.com/2013/04/04/rescue-the-easter-bunny-ham-radio-fox-hunting-for-beginners/



### Abdication of Her Majesty the Queen of the Netherlands

Queen of the Kingdom of the Netherlands, Beatrix van Oranje-Nassau, will hand over on 30th April the throne to her eldest son Prince Willem Alexander.

On 30th April 1980 she took over the throne of her mother Juliana. When she abdicates her throne she has been our Queen for almost 33 years. From this moment on 30th April 2013 she will become princess again.

Further information about the Abdication of Her Majesty the Queen can be found on the website of the Royal House! (see: www.koninklijkhuis.nl/globale-paginas/taalrubrieken/english/news/).

Several special stations are expected to be active to celebrate the event:

PB33Q from 20 April to 1 May (QSL via PA7DA bureau only),

PA200KING from 18 April to 5 May (QSL via PD5ROB),

PA33KBX operated by Contest Group ZeeuwsVlaanderen from 26 April to 23 May and

PC13KING operated by Contest Club Apeldoorn from 22 April to 2 May (QSL via PA1DV).

QSL please via the bureau or send an e-mail to <pa7da @ veron.nl>

Other stations that will be active during this time slot include:

PB2013KING (QSL via PA9LUC), PB6KING (QSL via PB2JJ), PC6KING (QSL via PC7C), PD6KING (QSL via PD9ND) and PE6KING (QSL via PE1KFC).

## We have just received a report on the World Amateur Radio Day celebrations in Gwalior...



WORLD AMATEUR RADIO DAY CELEBRATIONS IN GWALIOR

On 18 April 2013 World Amateur Radio Day was celebrated in Gwalior Glory High School.

Jayu S. Bhide (VU2JAU) and AniketAshtikar (VU2LOL) conducted the program. More than 100 students of 9 to 12 Standard along with their teachers and Principal Mrs. Rajeshwari Sawant participated.

The program started with a welcome speech by the Principal, Mrs. Sawant. She explained the importance of HAM Radio and the need for generating interest among students.

Jayu started his address by focusing on HAM Radio as a national resource.



World Amateur Radio Day is observed the world over on April 18 each year as the foundation day of the International Amateur Radio Union (IARU) back in 1925.

The IARU is the federation of 160 national amateur radio associations and represents the interests of ham radio operators to the International Telecommunications Union (ITU) which is the UN body charged with managing worldwide radio frequency allocations. The theme for this year's World Amateur Radio Day was: "Amateur Radio: Entering its Second Century of Disaster Communications". Hams are best recognised for their contribution to disaster relief work in areas where communications are inadequate or non-existent.

Even advanced countries like America recognize the importance of HAM Radio in times of disaster. It is heartening to know that in the Boston Marathon bomb blasts a couple of days ago about 200 HAMs provided radio communication to the authorities.

In his presentation, Jayu illustrated the activities of Amateur Radio operators during disasters, expeditions and educational activities. He also explained the educational



benefits to the students. After the presentation, a movie on HAM Radio was screened for the audience.

The program ended at 1.00 p.m. Most of the students in addition to the Principal and teachers desired to appear for the HAM Radio Examination (ASOC) in order to qualify for ham radio license. Lots of questions were asked by the teachers and students and Jayu answered the queries to the satisfaction of all.

### INAUGARATION OF HAMFEST 2013 WEBSITE

On the occasion of World Amateur Radio Day 18 April 2013 the Web site of HAMFEST India 2013 (hamfestindia2013.com) was inaugurated by General Manager, BSNL, Gwalior Mr. PrashantTrivedi accompanied by Dr. K.K. Pattanaik, Coordinator, ABVIIITM and Principal Gwalior Gory High School, Mrs. RajeshwariSawant, in Hotel Surya, Jayendraganj, Gwalior at 6.00 p.m. in the presence of about 40 members of the audience and officials of HAMFEST India, Gwalior. Secretary Mr. R.K.Khetan, VU2IG gave a welcome speech paying respect to our very old HAM Mr. S.N. Sharma, VU2WS (popularly known to hams as VU2 Whisky Soda). Mr. Khetan praised every one who who joined in the onerous task of making the HAMFEST successful event.

Jayu S. Bhide VU2JAU, Chairman, explained the design and content of the website which provides for Online registration with generation of a slip, list of registered HAMs, tourist information regarding Gwalior and its historical places, information of the venue, tentative program of the



HAMFEST which will be finalised and updated, arrangements of stay of delegates etc.

