

Focal points of interest:

- ✦ HAMRADIO 2010 Germany
- ✦ DARC anniversary
- ✦ Amateur radio awareness
- ✦ ASOC Examination
- ✦ STUDSAT-Student Satellite
- ✦ ISDR-Software Defined Radio



The President of India, H.E. Smt. Pratibha Devi Singh Patil presenting 'Thanks Badge' to Mrs. Bharathi Prasad VU2RBI, Chief Coordinator NIAR for meritorious service in amateur radio activities of the Bharat Scouts and Guides.

Dear readers

The issue in your hands updates you on the major happenings in the world of Amateur Radio during May-June 2010 with the lead story being the convention of HAMRADIO-2010. Wish you happy reading...

Department of Information Technology, GoI at HAMRADIO-2010 Germany



Mr. B.M. Baveja, VU2BMB, Senior Director & HoD, Department of Information Technology, Govt. of India, at the International HAMRADIO-2010, Friedrichshafen, Germany.

HAMRADIO was the event to be for amateur radio operators (HAMs) from all over the world from Friday, 25 June until Sunday, 27 June 2010. HAM RADIO an International Convention, forum and exhibition attracted over 17000 delegates from all continents.

Mr. B.M. Baveja, VU2BMB, Sr. Director & HoD, Dept. of Information Technology (DIT), Govt. of India and Mr. S. Suri, VU2MY, Chairman & CEO NIAR attended "HAMRADIO-2010" at Friedrichshafen, Germany, the largest gathering of Amateur Radio operators in Europe.

Many exhibitors from 29 countries provided an overview of the latest technology and equipment. These were spread over four halls and amateur radio operators as well as electronics enthusiasts were showered with ideas and got many opportunities to buy

anything from antennas to peripherals and accessories comprising electro technology and measuring devices to hardware, software and electronics. The HAM flea market was spread out over three halls where enthusiasts and hobbyists could purchase exclusive, used accessories and spare parts from individuals.

The three day event included parallel sessions on various topics like emergency communications, digital technologies, antenna engineering, policy matters, workshops besides many other topics deliberated by Amateur radio experts from across the globe. Besides the above, other topics of discussion included-European Balloon Project, Future Developments of D-Star and Digital Voice, Software Defined Radio for Ham Radio - an Introduction to SDR-hardware and software

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DARC 60th anniversary

DARC's anniversary in 2010 marked the HAM RADIO convention. The German Amateur Radio Club currently has 43,000 members and traced its 60-year history with a special exhibit. Daily prizes were raffled off. The 61st annual DARC convention on Lake Constance with over 40 presentations and 13 meetings formed an important part of the overall program. True to its motto, 'By amateur operators for amateur operators', the main purpose of the event was to promote dialogue and an exchange of ideas, as well as to share the joy of communication and technology, said Stephanie Helne of DARC, the sponsor of HAM RADIO-2010. One of the main topics discussed was digital, wireless voice transmission. Four presentations, dealing specifically with this topic like Future Developments and Trends in D-STAR Digital Transmission, Monitoring and Alert Notification through D-STAR gateways, Ham radio and Internet etc.

European follow up

Mr. Suri visited Austria and Spain in Europe holding meetings to discuss on the state of art technologies with Amateur Radio organizations on "Amateur Radio Advanced Digital Communication Network" being implemented by NIAR with the support of DIT of the Ministry of Communications, India. This European visit followed the HAM RADIO - 2010 convention.

DIT at HAM RADIO-2010

... (from page-1) International Space Station Contacts in Class, Digital Sensors, and Antenna Construction among other sessions.

A balloon was launched with amateur radio transmitter and a camera.

