

# Natural Radio

News, Comments and Letters About Natural Radio

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This month's column will be short as I am in the middle of switching phone and Internet suppliers and updating our internal digital phone system. I've also been dealing with all the technical issues of acquiring HD video production capabilities, the biggest being that each manufacturer feels compelled to develop their own file system for encoding video. Fortunately, the switch will be gradual as most of my clients are happy with Standard Definition for the present.

***LORAN-C Goes Silent*** – By the time you read this we'll be near the end of the 100 kHz. LORAN-C transmissions. This statement was issued by the US Coast Guard:

**\*\*\* Special Notice Regarding LORAN Closure: \*\*\*** In accordance with the DHS Appropriations Act, the U.S. Coast Guard will terminate the transmission of all U.S. LORAN-C signals effective 2000Z 08 Feb 2010. At that time, the U.S. LORAN-C signal will be unusable and permanently discontinued. This termination does not affect U.S. participation in the Russian American or Canadian LORAN-C chains. U.S. participation in these chains will continue temporarily in accordance with international agreements.

LORAN was active for almost 67 years. The fate of eLORAN (Enhanced LORAN), an upgraded LORAN system and proposed backup for GPS navigation and a precision time source is uncertain. Right now it is in the hands of the Secretary of the Department of Homeland Security. For those that have been bothered by cross modulation and other interference from LORAN, enjoy the quiet period while it lasts.

***Solar Activity On the Rise*** – On January 19, the sun came back to life and Sunspot 1039 erupted with the first M-class solar flare in almost two years. Over a 48 hour period this sunspot produced 5 M-class flares, and some nice aurora activity at higher latitudes. It looks like Cycle 24 is finally on the rise.

***The Ribbon at the End of the Solar System*** – Last year, NASA's IBEX (Interstellar Boundary Explorer) spacecraft discovered a giant ribbon at the edge of the solar system that had researchers scratching their heads.

Scientists now believe that this "ribbon" is a reflection from where the particles of the solar wind trying to leave the galaxy are reflected back into our solar system by a galactic magnetic field.

"This is an important finding," says Arik Posner, IBEX program scientist at NASA Headquarters. "Interstellar space just beyond the edge of the solar system is mostly unexplored territory. Now we know there could be a strong, well-organized magnetic field sitting right on our doorstep."

This opens the door to the idea that the earth-sun system operates on a grander scale, and some of the long-term fluctuations we observe are linked to the movements of fields in the galaxy. This should produce some interesting new ideas as the data is studied further.