



IS HAM RADIO OBSOLETE ?

Is ham radio communication system getting obsolete with the advent of Internet (for 'e-mailing' or 'chatting') or mobile telephone (for sending 'SMS' or 'picture')? Many people in fact think so. But it would be inappropriate to compare ham radio (amateur radio) with other professional communication network. Professional communication networks are maintained to provide basic utility service to the common people, whereas, ham radio communication network is maintained by non-professional hobbyists for their personal enjoyment. Ham radio is an adventure for the hobbyist.

The basic differences of ham radio with the professional communication network are:

- (1) Ham radio communication network is not run by professionals (of course there may be professional engineers who are hobbyists at the same time).
- (2) It is not run by the government.
- (3) It is not supposed to be used as an alternative to the mobile telephone/landline telephone (except in large scale disaster).
- (4) It is not for earning money by providing radio communication.

For example a mobile telephone is an electronic gizmo offered to the common consumer by profit making wireless networking companies. A consumer can send a text message of very short length through the Short Message Service (SMS) of the mobile telephone companies. It can reach anywhere in the world instantly because there are professional engineers to look after such a network and it has a utility in our day-to-day activities. But 'congestions' happen in such networks too when important messages may not be getting delivered at the right time.

Albeit little known, Hams have also been using computers since mid seventies to send 'radio-mails' across the globe using packet radio modems (much before the advent of e-mail through telephone or SMS/e-mail through mobile telephone!) connected to their wireless sets. Now, with the state-of-the-art PACTOR-III ham technology, they can send e-mails (even with image attachments) from remote locations where Internet connectivity is not available (for more information refer to: <http://winlink.org/News.htm>). Hams are the only people in the world who can access e-mails free of cost using their wireless apparatus from anywhere in the world! Just while preparing this note, the author is in receipt of such an e-mail originated from a small sailboat named 'Wild Card' cruising the Indian Ocean. The sailboat is skippered by a ham radio operator (Captain Gary Martin Goodlander aka Cap'n Fatty, VP5GGX). This ambitious ham radio operator is on a round the world voyage for the last three years onboard his small sailboat. More information on this is available at: http://www.vigyanprasar.com/ham/sailor_ham/. Here is a quote from his e-mail about the latest PACTOR-III ham radio e-mailing technology:

"In addition to our normal shore-side e-mail address, we now have e-mail aboard Wild Card as well! This is a huge technological leap for us. This means that, at any time from anywhere in the world, we can send and receive e-mail text messages... as many as we want! It also means that we can get (a) daily custom weather forecasts while at

sea, tailored specifically for our area and advanced along our projected course, (b) receive files from overhead satellites, (c) real-time wind and weather information for nearby oceanic buoys and (d) long-range five-day weather forecasts directly from NOAA's massive super-computers. But the main reason we went to all this trouble and expensive is not for the marvelous weather forecasts—though they are truly that—but to keep in touch with you!"

It is said that the number of sailors applying for ham radio licence has more than doubled in the recent time in the USA. It was thought that with the onslaught of 'Satellite Telephones', there was no hope for the survival of the long distance short wave radio communication systems (including ham radio), which solely depends on the ionosphere. On the contrary, short wave radio is returning in a big way in many advanced countries especially among the people who have to go to remote areas not connected by landline telephone. The huge advantage radio has over satellite is its extremely low infrastructure costs. Satellite communication systems require enormous capital expenditures to create and maintain infrastructure capable of providing service to a wide area. It may be mentioned that during the Gujarat earthquake, in many occasions satellite telephones didn't work, whereas ham radio operators provided reliable communication to the rescue and relief agencies.

Unlike our household electronic gizmos, a ham radio device may not look very user friendly to a novice at the first sight. These are usually manufactured in the countries where the hobby of ham radio has enabled an entire electronic industry to grow and vice-versa. A ham radio hobbyist has to learn some basic things related to the operation of these apparatus involving wireless technology in order to get a licence from the government. There are also many hobbyists who make their own wireless equipment. Since a ham radio hobbyist tries to be self-reliant in her/his radio communication skills, the government tries to ensure through a licencing examination that an aspiring ham radio hobbyist knows certain things, which would ensure non-interference to other professional wireless communication services.

The ham radio communication service has the potentiality to operate as a basic utility service, but it is not supposed or allowed to do so because of the government restrictions. As ham radio is a hobby, and the government earns only token revenues from the ham radio operators, it obviously does not permit the ham radio operators to run a public utility network. That would also be amounting to depriving the government of the revenues earned from landline/mobile telephone services! Otherwise ham radio operators have the capability to pass on messages for the public through their scheduled *on-the-air nets* across the country or for that matter across the globe through short wave radio! Only during large-scale disasters a ham radio operator is allowed by the government to handle third party (non-ham) messages. Unlike a mobile or landline telephone set, a ham radio operator is not authorized to allow her/his wireless equipment to be operated by an un-licensed person. Every ham radio operator has to identify herself/himself with a government allotted 'call-sign' when she/he is on-the-air.