40 Years of Monitoring Service - Detection of Digital Intruders, Antenna engineering today, German DX-Foundation, General Meeting, HF/Technik-Committee informed WRC 2012 Preparation, LW/MW Experiments, Solar Cycle, Ham Radio abroad - What is possible and what not, Remote SDR, Monitoring of D-Star Gateways, DARC and New Embedded Communication Systems, Long-Yagis for VHF/UHF - New Matching Concepts, "Solf 2009" a New All mode All band Kit, Emergency Communication Forum, German Amateur License Exam Class A and E, SAM Simple Aurora Monitor, YL-Meeting, D-Star for Beginners, PLT in Standardization, Terahertz Operation at Lake Constance, Campaign against PLT etc, were some topics among

others were organized in parallel sessions on the second day and -Amateur radio Direction Finding Competition, Departure Contest, Noise - Myths and Facts, Radio Lobby Work, one to one meets, exchange programs were the highlights of the final day.

Balloon mission: In keeping with the presentation by Michael Matthes, DL2SEK, on the European Balloon Project, two weather balloons with a radio transmitter and a camera on board were launched from the west open-air grounds on Saturday, 26th June at 10:30 am. The project was organized by a European team. The local Taubertal-Mitte club was in charge of the first balloon and payload. A Polish team launched the second balloon. The flight plan was overseen by French ham radio operators. During the entire flight, digital sensor data, position and voice information was transmitted. A pursuit team on the ground tracked the balloon and recovered the payload undamaged.

Contest University

For the first time in connection with HAM RADIO - 2010 Friedrichshafen, there was a Contest University organized, jointly sponsored by the DARC Committee for DX and HF Radio sport, the Bavarian Contest Club (BCC) and the Rhein Ruhr DX Association (RRDXA). The Contest University consisted of two blocks. The first, under the direction of Michael Höding, DL6MHW, covered six topics for beginners and intermediate operators on Friday afternoon. In the second block on Saturday, Helmut Heint, DK6WL, conducted the contest forum to include topics for advanced contest operators.

The goal of this training was to infuse beginners in amateur radio with a passion for radio-sport and help them build a solid knowledge base. The contest experience is designed to provide amateur radio operators with useful knowledge and suggestions to improve their skills.

Awareness Programs on ADCN

As part of the project funded by DIT, awareness programs and live demonstrations on "Amateur Radio Advanced Digital Communication Network" (ADCN) were organized by members of NIAR organized at different RMS & Client station locations. A power point presentation and live demonstration to the participants were held for the participants.

Bengaluru: One such program was conducted at the Indian Institute of Hams, Sree Kanteerava Outdoor

Stadium on 16th May 2010 for about 50 members.

Srikakulam: An awareness program was conducted at Government Degree College, Srikakulam on 5th June 2010.

Over 50 students participated. A live demonstration was shown and a presentation cum lecture on the proposed digital technology was given by Ms. S. Yamini, VU2YAM ably aided by Ms. M. Bhanumathy, VU2BL, Mr. Mukesh, VU2MCW and Mr. Mallikarjun, SWL.



... Awareness Programs on ADCN

Tenali:



An awareness program was conducted at NVR College of Engineering, Tenali on 17th June 2010. Over 150 students have attended the program. A power point presentation and live demonstration to the participants by Ms. S. Yamini, VU2YAM ably aided by Ms. M. Bhanumathy, VU2BL, Mr. Mukesh, VU2MCW. The college conveyed extending its support to organize awareness programs in future.

Chikmagalore:

An awareness program was conducted at Mountain View College of Management & Sciences, Chikmagalore on 23rd June 2010. Over 250 students have attended the program. A power point presentation and live demonstration to the participants. The college extended their support to organize awareness programs in future. The demo was conducted by Ms. S. Yamini, VU2YAM and assisted by Mr. Mukesh, VU2MCW and Mr. Bharath, Investigator, ADCN project. Mr. Johar, VU3HDS, local ham also assisted in the program.



