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## **High-Tech Communications Firm Gets a Boost from Cal State San Bernardino Technology Office**

### **E-Band Communications Promises Significant Advances in Port, Border Security**

**SAN BERNARDINO, CA – August 14, 2006** – When California high-tech communications firm E-Band Communications Corp. first went looking for financial help to develop their proprietary wireless radio communication system, investors basically said, “Looks great, but this is very complicated millimeter wave technology which has only been used by Department of Defense in the past and requires very specialized engineering skills to develop. Can you really do it?” That’s how E-Band co-founder and VP of Technology Jim Plante, starts his E-Band story.

E-Band Communications has now, in fact, developed a prototype transceiver system that operates in the millimeter-wave region at 71-76GHz and 81-86GHz (the “E-Band”). This is important because this provides significant advantages over other millimeter-wave wireless technologies. For one thing, signals in this band suffer much less loss of signal strength as distance increases. Adverse weather affects such as fog, dust, snow or desert sun basically have very little if any affect on this technology. This is especially important for defense and National security related applications such as port security, where fog is a consistent presence and always an enemy of communication and security systems.

The E-Band transceiver is now positioned to be the core for a high speed radio communications link serving as a low-cost alternative to fiber optic cable installation for border and port security applications, as well as intelligence gathering, communications interoperability, and information sharing.

“This is the only wireless technology able to transmit 1 to 10 Gbps data-rates at distances up to 6 miles. This technology opens up a number of new opportunities and enables applications previously possible only with fiber optic connections, which typically cost several times more and can take months if not years to implement. Using E-band wireless, we can set up ‘fiber-like’ network in a matter of days,” says co-founder and Chief Marketing Officer Saul Umbrasas, “and that makes our technology stand out from the crowd.”

E-Band has been able to demonstrate a working prototype, thanks to two grants awarded by Cal State San Bernardino’s Office of Technology Transfer and Commercialization (OTTC). The first was for \$75,000 for prototype development, testing and evaluation. Results provided proof of concept for the technology and E-Band applied for follow-on funding to handle a couple additional improvements. OTTC then provided a \$50,000 follow-on commercialization award that allowed E-Band to complete its prototype.

The funds OTTC provided come from the Center for Commercialization of Advanced Technology (CCAT) program, sponsored by Congressman Jerry Lewis and channeled through the Department of Defense via the Office of Naval Research.

Thanks to the OTTC/CCAT grant, E-Band has been able to significantly increase its ability to attract institutional capital. As this report goes to press, E-Band's principals are now in discussions with a group of venture capital and strategic investors.

#### **About E-Band Communications**

E-Band Communications Corporation (EBCC) is San Diego, California-based firm that designs and manufactures multi-gigabit capacity wireless communication systems based on 71-86GHz millimeter-wave radio technology. EBCC uses highly integrated microwave monolithic integrated circuits (MMICs) to manufacturer cost efficient and high performance wireless systems with 1 to 10 Gbps throughput over the distances of several miles.

In the past, EBCC signed an exclusive field of use license agreement with Northrop Grumman Corporation for its E-Band Monolithic Microwave Integrated Circuit (MMIC) technology. The highly integrated multifunction GaAs MMIC-based chipset will be used by EBCC to develop low cost millimeter wave radio communication systems. This technology will give EBCC a head-start compared to competitors and will ensure long term performance and cost advantages. For more information, visit [www.ebandcom.com](http://www.ebandcom.com).

#### **About the Office of Technology Transfer and Commercialization (OTTC)**

OTTC (<http://www.ottc.csusb.edu>) is the management office for a grant program known as CCAT, Center for Commercialization of Advanced Technology, funded by the Office of Naval Research (ONR) through Congressman Jerry Lewis's office. The Foundation for California State University, San Bernardino hosts and oversees OTTC. CCAT provides grants intended to be used in two ways: (1) to help companies develop commercial applications for technologies that have been developed in government laboratories; and (2) to help the government find technologies it needs for defense and homeland security needs and help them along so they can enter government procurement channels. OTTC is a two-way conduit that acts as a virtual incubator for advanced technology. There are two CCAT programs in Southern California, with the other one being in San Diego (<http://www.ccatsandiego.org>).