

# Natural Radio

News, Comments and Letters About Natural Radio

August 2001

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**Natural Radio CD For Club** As we often do in summer, my middle son Jeff, and I were up early this morning and off to a hamfest. Hamfests of course have the usual fleamarket, and often have seminars and demonstrations, or tables set up to promote a club or specific special interest within the hobby. But, in all my years of hamfesting, I have never been to a hamfest where any aspect of LF radio was promoted. (Not to say that it hasn't happened.)

Expanding interest in our hobby is one of the purposes of the LWCA. So here's an idea. What about a club CD that promotes natural radio listening and gives samples of each type of sound. We could also include some interviews with some of our longtime listeners talking about the hobby. The CD would be available to members, of course, but more importantly to newcomers to the natural radio hobby. Distributing them at hamfests at cost would also be a good way to promote our hobby.

I would be willing to handle production and duplication if those who have made some good recordings would be willing to contribute some of their sounds to the project. I would think we could get them out the door in the 4 or 5 dollar range, even in small quantities. Let me know if you are interested.

**Dave Ewer Receiver Design Article** Look elsewhere in this issue for an excellent article on receiver design by Dave Ewer.

**Goes M** GOES-M, or Geostationary Operational Environmental Satellite, was successfully launched from Cape Canaveral Air Force Station, FL, on July 23, 2001. The satellite, will monitor hurricanes, severe thunderstorms, flash floods and other severe weather. However, this satellite also comes equipped with the first operational Solar X-ray Imager to detect solar storms.

The GOES-M Solar X-ray Imager will take a full-disk image of the Sun's atmosphere once every minute. NOAA and the U.S. Air Force will use the images to monitor and forecast solar flares, coronal mass ejections, coronal holes and active regions. These features are the dominant sources of disturbances in space weather that lead to geomagnetic storms.

The United States operates two GOES meteorological satellites in geostationary orbit 22,300 miles over the Equator, one over the East Coast and one over the West Coast. NOAA's GOES-10 spacecraft, launched in 1997, is currently overlooking the West Coast out into the Pacific including Hawaii; it is located at 135 degrees west longitude. GOES-8, launched in April 1994, is overlooking the East Coast out into the Atlantic Ocean and is positioned at 75 degrees west longitude.

GOES-M will be stored on orbit ready for operation when needed as a replacement for GOES-8 or 10. It joins GOES-11, also in storage. The satellite will be renamed GOES-12 once reaching geostationary orbit.

Images taken by the GOES-M Solar X-ray Imager will be available in real time to the general public via the World Wide Web, through NOAA's National Geophysical Data Center in Boulder, CO, at: <http://www.ngdc.noaa.gov/stp/stp.html>

Additional GOES information, imagery and space weather information are available on the Internet at: <http://www.goes.noaa.gov>

## *Your Much Appreciated Correspondence*

•**Shawn Korgan, Gilcrest, Colorado (VLFKorgan@aol.com)** I was able to monitor on Friday the 13th and heard many nice sounding whistlers. At times, there were literally streams of whistlers occurring that seemed to come in groups every half hour to forty-five minutes. There were multi-path whistlers along with both one-hop and two-hop whistlers this particular morning. I was monitoring from 10:30 UT - 15:30 UT. The whistlers were still occurring as I left for the morning. The morning activity appears to be peaking at approximately 1-2 hours after sunrise currently. Last month (June), the best morning activity was peaking 2 1/2 hours after sunrise.

On a good note for the July LOWDOWN recording session, the SEC User Notes (Issue 34), published by the Space Environment Center located in Boulder, Colorado, it was reported that the, "sub-cycle suggests major activity likely in July." We can all hope that this indeed proves to be the case.

## **Natural Radio Log**

Month Day	Time UTC	What Heard (whistlers/hour where applicable)	ID Grid Sq.
06/17	1030-1430	Whistlers	SK-DM79
06/19	1030-1430	Whistlers	SK-DM79
06/28	1100-1400	Lots of diffuse whistlers	SK-DM79
07/13	1030-1530	Streams of whistlers (See correspondence)	SK-DM79
07/15	1030-1500	Low frequency whistlers & chorus	SK-DM79
07/16	1030-1500	Low frequency whistlers & chorus	SK-DM79

**SK - Shawn Korgan, Gilcrest, CO.** Equipment - Homemade e-field receiver I refer to as the SK-1 with 500 feet of antenna wire.