Shively Labs Tour

Join us for a technical talk at Shively labs followed by a tour

*Sat April 7, 2007 at 10:00am, Shively labs, Bridgton, ME*

**Technical Talk: FM antenna Elevation and Azimuth pattern development**  
Basic principal of how elevation pattern are developed will be discussed. First, by looking at a series of isotropic point sources that make up the array factor of an elevation pattern equation. The measured unit pattern which will result in a particle elevation pattern of an FM array will be introduced. Time will be spent on the optimization of the bay spacing to maximize antenna gain and reduce downward radiation. The second section will cover a series of measured azimuth patterns and how tower size distorts patterns. Lastly, a brief review of how FM analog and digital transmitters interact to produce inter-modulation product that cause interference to other FM stations.

**Speaker:** Robert A. Surette  
Director of Sales Engineering with Shively Labs, a Division of Howell Laboratories, from 1981 to the present. Mr. Surette was graduated from Lowell Technological Institute, Lowell, Massachusetts in 1973 with the degree of Bachelor of Science in Electrical Engineering. He has been directly involved with design and development of broadcast antennas, filter systems and RF transmission components since 1974, as an RF Engineer for six years with the original Shively Labs in Raymond, ME and for a short period of time with Dielectric Communications. He is currently an Associate Member of the AFCCE and a Senior Member of IEEE. He has authored a chapter on filters and combining systems for the latest edition of the CRC Electronics Handbook and for the 9th and future 10th Edition of the NAB Handbook.

**Free admission for IEEE members**

**Registration is required**

Please send an e-mail to Paul.Lerley@cmpco.com to reserve your seat.

Space is limited and will be filled on a first come first serve basis.

Light lunch will be provided.

For more info and directions visit shively.com