



HAM Fest-VU7 RG

Lakshadweep Islands, India

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Sponsored by

Department of Information Technology,
Ministry of Tourism, GOI. &
Lakshadweep Administration

Supported by

Ministry of Defence,
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Organised by



National Institute of Amateur Radio, Hyderabad - India

Hamfest-2007, the International conference of amateur radio operators, will take place during January 15- 17, 2007 in Kadmat, Lakshadweep Islands- India



For years, amateur (HAM) radio operators around the world have been forerunners in experimentation and education in the field of electronic communication, research and development, dissemination of technical, education and scientific information. Hams have shown proven ability to contribute for advancement of radio art. Hams are part of the knowledge society that promote technical skills and expand the existing reservoir of trained operators, technicians and electronics experts and are recognised for providing essential second line of communication for disaster management needs as part of amateur service.

Amateur radio encompass all aspects of technology for wireless communication systems, including for example, antennas, propagation, analogue and digital signal processing techniques and HF/VHF/UHF circuit design for wireless systems.

HAMFEST is the principal forum for the presentation and discussion to update and share their knowledge on recent advances in the field of amateur radio wireless communication technologies.

The very positive assessment to humanitarian service rendered by amateur radio operators in the aftermath of Indian Ocean Tsunami of 2004 and the overwhelming response of HAMFEST - 2006 held in Port Blair, A&N Islands has resulted in a strong basis for HAMFEST - 2007.

The Chairman, Mr.S.Suri VU2MY, and all members of the conference committees welcome you to join us in Kadmat, Lakshadweep Islands in January 2007.

PREAMBLE

National Institute of Amateur Radio (NIAR) was established in the year 1983 as an apex organization in India for promotion of amateur radio activity as part of 'people's participation in communication & information technology and disaster management' with the support of Department of Information Technology (formerly DOE) and Government of Andhra Pradesh. NIAR activities scaled new height each year which include awareness programs, training, field exercises, dx-peditions, disaster mitigation management services and other events to benefit promotion of amateur radio. The humanitarian service rendered by hams in supporting various government and other agencies by providing second line of communications during major calamities like Tsunami emergency communications 2004, Gujarat earthquake relief operations 2001, Orissa super cyclone relief operation 1999 etc., has proved the merits of amateur radio.

Amateur radio communication technologies are continuously adapting to changes in design and development of communication hardware, software as well as internet related techniques, improving skills on radio communication art enriches individual hams with knowledge and information in this field.



Hamfest provides a convenient platform to encourage hams to discuss, display and demonstrate the latest amateur radio communication technologies used by them internationally. The socio-economic benefits of amateur radio in promoting communication and information technology as well as its use in disaster management are increasing with the frequent occurrences of severe disasters. There is also the necessity to improve internal security through ham operations.

During December, 2004 NIAR had organized a successful Dx-pedition (VU4NRO/VU4RBI) in Port Blair, Andaman and Nicobar Islands which had over 38,000 successful two way radio contacts. The team members prematurely stopped the Dx-pedition activity after Tsunami disaster struck the South Asian region on 26th December 2004 and mobilized their communication resources to provide humanitarian service to support essential rescue and relief operations. The services of these amateur radio operators were appreciated by several agencies in India and abroad.

Hamfest-2006 held in April 2006 in Port Blair received overwhelming support from Government of India, International amateur radio organizations, Dx forums, and Individual hams for organizing a suitable event in a befitting manner to highlight the benefits of amateur radio technologies for social and scientific development.

Hamfest-2007 is made possible with the untiring efforts of amateur radio community in India and abroad particularly the sponsors and supporters of earlier events.

OBJECTIVE

HAMFEST provides a convenient setting for presentations and discussions of innovative developments in the interdisciplinary aspects of amateur radio in various sessions. the conference will consider how to promote amateur radio as a means of technical self - training for young people, promotion of technical and scientific investigations in the field of radio communication, representation of the interests of radio amateurs with government and other organizations, development of amateur radio as a valuable national resource, encouragement of international goodwill and friendship.

THE PARTICIPANTS

HAMFEST is one place where amateur radio operators, government, NGOs and communications professionals, amateur radio clubs/societies come together to share thoughts and ideas on amateur radio communication technologies from Asia, the Americas, and Europe. The conference aims at bringing together people from different areas, disciplines, professions and interests to share ideas and explore various discussions, which are innovative and exciting.