THE NEW INDIAN EXPRESS
24/6/2010

Amateur radio station to come up at city college

Express News Service
Chikmagalur, June 23

NATIONAL Institute of Amateur Radio (NIAR), Hyderabad, has pioneered nationwide and world-wide wireless communications supported by emergency and disaster communications besides enabling radio operators to increase their personal knowledge of electronics and radio theory, local Ham Radio operator Johar said on Wednesday.

In an awareness programme and demonstration on 'Amateur Radio and Advanced Digital Communication Network' held at Mountain View College of Management and Sciences here on Wednesday, he said the current project, supported by the Department of Information Technology,

Government of India, is setting up 10 RMS servers and 20 client stations in various parts of the country including Chikmagalur. Students were given live demonstration on Amateur radio by the co-investigator S Yamini.

Amateur radio, often called Ham Radio, is both a hobby and a service in which participants, called hams, use various types of radio communication equipment to communicate with radio amateurs. Outlining the advantages of this system, Johar said long distance communication where sometimes signals are marginal and bandwidth is restricted are done without any compromise on audio quality. "The system also provides e-mail capabilities with attachments, position reporting, graphic and text weather bulletins, robust emergency communications between Internet users and the amateur radio communities," he added.

Bharath Kumar of NIAR, local Ham Radio operators Padmanabhan and Manjunath participated in the event. Mrs Habib Pasha, the proprietor of Mountain View College, gave her consent to set up the client station in the college.

HAMRADIO-2010
Friedrichshafen, Germany

EUROPEAN

BALLOON PROJECT



Award from Science Olympiad Foundation

Delighting Delhi

Hearty congratulations to Ms. Nisha M. Mohan, VU2NIS, PGT Physics, Kendriya Vidyalaya No.2, Uppal, Hyderabad for receiving Best School NSO Incharge Trophy and cash award from Science Olympiad Foundation (SPF), New Delhi for the continued support rendered towards popularization of Science, Maths & IT of which amateur radio is an important component.

BEST SCHOOL NSO INCHARGE TROPHY

awarded by



for the continued support rendered towards popularisation of Science, Maths & IT



Ms. Nisha M. Mohan

Kendriya Vidyalaya No. 2, Uppal
Hyderabad

A ham radio demonstration was organized by Ms.D.Bharathi Prasad, VU2RBI along with Ms. Mahathi VU3DSM who is a 12th class student from Delhi Public School, R.K. Puram, New Delhi to Delhi School children at 10:00 am to 1.00 PM on 14th May 2010 at National Bal Bhavan, Kotla Road, New Delhi-2. The children were told about the importance of World Telecomm-unications Day and the role of telecommunication in changing the face of the Globe, different types of communication and digital communication through computer. Mr. Sushil Kumar Dhingra, VU2SD helped for demonstration from NIAR, Hyderabad.

6th Asia-Pacific Regional Air/Internet Jamboree-7-8 August 2010

The Asia-Pacific Region of WOSM is pleased to introduce the 6th Asia Pacific Regional Air-Internet Jamboree. Persekutuan Pengakap Malaysia (PPM) will host this year's event on 7-8 August 2010.

The Air-Internet Jamboree is a regional event in which Scouts can contact each other by means of amateur radio and through the Internet. Having a live conversation with a fellow Scout in some other place in the world gives the same excitement like having a normal Jamboree on the land minus the normal expenses. Just like the normal Jamboree, the Air-Internet Jamboree is also an event during which Scouting experiences are exchanged and ideas are shared. It's a great and unique opportunity for Scouts

of all ages to communicate with each other as when in actual fact they are in their own countries. Indeed, Radio Scouting eliminates the distances and fosters a closer relationship of the worldwide Scouting movement. Bharat Scouts and Guides will take necessary arrangements for the success of the APR JOTA /JOTI by contacting Amateur Radio Operators in their area. Freq. 40m 7.090 - 7.030 MHz, 20m 14.290 - 14.060 MHz More details are available at <http://apraj.scouts.my> and will have links from <http://www.scout.org/asia-pacific>, www.scoutlink.net,

Jamboree On The Air - JOTA
'Scouts can contact each other by means of amateur radio and Internet'.

