

SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)

Fixed and Broadcast Communications (1)

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OF SATELLITES, PROBES AND ROVERS**Abstract**

The short of instantaneous access and bandwidth to which we are accustomed does not yet exist in space the enormous distances of space, for one, create huge time lag for while doing communication. the signals have to make it from another planet's surface to earth through a gauntlet of space radiations that degrades their clarity and when we talk about space communication we always thing of latest use of technology or using different high power system. This paper presents combination of two ideas which is less costly and more incremental way of putting together such a network.(1) to create a satellite network system which can connect the whole universe in one line. In this system three satellites would be put in polar orbit around the sun and others in either geosynchronous or polar orbit around various planets. All the satellite will be linked into a network with the help of same radio frequency that would pick up the radio messages from manned space ship or orbit probes and relay them up and down the line from one planet or another until they reach the earth. With the help of this we can reduce the time lag and errors that come up while using the conventional communication method. (2) whenever we send any spacecraft or satellites into space, they have usually communicated directly with Earth-based stations and utilized software and equipment that have been specially designed for that particular mission. But what if we equip every craft or object that was launched into space from space stations, orbital telescopes, probes in orbit around Mars or other planets, and even robotic rovers that can work as receiver or transmitter of signal and serve as nodes of a sprawling interplanetary network. In addition to relaying information, ideally, such an interplanetary network might tie into the Internet on Earth, so that we could connect with orbital satellites or rovers and check out what they are seeing. This will create an interplanetary communication system which will be have more fast and reliable signals and will make the interplanetary communication easy and efficient as well as an error free communication system.