CALL FOR PAPERS

Your support and contribution for the success of this Hamfest will be valuable. Therefore we request you to kindly have a paper contributed for this meet. The topics covered at this convention are i) Latest Technology Developments, ii) Antennas & Propagation, iii) Dx-peditions, iv) HF & VHF Communications, v) Digital amateur radio vi) Emergency Communications vii) Promotion of amateur radio.

The Hamfest will consider interdisciplinary aspects of amateur radio in various sessions. The full length papers may be sent as hard copy, soft copy or email niarvu7@gmail.com to reach NIAR by 25th December 2006.

PROCEEDINGS

All the registered delegates as well as sponsoring organisations will receive one copy of the proceedings of the international Hamfest. More copies can be supplied based on availability and upon request.

EXPECTED OUTCOME

The discussions will take into account the challenges, achievements to evolve strategies for development of society with the use of amateur radio communication technology in the country. It is envisaged to develop an action plan on use of amateur radio communication technologies for technical and scientific development of society as well as in disaster mitigation / management. The event encourages tourism promotion by international hams and others in the country.

AMATEUR RADIO IN INDIA

Department of Information Technology (DIT) under the Ministry of Communications and Information Technology, Government of India is the central department responsible for all administrative functions relating to formulation, execution and implementation of IT policies in India, has undertaken several initiatives for promotion of amateur radio with support of other Ministries/Departments like the Ministry of Home affairs, Ministry of Defence, Ministry of Tourism, Department of Telecommunications etc.

Favourable policies/programs for development of amateur radio in the country have encouraged youth to join this socially useful scientific activity. Several public and private institutions like the NCC, Bharat Scouts and Guides, Disaster Management Institutions, IITs, NITs, Schools, Colleges are now actively associated with promotion of amateur radio in the country.

Amateur radio 'a service of self-learning, inter-communication and technical investigations' provides an opportunity for free two way communication by citizens all over the world in various HF/VHF/UHF amateur radio frequency bands. Radio amateurs are pioneers & innovators and are considered a national resource.

Citizens need to qualify in a simple test conducted by Dept. of Telecommunications and obtain license. These licensed amateur radio operators are called 'Hams' and they are from all walks of life including kings, parliamentarians, bureaucrats, engineers, lawyers, scientists, students etc. The two way communication as a hobby can be taken up by any individual above 12 years of age, some enter this wonderful field as late as 70 years, and there is tremendous value added to the fellowship through amateur radio contacts.

It is also a social utility communication tool during natural calamities, like Indian Ocean Tsunami - 2004 emergency communications, which has brought amateur radio to the forefront again with the use of latest trends in communication and information technology tools including internet related communication.

Today, hams use many kinds of hand held devices, as simple as a mobile phone to use and are well connected to any remote island, high peak like Himalayas or in air, sea or land route. No airtime is charged by any agency / government in the world for using ham as a means of two way communications for amateur purpose. Many families / friends get connected even from far off places. It is these hams services for social good needs to be further strengthened thus the national & international hams meet along with their families for fellowship and exchange of valuable information.

LAKSHADWEEP ISLANDS

Location: it is located between 8 °- 12 ° 13" North latitude and 71 ° -74 ° East longitudes, 220 to 440 kms, away from the coastal city of Kochi in Kerala, in the emerald Arabian Sea. Considering its lagoon area of about 4,200 sq.kms, 20,000 sq.kms of territorial waters and about 4 lakhs sq.kms. of economic zone, Lakshadweep is a large territory.

According to the 1991 census, Lakshadweep has a population of 51707 persons. (it is 60,595 as per the census -2001, provisional population data sheet). More than 93% of the population, who are indigenous, are Muslims and majority of them belong to the Shafi School of the Sunni sect.

Malayalam is spoken in all the islands except Minicoy where people speak Mahl which is written in Divehi script and is spoken in Maldives. The entire indigenous population has been classified as scheduled tribes because of their economic and social backwardness. The main occupation of the people is fishing, coconut cultivation and coir twisting. Tourism is an emerging industry.



Hon'ble Minister of Communication and Information Technology, GoI, Thiru. Dayanidhi Maran, VU2DMK, operating amateur radio station in New Delhi.



Senior officers of DIT, Mr. Ajeer Vidya, IAS, JS&FA, Dr. R.C. Chopra, Group Co-ordinator, Mr. B.M. Baveja, Sr. Director, at a demonstration of amateur radio communication.

