Amateur (HAM) Radio for

Information Interaction Innovation

Amateur Radio or HAM Radio:

Amateur radio operator or HAM is an interesting person whose curiosity is piqued by unusual things or enjoy talking to other people, or want to understand a little about Broadcasting, Computers, Space, Information Sciences, Electronics and Communication & Information Technology tools even as a hobby. Amateurs (Hams) build their own electronics and communication project by adding a transmitter to radio. It can work as two way communication device, just like telephone but can be used purely for non commercial purposes. Amateur Radio (HAM) operators or just "HAMS" are identified with a Callsign issued by Ministry of Communications & IT to each individual.

Anyone over 12 years can be a HAM.



Ms. S. Yamini, VU2YAM name included in Limca Book of Records-2009 being the First Indian and only woman participated in an International Dxpedition "TI9KK", Isla Del Coco, Costa Rica, Central America sponsered by NIAR.

Communication for Societal Development

Amateur Radio Service means a service of self training, intercommunication and technical investigations carried on by amateurs that is, by persons duly authorized under these rules interested in radio technique solely with a personal aim and without pecuniary interest.

Amateur Radio is a friendly, scientific, fun-loving, high-tech hobby and is popularly known as HAM Radio. Any individual above the age of 12 can become an Amateur Radio operator no matter what age, gender or physical ability. Ham radio operators use two-way radio stations from their homes to make hundreds of friends in their town, country and around the world. They communicate with each other using voice, computers, and Morse code. Hams use satellites, exchange pictures of each other using television. Many use hand-held radios that fit in their pockets. Some also like to work on electronic circuits, building their own radios and antennas.

A few pioneers in Amateur Radio have even contributed to advances in technology that we all enjoy today. There are even ham-astronauts who take radios with them on space shuttle missions and thrill thousands of hams on earth with a call from space! You never know who you'll run into when communicating with Amateur Radio. Young people, retirees, teachers and students, engineers and scientists, doctors, lawyers, mechanics and technicians, housewives, film stars, prime ministers, kings...

Using even the simplest of radio setups and antennas, amateurs communicate with each other for fun, during emergencies, and even in contests. They handle messages for all kinds of emergencies including Cyclones, Earthquakes, Floods Rail / Road & Air accidents Fires.

Sounds interesting....

Amateur Radio Communications Can be Fun!!
Making Equipment and Learning about Wave
Propagation Amateur radio communications is by
nature a scientific hobby.

Today there are thousands of hams who are enthusiastic about amateur radio and use various methods to communicate with their counterparts around the world. Groups, individuals, and schools are all striving to acquire radio technology, as they are eager to improve their skill over a wide spectrum of fields: HF/VHF Communication, amateur satellite communications, TV broadcasting, Earth-Moon-Earth (EME) communications, and so on. The current boom in computers, digital communications (images, data, etc.) is becoming increasingly popular and these on-going challenges, attracts numerous eager vouths.

Promoting art of radio communication for Education, Information and Sports.

Callsign

CALLSIGN is an unique identification of HAM radio operator working an amateur radio wireless station, issued by a competent authority. The prefix of a callsign indicates the country from which HAM operator is working on his/her station. India is identified with letters "VU".

How to become a HAM

If you are a citizen of India and above 12 years of age and

- have interest in communications or electronics
- inclined to be in contact with global communities
- want to be online for information and research

THEN you are eligible for Amateur Station Operator Certificate Exam and get Amateur (Ham) Radio license.

The Officer-In-Charge, Wireless Monitoring Station, Department of Telecommunication (DoT) under Ministry of Communications & IT, Government of India is the authority for conducting these tests. The ASOC examination is conducted in the following topics:

- Elementary knowledge of Electronics
- Communication Procedure
- Morse Code

The licenses are issued by Wireless Planning & Coordination Wing of DoT, Ministry of Communications & IT, Government of India after qualifying the ASOC Examination in any of the following grades:

| | Grade | Frequencies alloted | Morse code (sending and receiving) |
|--|------------|-------------------------------|------------------------------------|
| | Restricted | HF/ VHF/ UHF | - |
| | General | All Amateur Radio Frequencies | 8 words per minute |

Success stories Accomplishments explain our service initiatives

- Bharat Scouts and Guides, Kendriya Vidyalaya Sanghatan, Sainik Schools, IIT's/NIT's, MPLADS are promoting the use of Amateur Radio
- Amateur Radio in schools: CBSE is emphasizing on teaching the concept of Amateur Radio as part of Disaster Management in school curriculum all over India
- in Emergency, Amateur Radio has been extensively used in India during calamities in the recent past such as:
 - Aila Cyclone, 2009, West Bengal
 - Krishna Floods, 2009, Andhra Pradesh
 - Tsunami in South Asia in 2004
 - Guiarat Earth Quake in 2001
 - Orissa Super Cyclone in 1999

NIAR enabling an access to futuristic world of radio communications

Broad Spectrum of service delivery

Supported by Government of India, several state governments and the World Bank, National Institute of Amateur Radio (NIAR) is established to broaden the awareness of Amateur Radio activity amongst the people in the country through following services:

Training

Institute organizes regular training programs to train people for Amateur Station Operator License Examination conducted by the Ministry of Communications, Government of India.

