## SOUND

### **TRACK**

#### **EMPIRE STATE ANTENNA**

The Empire State Building has reaffirmed its pledge to provide the power, space and infrastructure necessary to permanently accommodate the television and FM broadcasters in the New York metropolitan area who previously transmitted from the World Trade Center. Adequate power and electricity has already been added to the Empire State Building antenna to allow transmission at full power and full range in cooperation with the Metropolitan Television Alliance.

Since the destruction of the World Trade Center, all television broadcasters have been transmitting from the Empire State Building. In the wake of the attacks, the building accommodated broadcasters by providing access to its antenna at no cost from September 11 through October 2001. The building immediately installed a temporary electrical AC power supply circuit of 2000 amperes, which it replaced in March 2002 by a permanent AC power supply circuit of 9000 amperes that permits analog broadcast at full range and power. Plans to install an additional 16 700 amperes of electricity will permit full analog and digital transmission by all broadcasters by mid-2003. If the proposed 2000-ft. antenna is built at an alternative site, the Empire State Building will remain the primary antenna in the three to four years required to complete such a structure, and then could serve as a permanent secondary antenna.

#### **MUSIC AWARDS FOR 2004**

The University of Louisville School of Music has announced that it is now accepting applications for the University of Louisville Grawemeyer Award for Music Composition 2004. The University will offer an international prize in recognition of outstanding achieve-

ment by a living composer in a musical genre: choral, orchestral, chamber, electronic, song-cycle, dance, opera, musical theater, extended solo work, etc. The \$200,000 award will be granted to a composer for a work premiered during the five-year period from January 1, 1998 through December 31, 2002. For details regarding the submission of scores and the rules and procedures for the selection of the winning work, contact: Grawemeyer Music Award Committee, School of Music, University of Louisville, Louisville, Kentucky 40292, USA. The committee must receive all materials plus the application form by January 27, 2003.

#### **DVB-T PROJECT**

Broadcast specialist Rohde & Schwarz has been awarded an exclusive contract to supply the required transmitter systems needed to convert the Berlin metropolitan area from terrestrial analog to **digital signal transmission**.

In the first phase, the Munich-based company will supply 13 new transmitters and modify the existing analog high-power transmitter so it can be used for digital transmission. The DVB-T coverage of households is scheduled for completion by August 2003. The existing conventional analog terrestrial TV transmissions will be fully replaced. The digitization of terrestrial frequencies will allow more TV program channels to be transmitted on fewer frequencies and provide viewers with additional services such as electronic program guides.

# EDISON EXHIBIT AT VIRTUAL MUSEUM

The **IEEE Virtual Museum** (VM) has launched its newest exhibit: Thomas Edison: A Lifetime of Invention. The exhibit, funded by the Charles Edison

Fund, explores the different stages of Edison's career, from his entrepreneurial youth to the disappointments of his later years.

Most are familiar with the works that marked the apex of Edison's career: the incandescent bulb, a lighting system, and the phonograph. These achievements earned Edison the moniker: "The Wizard of Menlo Park," and made him famous.

Lesser known, but also compelling, are the research and inventions that bracket Edison's most prolific years. Edison's first patented device, an automatic vote-recording machine (1865), worked well, but did not meet with commercial success. From that, Edison learned to create things that people needed and would buy. For the next fifty years, he followed that dictum and, in addition to his most famous works, introduced such things as the universal stock ticker, the carbon button transmitter and the storage battery. Along the way, he also helped launch the modern electric utility industry, founded many companies (one of which became General Electric) and created the precursor to the modern research laboratory.

Unfortunately, as he grew older, Edison's ability to identify potentially commercial products declined. His later years were marked by ephemeral success in the concrete and movie businesses and complete failure in iron ore production. Nonetheless, by the time of his death in 1931, he had close to 1100 patents, a number which remains unsurpassed by any inventor.

The exhibit does a thorough job of explaining to a pre-college audience how different technologies worked, how they were developed, and the impact they had on the people who used them. To find out more about Edison, his inventions and his era, visit: www.ieee.org/museum.