People: The tiniest Union Territory of India, Lakshadweep is an archipelago consisting of 12 atolls, three reefs and five submerged banks. it is a uni-district union territory with an area of 32 sq.kms and is comprised of ten inhabited islands, 17 uninhabited islands attached islets, four newly formed islets and 5 submerged reefs. The inhabited islands are Kavaratti, Agatti, Amini, Kadmat, Kiltan, Chetlat, Bitra, Andrott, Kalpeni and Minicoy. Bitra is the smallest of all having only a population of 225 persons (census 1991). The uninhabited island Bangaram has been enumerated during 1991 census operation and has a population of 61 persons.

History: Early history of Lakshadweep is unwritten. What now passes for history is based on various legends. Local traditions attribute the first settlement on these islands to the period of Cheraman Perumal, the last king of Kerala. It is believed that after his conversion to Islam, at the behest of some Arab merchants, he slipped out of his capital Cranganore, the present day Kodungallor - an old harbour town Kochi, for Mecca. When his disappearance was discovered, search parties went after him in sailing boats and left for the shores of Mecca, in search of the king from different places. It is believed that one of these sailing boats of Raja of Cannanore was struck by a fierce storm and they were shipwrecked on the island now known as Bangaram. From there they went to the nearby island of Agatti. Finally the weather improved and they returned to the mainland sighting other islands on their way. It is said that after their return another party of sailors and soldiers discovered the island of Amini and started living there. It is believed that the people sent there were Hindus. Even now unmistakable Hindu social stratification exists in these islands despite Islam. Legends say that small settlements started in the islands of Amini, Kavaratti, Andrott and Kalpeni first and later people from these islands moved to the other islands of Agatti, Kiltan, Chetlat and Kadmat. This legend of Cheraman Perumal is not, however, substantiated.

The advent of Islam dates back to the 7th century around the year 41 Hijra. It is universally believed that one St.Ubaidullah(r) while praying at Mecca fell asleep. He dreamt that Prophet Mohammed(s) wanted him to go to Jeddah and take a ship from there to go to distant places. Thus, he left Jeddah but after sailing for months, a storm wrecked his ship near these small islands. Floating on a plank he was swept ashore on the island of Amini. He fell asleep there but again dreamt of the Prophet asking him to propagate Islam in that island. Ubaidullah started doing so. He next went to other islands and successfully propagated Islam and returned to Andrott where he died, and was buried. The grave of St.Ubaidullah(r) is today a sacred place. Preachers from Andrott respected deeply in far off lands like Sri Lanka, Malaysia, and Burma etc. It is a Marabout or Mukbara.

The arrival of the Portuguese in India again made Laccadives an important place for seafarers. It was also the beginning of years of plunder for the islands. The finely spun coir was much sought after for ships.

In the year 1783 some islanders from Amini took courage and went to Tipu Sultan at Mangalore and requested him to take over the administration of Amini group of islands. Tipu Sultan at that time was on friendly terms with Beebi of Arakkal and after deliberations, the islands of Amini group were handed over to him.

In 1854 all the islands were handed over to the East India Company for administration. So, came the British rule. The British later brought the Lakshadweep regulation 1912, which confers limited power of judicial and magisterial status to Amins/Karanis of the islands. A reasonable restriction of outsiders was also brought into force by the above regulation. Nine primary schools and few dispensaries were started during the colonial rule in the islands.

The union territory was formed in 1956 and it was named Lakshadweep in 1973. The administrative centre is Kavaratti. The jurisdiction of the Kerala High Court extends over Lakshadweep.



CLIMATE

Climatic conditions are similar to that of Kerala coast. Average rainfall is 1600 mm a year with the major share from the Southwest monsoon. Almost all islands experience tropical climate with temperature ranging from 25 degrees C to 35 degrees C and humidity ranging from 70 -76 per cent during the most part of the year. March, April and may are the hottest months of the year.



KADMAT

Location: 11°-13° North latitude 72°-47° East longitude, located 407 kms, from Cochin.

Population: 5319

Land area: 3.20 sq.kms. 8 kms long and 550 metres wide at the broadest point.

Climate: the climate of the island is moderate.