· Disaster Management

The Radio Amateur Civil Emergency Services (RACES) branch of NIAR has total required infrastructure and skilled people with communication equipment to assist administration in any kind of emergency situation, natural or manmade calamities.

• Support for organizations

NIAR assists various educational institutes like schools, colleges, universities, and various organizations to setup Amateur Radio Clubs.

Technical Support

The technical team of institute supports amateurs radio enthusiasts to setup their own home made transceivers which are very cost-effective as compared to the commercial equipment.

QSL bureau

QSL bureau of the institute is known with Callsign VU2 APR, which has done excellent work of mail forwarding for Dxpeditions conducted in India.

Knowledge Repository

NIAR has an exceptional collection of books, journals, magazines, manuals and technical collateral on worldwide wireless communication. We have rich collection of over 3000 books ranging from hobby kits to satellite communications. This library is accessible for all our members to information and intensive research activities.

• Comprehensive Consultancy

NIAR provide an end-to-end consultancy for Amateur Radio activities that includes in-depth research into information, computers, satellites, space, broadcasting, wireless radio, data and images and information sciences.

Social Networking

We provide social networking opportunities through Amateur Radio, training, awareness, and support services.

Benefits Galore Numerous Opportunities ... Myriad Benefits ...

Amateur Radio offers many avenues of awareness, information access, intellectual interaction, innovative research and escalated lifestyles:

- t He/She can be introduced to the scientific activity and can have an advantage to get awareness on the importance of Information Technology and Communications in their life
- t He/She can possess a license from the Ministry of Communications & IT, Government of India and are encouraged to setup their own transceiver or Purchase or Operate a Amateur Radio station and explore Information Technology facets using Computers
- t He/she can participate and share information on the latest developments and trends in various sciences and technologies
- t He/she can join the fraternity of intellectuals and interact with other students, teachers, scientists, doctors, lawyers, politicians, Kings and Prime Ministers across the globe for better information and lifestyle
- t He/She can win many accolades and appreciations by participating in various competitions and contests around the world from their own house
- t He/She can discuss and deliberate their views and ideas freely and can educate themselves and others to improve their awareness on various advanced subjects
- t He/She can inculcate leadership and communication skills



Prominents HAMs

VU2RG,

VU2SON

VU2PGY

VU2TRB

VU2DMK

VU3KMV

VU2SLW

VU2SJS

VU2SJA

VU2RI

Mrs. Bharathi

Politicians

Mr. T. R. Balu.

Late Shri Rajiv Gandhi,

Mrs. Sonia Gandhi,

Ms. Privanka Vadera.

Mr. Dayanidhi Maran,

Mr. Kumar Bangarappa,

Mr. Madhu Bangarappa,

Late (Dr.) Shrikant Jichkar,

Late Shri Rajesh Kumar Sharma.

Mr. N. Vittal, IAS (Retd.),

Dr. Bhaskar Balakrishnan IFS,

Eminent International Hams

UA1LO, Late (Mrs.) Kalpana

Chawla, K5ESI, Mrs. Sunita

Dr. Fernando Fernandaz Martin,

Mr. Francesco Cossiga, I0FCG.

Mr. Keizo Obuchi, JI1KIT, former

Mr. Carlos Saul Menem. LU1SM.

King of Jordan, Spain, Thailand.

Morocco, Sikkim, Sultan of

· Astronauts: Mr. Uri Gagarin,

Williams, KD5PLB.

Parliament

Oman.

EA8AK, MP, European

former President of Italy

Prime Minister of Japan

President of Argentina

Late (Dr.) N. Tata Rao,

Dr. Sanjay Singh,

Most popular Woman Ham

Bureaucrats

VU2NVO

VU2NTR

VU2QV

VU2NRV

Mr. N. Ravi,













<u>Filmstars</u>

 Mr. Amitabh Bachhan VU2AMY

- Mr. Kamal Hassan. VU2HAS
- Ms. Sarika Hassan, VU2SIK
- Mr. Charu Hassan, VU2SCU • Mr. Mamoothy,
- Mr. Rajender Prasad.
- Mr. Shivraj Kumar,







Organization Profile

NIAR is a Non-Profit, Non-Government Voluntary Organization emphasizing to encourage peoples' Participation in Communication and Information Technology through Amateur Radio and Disaster Management. The Institute has a remarkable reputation of serving the public during calamities like cyclones, earthquakes, emergency situations such as wildfires and floods through our expertise and the teams of Hams. We offer a comprehensive range of services for Amateur Radio training, technical support, disaster management services, and research on radio communication.