Hyderabad: Demonstration at Life Health Reinforcement Group



A Demonstration was held for the Life Health Reinforcement Group at Kothapet on the occasion of IV anniversary of Open House / Andari Illu (Telugu) on 15th June 2010 by Mr. S.Ram Mohan, VU2MYH and assisted by Jose Jacob, VU2JOS and Mr. Mukesh Kumar, VU2MCW. About 50 delegates attended the program. Special thanks to Dr. Prakash for organizing this program.



Demonstration at Residential Science Workshop



The Dr. A S Rao Awards Council, an NGO in Hyderabad, has been conducting Science Talent Search examination for students of 8th, 9th and 10th class studying in different schools throughout Andhra Pradesh for the last 20 years. Every year Residential Science workshop is held for the first 50 topper of 9th class during summer vacation. Amateur Radio communications was introduced to the students of 9th class participating in the Residential Science Workshop at Vikas Concept School, Ballupally by Mr.S. Ram Mohan, VU2MYH ably aided by Ms. M. Bhanumathy, VU2BL and others.

'STUDSAT' - Student Experimental Satellite Launched by ISRO



Engineering students Swetha Prasad and R. Harish Rao, who designed the Pico satellite, at SHAR in Sriharikota in Nellore district. (Photo: The Hindu)

Studsat (Student Satellite) is a unique satellite technology endeavor undertaken by college students in India. Studsat will be the first Pico-Satellite being launched by India, and is very special - since it is a project undertaken by Under-graduate students from seven different Academic Institutions, from different regions of India, under the guidance of the Indian Space Research Organization (ISRO).

Studsat will be the smallest operational satellite launched by ISRO. The mission of the satellite is experimental in nature, but the major objective of this mission is to enable students to have hands-on experience on Space technology by involving themselves in the design,

fabrication and implementation of a full-fledged space mission at a nominal budget.

An internal MoU has been signed between the colleges, and Nitte Meenakshi Institute of Technology, Bengaluru, has been chosen as one of the participant institutions as their representative, to sign the official MoU with ISRO on their behalf.

Description

The functional objective of

the satellite is to perform remote sensing, and capture images of the surface of the earth using its camera of resolution 90 m; The best resolution hitherto achieved by any Pico Satellite in the world.

Communication sub-system.

Power generation and distribution sub-system.

Altitude Determination and Control sub-system.

On-board computer.

Payload(Camera).

Mechanical Structure.

Apart from these constituent subsystems of the satellite, a fully operational amateur frequency Ground Station has been designed in order to communicate with the satellite.

The Ground Station has been established in Nitte Meenakshi Institute of Technology, Bengaluru.

All the above subsystems have been indigenously designed by the students.

Source: www.teamstudsat.com/



STUDSAT details
Launched by ISRO
Developed by a team of students
Cost - around Rs.55 lakh
Use capture high-resolution images
Orbit Low Earth Orbit
Launcher Polar Sat. Launch Veh.
Volume 1.1 litres



HAMRADIO-2010 Friedrichshafen, Germany



Iih-Software Defined Radio (ISDR)

- 9) P and Q outputs are connected to Mike input. Mike input is Stereo whereas as Pand Q are mono jacks. One mtr long cable to

Visit to INCOIS Tsunami Warning Centre at Hyderabad

Members of NIAR visited Indian National Centre for Ocean Information Services (INCOIS), Hyderabad on 31 May 2010. The guided tour of the various facilities including the state of the art Tsunami Warning Centre. The members gained lot of knowledge about its functioning and invaluable services to the country. Special thanks to Dr. S.S.C. Shenoi, Director, INCOIS and Dr. Srinivasa Kumar, Head & In-charge, Tsunami Warning Centre for making the visit possible.