Language: Malayalam

A glance: Kadmat is 8 kms long and 550 metres wide at the broadest point. In addition to the beautiful shallow lagoon on the west that forms an ideal spot for water sports, there is a narrow lagoon on the east. The best attractions are the long sandy beaches and small sand banks on the southern tip for sun baths. Kadmat has been identified for staying tourists with its tourist huts aesthetically situated in the coconut palm groves in the beaches facing the lagoon. The place is ideal for a real holiday that brings you away from the maddening crowd, hustle and bustle of city life. Water sports crafts like kayaks, pedal boats, sailing yachts, skiing boats and glass bottomed boats are available on hire. The scuba diving centre in the island has become an attraction for water-sport enthusiasts. All meals are served at the tourist restaurant.

AGATTI

Location: 10°-51° North latitude 72° East longitude, located 459 kms, from Cochin.

Population: 7072

Land area: 3.84 sq.kms. 6 kms long and 1000 mts wide.

Climate: the climate of the island is hot when compared to the islands in the rest of the group

A glance: In Agatti coral growths and multicoloured coral fishes abundant in its lagoons. Fishing is the most important industry of Agatti which is perhaps the only island besides Minicoy getting surplus fish. Next to fishing, coir and copra are the main industries. Agatti is the airport stopover from Cochin and Goa on the way to Bangaram which can be seen on the Northern horizon. Agatti offers fully furnished resorts managed by a private entrepreneur. The main attraction at the resorts is the water sport facilities. A medical centre with qualified doctors functions at Agatti



BANGARAM

Location: 10°-56* North latitude 72°-17* East longitude, located 459 kms, from Cochin.

Population: uninhabited

Land area: 2.30 sq.kms.

Climate: The climate of the island is warm round the year. Rainfall is limited and the temperature during the monsoon is 25-27°C.

A glance: A bewitchingly beautiful and breath taking island in Lakshadweep. Bangaram is uninhabited. It is surrounded by a shallow lagoon enclosed by coral reef. It has been ranked among the best gateways of the world. Here the sun, sand and surf in harmony casting a spell on the visitor. It offers utmost privacy unpolluted comfort with crystal clear water. Sparkling coral reef and blue lagoon perform magic on the soul searching traveller. A matchless sense of well being takes over and one begins to discover the graceful fishes, porcupines, parrots, puffer fishes, hermit crabs and sea birds on the vast 120 acres of lush coconut groves in Bangaram. There are numerous adventures like scuba diving, beach games, swimming, snorkelling and deep sea fishing. The resort has 60 bedded beach cottages with a multi cuisine restaurant serving myriad delicacies. A well stocked bar is also available. Agatti is the gate way to Bangaram and is linked to Cochin for onward flights to metros.

MINICOY

Location: 8°-17* North latitude 73°-04* East longitude, located 398 kms, from Cochin.

Population: 9495

Land area: 4.80 sq.kms. It is about 10.6 kms long

Climate: The climate of the island is moderate.

Language: Mahl

A glance: It is the second largest island, the first being Andrott. It is the southern most islands in Lakshadweep, crescent shaped and has one of the largest Lagoons. Viringle is the small islet that you see on the South. Minicoy is set apart from the northern group of islands by its culture; the islanders are employed as seamen in ocean going vessels the world over. The island has systematically arranged village system known as "Avah"; each Avah is a cluster of houses which is headed by an elected elderly man called Mooppan(Bodukaka). Traditionally all powers to manage village affairs are vested in him. Each village has a village house beautifully decorated and maintained. Mahl is the spoken language. Minicoy is an important centre of tuna fishing.

The light house of the island is one of the oldest and was constructed in 1885. You will be taken to the villages, tuna canning factory, the light house and for a long drive through dense coconut groves and winding village roads. The beaches have bathing huts and change rooms; so swim and beach walk, pedal boat, kayak and sail.





H.E. Dr. A.P.J. Abdul Kalam, President of India in his address at the inauguration of URSI on 23rd October, 2005 acknowledged the contributions made by Hams and gave suggestions to promote this hobby in Panchayat Offices, Schools, hospitals by NGOs as part of village knowledge centre.



Dr. Manmohan Singh, Prime Minister of India while appreciating the services rendered by Hams in natural calamities, said this useful activity may be encouraged among the youth in the country, when NIAR delegation met him on 5th March, 2005.



Shri. Rajiv Gandhi VU2 RG operating amateur radio station during cyclone relief operations in Andhra Pradesh in 1990.



Smt. Sonia Gandhi, VU2SON encouraged series of programs for promotion of amateur radio through Rajiv Gandhi Foundation.

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