

Natural Radio

News, Comments and Letters About Natural Radio

July 2001

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The summer doldrums are upon us with a quiet sun and almost no correspondence this month. I had to cancel my trip to Canada because of business concerns and I also lost the better part of a week due to a failed motherboard on my main computer which trashed my hard drive. Fortunately, I didn't lose any important data but reloading all the programs was still a big pain.

Summer Coordinated Listening To get some activity going again, I think it might be time for a coordinated listening weekend. This is a good excuse to get out into the great outdoors and enjoy the summer along with your favorite natural radio hobby. Although summer may not be the optimum time for whistlers, it's the best time for those of us in the more northern climates to get out and do some listening.

I suggest the weekend of July 28 & 29. As a minimum, please monitor and record, if possible, the first six minutes of the hour beginning at 5:00 AM local time. This should be very close to local sunrise. You are encouraged to monitor up to three hours before and two hours after local sunrise.

If you are recording, begin each segment with an announcement of your name, date and location. Follow the announcement with a recording of WWV or CHU with their top-of-the-hour time announcement and marker tone.

If you are not recording, it is important to keep an accurate log. The data will be most useful if it is timed accurately. Use WWV time signals and a stopwatch. (See this year's March issue of *The Lowdown* for detailed logging instructions.)

Send in a copy of your log (please don't send originals). If I receive enough logs to establish some coordination between them, I'll publish a composite report in a future issue of *The Lowdown*. If there doesn't seem to be any coordinated activity, or if the ionosphere doesn't cooperate, I'll publish the highlights of individual results.

HESSI Satellite Launch Delayed The High Energy Solar Spectroscopic Imager (HESSI) satellite launch has been postponed indefinitely due to possible problems with the Pegasus launch vehicle. HESSI's mission is to explore solar flares and to try to discover the source of energy that lets them accelerate particles into space at speeds that exceed the most powerful particle accelerators on earth.

Researchers believe that much of the energy released during a flare is used to accelerate, to very high energies, electrons (emitting primarily X-rays) and protons and other ions (emitting primarily gamma rays). The new approach of the HESSI mission is to combine, for the first time, high-resolution imaging in hard X-rays and gamma rays with high-resolution spectroscopy, so that a detailed energy spectrum can be obtained at each point of the image.

This new approach will enable researchers to find out where these particles are accelerated and to what energies. Such information will advance understanding of the fundamental high-energy processes at the core of the solar flare problem. The website is at <http://hesperia.gsfc.nasa.gov/hessi/objectives.htm>