Subject: USENET satellite
Posted by al on Mon, 27 May 2013 01:12:21 GMT
View Forum Message <> Reply to Message

Message-ID:
Date: Thu, 5-Jul-84 21:48:27 EDT
Article-I.D.: ames-lm.386
Posted: Thu Jul 5 21:48:27 1984
Date-Received: Sat, 7-Jul-84 01:38:01 EDT
Organization: NASA-Ames Research Center, Mtn. View, CA
Lines: 15

Any thoughts on the feasibility of a USENET satellite? The satellite would in some fairly low orbit and act as a USENENT node with a low power omni antenna. It would pick up USENET files from sites near the orbital path, analyse the destinations and drop the mail off when it passed over the appropriate site. There might be long delays for a high inclination satellite, but an equitorial satellite in low orbit (4-500 miles?) could deliver mail rapidly to equitorial nations. There's also the possiblity of multiple satellites in various orbit that send to each other as they pass nearby. Perhaps AMSAT could get into something like this, I'd think that power requirements should be quite low leading to a relatively cheap satellite.

From the half baked ideas of

Al Globus

Subject: Re: USENET satellite
Posted by kiessig on Mon, 27 May 2013 01:12:22 GMT
View Forum Message <> Reply to Message

Message-ID:
Date: Sat, 7-Jul-84 02:08:21 EDT
Article-I.D.: idi.211
Posted: Sat Jul 7 02:08:21 1984
Date-Received: Sun, 8-Jul-84 00:18:02 EDT
References:
Organization: Intelligent Decisions, Saratoga, CA
Lines: 10

It's much simpler to use VIR space off of an existing

television channel. Lauren gave a talk on this at the last
Usenix conference.

--
Rick Kiessig
{decvax, ucbvax}!sun!idi!kiessig
{akgua, allegra, amd70, burl, cbosgd, dual, ihnp4}!idi!kiessig
Phone: 408-996-2399

Subject: Re: USENET satellite
Posted by ron@brl-vgr.ARPA (Ron on Mon, 27 May 2013 01:12:25 GMT
View Forum Message <> Reply to Message

Message-ID:
Date: Mon, 9-Jul-84 14:26:08 EDT
Article-I.D.: brl-tgr.3141
Posted: Mon Jul 9 14:26:08 1984
Date-Received: Thu, 12-Jul-84 05:09:15 EDT
References:
Organization: Ballistics Research Lab
Lines: 5

Actually, a more practical and on the way to being implemented solution
is that of Lauren Weinstein. He plans to buy some vertical retrace time
on one of the super tv stations to continuously broadcast netnews.

-Ron

Subject: Re: USENET satellite
Posted by karn on Mon, 27 May 2013 01:12:31 GMT
View Forum Message <> Reply to Message

Message-ID:
Date: Tue, 17-Jul-84 15:45:44 EDT
Article-I.D.: mouton.96
Posted: Tue Jul 17 15:45:44 1984
Date-Received: Wed, 18-Jul-84 02:56:54 EDT
References:
Organization: Bell Communications Research, Inc

Lines: 30

The project which you suggest is in fact being done by AMSAT: it's called PACSAT. Actually, there are now three distinct projects for packet radio hardware (i.e., hardware containing HDLC decoding/encoding, memory, etc, as opposed to straight "bent pipe" transponders). PACSAT is one involving a dedicated payload to be deployed from the Shuttle on a Vandenburg launch. The working figures are 9600 bps PSK up and down, with 4 megabytes of CMOS bulk RAM. The Japanese are also working on JAS-1, which will contain a smaller pacsat-like unit, although the memory capacity and transmission speeds will be smaller. The orbit planned for JAS-1 is approx 1500 km, high inclination but not sun-synchronous. JAS-1 will also carry a more conventional real-time transponder similar to that of Oscar-8 (which also carried a transponder of Japanese construction.)

There is now a new project underway to include some form of packet radio store-and-forward unit as part of Phase 3-C, to be launched on an Ariane in a few years. A new group of amateur packet enthusiasts in the Munich area (which I just visited) is starting this work.

All in all, there is a lot of interest in this type of work. However, for USENET there are some fatal problems. First, amateur radio cannot be used for business purposes. Since this is how we justify USENET to our employers (regardless of what the traffic actually looks like) it would be somewhat hypocritical to use amateur radio. Second, many countries do not have rules quite as liberal as the USA and "third party" traffic (communications involving a non-amateur party) are not permitted. Third, some administrations do not as yet recognize digital transmissions in their amateur rules.

Phil Karn, KA9Q
Asst VP Engineering, AMSAT