

ARTER & HADDEN^{LLP}

ATTORNEYS AT LAW

founded 1843

1801 K Street, N.W., Suite 400K
Washington, D.C. 20006-1301

telephone 202.775.7100
facsimile 202.857.0172

Austin
Cleveland
Columbus
Dallas
Dayton
Irvine
Los Angeles
Sacramento

San Antonio
San Diego
San Francisco
Washington, D.C.
Woodland Hills
Affiliated Offices:
Brussels, Belgium
Geneva, Switzerland

RECEIVED

MAY 28 1999

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Direct Dial: (202) 775-7123
Internet Address: kkeane@arterhadden.com

May 28, 1999

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
Room TW-A325, The Portals
445 Twelfth Street, S.W.
Washington, D. C. 20554

Re: Experimental Station KA2XXU
File No. 0134-EX-RR-1999

Dear Ms. Salas:

Submitted herewith on behalf of Input/Output, Inc. is a progress report relative to its
Experimental Radio Authorization.

Any questions regarding this filing may be directed to the undersigned.

Sincerely,



William K. Keane

Enclosures

ARTER & HADDEN_{LLP}

Ms. Magalie Roman Salas
May 28, 1999
Page 2

bcc (w/enc.): Mr. Jerry Iseli
Chris Wolfe, Esq.



Progress Report

Input/Output, Inc. Propagation Testing Experiments

Input/Output, Inc. is in the process of collecting radio propagation data in the band of 2400-2483.5 MHz to characterize the radio channel against several variables and in several environments. To date data has been taken in desert and dense forest areas in California and Texas. We have characterized the dependency of path loss on the variables of antenna height (both transmit and receive), distance, wave polarization and antenna diversity arrangement. It is our plan to continue this testing in other environments.

Our future plans including testing of propagation in swamps and marsh lands to complete the characterization of the 2400 MHz radio channel in the environments typically encountered during seismic oil and gas exploration studies. This should be completed within the remainder of 1999.

The Input/Output, Inc. 2.4 GHz propagation testing experiment is being undertaken to provide a baseline radio channel model for planned radio designs. Once these designs are implemented, we will conduct further radio experiments in these same environments. This will be used to validate and perfect the designs as well as further the understanding of the radio channel in this band and these environments. This phase is planned to complete within 2000.