We are striving to develop a world-class Amateur Radio emergency service and promotion divisions to cater the needs of communications and technology. We enable Amateur Radio enthusiasts to get proper training and licensing. We encourage spirit of experimentation among Hams using radio communications. We arrange various skill enhancement programmes in terms of guest lectures, seminars, symposiums, film shows, discussions and field days on various advanced trends in radio communications.

We support Hams with advanced infrastructural support such as fixed and mobile stations, well equipped laboratory, workshop and library. We publish periodical bulletins, magazines, newsletters, research papers and other allied articles to update Hams with latest trends.

We encourage our members to actively participate in contests, competitions and exhibitions to enhance their awareness. We collaborate with likeminded amateur radio Clubs and Societies. We encourage student communities to make their career in electronics so as to provide self employment and increase Hams and their contribution to the society. We render our professional consultation services for various national and international organizations in the fields of wireless and radio communications. We strive to get government advocacy for policies favoring the growth of amateur radio movement in India. We are aimed to establish Amateur Radio Clubs in India and affiliate to global counterparts for amateur radio communications.

Our unrivaled initiative to continuous research; and our enduring effort to process enhancement; enable us to provide future-centric communication support systems and services to society. We put forth all our best efforts to create new avenues of radio communications for better lifestyle.

25 years of Evolution

Celebrating Silver Jubilee with intense know-how

In 25 years, NIAR has made incredible accomplishments in creating awareness, government advocacy and service to society. The services provided by NIAR during natural and manmade calamities have brought worldwide recognition and

- 2010: NIAR implementing a project on Amateur Radio Advanced Digital Communication Network for Govt. of India.
- 2009: Hon'ble Chief Minister of Orrisa, Shri. Naveen Patnaik facilitated NIAR for its services in Orrisa.
- 2008- First Indian women HAM operator joins International Dxpedition team to "TI9KK" Isla Del Coco, Costa Rica. Central America.
- 2007-NIAR sponsored 8 members for Emergency Communications Training in Austria.
- 2007- Invited by Dr. Fernando, EA8AK, Member of European Parliament, Mr. S.Suri attended an exhibition Amateur Radio - a European Resource in European Parliament, Brussels.
- 2005- NIAR organized International Seminar on Amateur Radio in Disaster Management in Chennai on 18th April 2005, supported by Department of Information Technology-Gol, attended by delegates from DERA USA, GDXF Germany, Finland, Sri Lanka, etc.
- 2005- NIAR members received the prestigious International Humanitarian Award from ARRL, USA,
- 2004- NIAR implemented a Project on Digital Connectivity -Urban, Rural, and Remote Areas through Amateur Radio supported by Department of Information Technology, Govt. of India. 10 centers were setup in different parts of India.
- 2000- NIAR received Award for Excellence and Award for Meritorious Leadership from DERA, USA.
- 1993- NIAR bagged "Golden Antenna Award" at 25th German -Dutch Radio Amateur Festival held in Bad Bentheim. Germany.
- 1983- Inception of NIAR
- 1983- Mr. S. Suri, VU2MY, Founder and Director, NIAR was sent on world tour for two months to study and analyze many global Amateur Radio organizations.
- 1981- A major exhibition on Communication, Past Present -Future was organized by Late Shri. Rajiv Gandhi VU2RG with the help of Mr. S.Suri
- 1975- Registration of A.P. Amateur Radio Society (APARS) in Hyderabad

Dxpeditions:

• In 1983, 1987, 1989, 2004, 2008; NIAR has conducted major Dxpedition in Andaman & Nicobar Islands, Lakshadweep Island International Hamfest-2006 & 2007 with participation of Foreign and Indian HAMs.



Vision

To build a world-class institution to support advancement of global Amateur Radio activity in terms of promotion, training, government advocacy, technical support, knowledge repository and research, exceed the expectations with commitment, quality and excellent service.

Mission

We are committed to deliver services to Hams, communities, policy makers, organizations to accomplish integrated information systems and provide excellent second line of communication through amateur radio.

To achieve our mission, we adopt the following:

- Unparalleled and customized programs and support options
- Proactive service to support Hams and organizations' needs
- Providing services with high levels of quality standards

Enabling Hams to become partners-inprogress in Science and Technology



National Institute of Amateur Radio

Raj Bhavan Road, Somajiguda, Hyderabad - 500 082 Tel / Fax: +91 - 40 - 23310287. Ph: + 91- 40- 65167388 Email: niarindia@hotmail.com & vu2nro@gmail.com

Website: www.niar.org

Please feel free to contact us for any information, suggestions, queries and support.



Amateur Radio

Communication for Societal Development









National Institute of Amateur Radio

Raj Bhavan Road, Somajiguda, Hyderabad - 500 082 Tel / Fax: +91 - 40 - 23310287, Ph: + 91- 40- 65167388 Email: niarindia@hotmail.com & vu2nro@gmail.com Website: www.niar.org





