

Experimentation Description for Application File Number 0213-EX-PL-2006

The experimental license that is the subject of this application, if granted, will be used for general laboratory and field testing of ArrayComm's products.

ArrayComm develops adaptive antenna products for wireless communications systems. The company's current product portfolio includes products for GSM base stations, WCDMA base station and client devices, 802.16e base station and client devices, PHS base stations, and HC-SDMA (also known as iBurst™) base station and client devices. Products are typically delivered as DSP software for base station applications and Verilog soft cores for client ASIC applications.

Laboratory and field testing involving RF transmission and reception is an essential and necessary step in the development of ArrayComm's products. In the laboratory, testing is variously performed with cabled connections between transmitters and receivers, and over-the-air at low powers achieved through the use programmable amplifier gain or through the use of RF attenuators. Outdoor testing at higher powers is typically conducted using a single base station at the company's facilities in San Jose. Testing to characterize interference management may require test configurations with multiple base stations (cells). Testing to characterize performance in various propagation environments may require testing at locations other than our San Jose facility. Testing involving sites other than our facility is accomplished through short-term, opportunistic leases with property and tower owners which is why we can not provide exact antenna locations at this time.

There are a number of sources for the RF equipment used in our tests. In some cases, the source is our customer who has provided us with prototypes or commercial samples for integration and test. In other cases, it is commercial test equipment. ArrayComm itself is the source for some RF equipment as in the case of "breadboards" and other development platforms. Transmission formats are consistent with those of the commercial air interfaces listed above and occur on their nominal frequencies (e.g., PCS band emissions for our GSM products).

ArrayComm has established procedures to prevent interference from our experimental systems to FCC licensees and others with priority access to the spectrum. In more than ten years of experimental operations, there have been no complaints to the Commission regarding our operations. We appreciate the flexibility that the Commission has provided to us in its past license grants and respectfully request that this application be granted as well.

Please note that this license is a replacement for our previous license 0149-EX-RR-2002, call sign WB2XFZ, which we allowed to lapse through a clerical error. Our intent was to renew that license, in which case the present application would not have been filed.