He also explained that subject to permission of GM of BSNL a VHF repeater will be put up on Gwalior Fort, it will be an advantage to all HAMs and delegates at the time of HAMFEST. The Principal, G.G.H.S., Mrs. Sawant also praised the efforts of all Gwalior HAMs who are working hard to popularise this hobby. She informed that 50 students of Gwalior Glory High school along with teachers including herself are eager to take the ASOC examination. She further said she personally would assist the HAMFEST along with her school teachers. ABVIIITM Coordinator was impressed with the work HAMs are doing and expressed his willingness to render help of every kind to make the HAMFEST a big event.

Mr. PrashantTrivedi, General Manager, BSNL, Gwalior was happy to be with the HAM fraternity of Gwalior and declared his approval and help/support for installation of a repeater on the Gwalior Fort before the dates of the HAMFEST. He expressed his desire to join the HAMs of Gwalior and appear in the ASOC Examination. He also praised the design of the website and said it was nice to see such a soothing site. He also liked the contents of the website.

In the end, vote of thanks was proposed by Mr. Pravin Gupta VU2PGZ. The program was nicely conducted by Mrs. MekhalaNatu who requested all to join for high tea.

The program was attended by Jayu VU2JAU, R.K.Khetan VU2IG, S.N.Sharma VU2WS, Swati Gupta VU2OLH, Pravin Gupta VU2PGZ, AniketAshtikar VU2LOL, Chaudhary VU3SLX, KailashAgarwal VU4KC, Aditya, Avinash, Vivek Joshi, Dr. Kumar, DivyaTiwari, Shivanand Sharma and his team and PrakashBhise,

## Where To, After Microsoft XP End of Support?

After 8 April 2014 Microsoft will no longer offer future support, or updates, for the popular Windows XP OS. This lack of support and updates will create the need for a replacement operating system. One solution is to buy a more current version of Windows (Vista, 7, or 8). With featurecreep, Windows software has grown larger and more demanding of computer resources-disk space, chip memory, and processor speed. Before upgrading to a later Microsoft OS, download (from Microsoft) and run one of its programs that tests if the new OS will run on your machine, and what changes are needed (hardware and drivers). An example of a "test" software is found at http://windows.microsoft.com/isis/windows/downloads/upgrade-advisor.

Software has three costs: 1) what you pay for it in cash, 2) the hardware needed to run it, and 3) the time it takes to install, configure, and learn how to use it. If the Amateur Radio Operator has a large investment in other software which runs on Windows, he or she may decide to buy the successor Windows OS.

I chose to investigate the merits of using one of the many free Linux distributions, as Linux distributions run very well on lesser computers and some of my computers are old. We all thought of Linux as a mainframe, UNIX-type, terminal and keyboard operated software with its roots in the 1970s. No one wanted to learn to type the commands and look at a black and white, or green, screen. However, the Linux community has kept pace, and the Linux graphical-user-interfaces (Gnome and KDE) are the peers of the best of the Windows OS. There is little learn-up time, and a user is comfortable "mouse-clicking" the commands.

Some of the more popular Linux distribution are Ubuntu, Mint, Red Hat, Fedora, openSusie, and Debian (there are more). These distributions are available by free download (not a good solution on a slow Internet connection as they are large), or an installation CD or DVD, which can be purchased from a seller on www.ebay.com, or www.amazon.com. The usual cost is \$5 to \$25 USD, depending upon what is bundled with the free Linux operating system. Most come bundled with the equivalent of Microsoft Office, and most have free down-loadable software(s) which number in the thousands. Updates are also free downloads. No virus checking is required. Some sellers offer disks that contain multiple distributions so you can pick and choose the one you prefer.

Linux can be easily installed on the same hard-disk with Windows, and you can use the co-installation as a set of training wheels before you fully commit to Linux. You can install Linux on as many machines as you have-it is free, open source, software.

The Linux Journal for January 2010 featured Ham radio. Have a look at what is available in Linux amateur radio software by typing into Google the words "Fedora Amateur Radio Guide." If you are using another Linux distribution type in the name of your distribution (say "Mint" followed by "Amateur Radio Guide"). If you are an ARRL member you can search the archives of QST magazine and find references to Linux programs for "Ham radio." Just last evening I was using "Linsmith," a Smith Chart package which is a free download in Linux.

My wife has a small guest house in Shillong. I looked at the various distributions of Linux and initially chose Ubuntu. I ran it on my computer for a year, and later decided to install Mint 14 (an Ubuntu offshoot) at the front desk, as it is more "Windows –Like." The computing needs at the front desk are Internet browsing and email, word-processing, and spreadsheet. I converted the front desk computer to Linux and gave the front desk crew 15 minutes of instruction on Mint. In the few months after installation, I have had no request for help, and no complaint. All the templates created in Microsoft Office worked on the Linux equivalent (Libre Office), without tweaking.

Pick the distribution which appeals to you, and take a test drive. 73 de Jim, W4GFX, in Shillong.