"This is the only Tsunami Warning Centre in India"
- Dr. Srinivasa Kumar

INCOIS provides ocean information and advisory services to the society, industry, government and scientific community through sustained ocean observations and constant improvements through systematic and focused research...
(More information at www.incois.gov.in)



IDEAS TO ACTION - Technology Demo Exhibition at Guwahati

The Assam Science Technology and Environment Council (ASTEC) organized "Ideas to Action: Let us grow with Innovation"- a Technology Demonstration Exhibition for Entrepreneurs which began in the city at Assam Engineering Institute Field, Chandmari, Guwahati from 3-7 February, 2010. More than 50 stalls from different institutions, colleges, organizations, and individuals displayed their innovative projects and concepts. The Exhibition was formally



Shri H.B.Sarma, Hon'ble Minister for Science & Technology, Govt. of Assam at the closing ceremony on 7th February 2010.



Mr.T. Ahmed explaining Hamradio concepts to participants

of new communication era through the Amateur Radio activities. The contacts were established through HAM Radio worldwide NIAR (VU2NRO), VU2JOS, VU2RCH, VU2DBM, VU2PTM, VU2AP, VU3BHI, VU2BTP, YBOR (Indonesia) etc. The visitors were regaled with HAM Radio activities using SSTV, DIGIPAN digital communications and requests have been pouring-in from the students/enthusiasts in order to appear for the ASOC Exam.

(Source: APRO-Jalukbari, Guwahati)



Shri C.M.Patowary, AGP Party Assam, Showing keen interest in Ham radio activities

DX Hams visit NIAR



Mr. Luis Encinas, EA4BGH of Spain (seen above) stayed in Hyderabad on his (MQTH) official work, during the period of stay he visited NIAR on couple of occasions and exchanged information on amateur radio activities. He specializes in construction and design of antennas with special focus on V/UHF Bands.

Earlier, Mr.Ahmed Nasser, HZ1AN of Saudi Arabia made brief visit to amateur radio museum at NIAR.

ASOC Examination

An examination, for candidates trained at NIAR, of the Amateur radio Station Operators Certificate was conducted on 30th June 2010 at Wireless Monitoring Station (WMS), Hyderabad.

It was the second examination, as reported, to be held in the new format (under the new amended AR Regulations of 2009) any where in India.

The exam consisted of Objective Questions.

Morse Cat software was used for reception test sent by Computer.



FUN ZONE -CARTOON

Let's be honest! We all love to tweak knobs! There is nothing more satisfying than watching a needle swing across an amber backlit analog dial. The more complicated the radio appears, the more satisfaction we derive out of making the "rig" work as intended.

Source-<http://www.hamradiosecrets.com/ham-radio-cartoons.html>



All Asian DX Contest

Jose Jacob, VU2JOS of NIAR has received "First in India" certificate from Japan Amateur Radio League (JARL) for participating in their 50th All Asian Dx Contest in CW Mode, Single Operator, 20 Meter, High Power category.

Hamfest India 2010

This Hamfest India 2010 is to be held on 13th and 14th of November 2010 at Pollachi, Coimbatore, Tamilnadu. For more details contact Mr. S. Vijayan, VU2WDP, Cell : 94420 05599. Email : vu2wdp@yahoo.com

Glimpses of HAMRADIO-2010, Friedrichshafen, Germany



L to R: Mr. Hans Elhers DF5UG, Ms. Maya Shankar VU2CIA, Mr. Girish Babu VU2KGB, Mr. B. M. Baveja VU2BMB, Mr. Suri VU2MY, Mr. Hans Schwarz DK5JI



Mr. S. Suri VU2MY visited Unión de Radioaficionados Españoles (URE), Madrid, Spain and had fruitful discussions with officials at URE on developments in amateur radio in Spain. Dr. Fernando Fernandez Martin, EA8AK a well known Dxer and Former MP (EU Parliament) also joined during the visit.



Juan Carlos de Borbón
King of Spain
Royal Palace,
Madrid, Spain

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