EXHIBIT 3

MANUFACTURING AND PRODUCT INFORMATION

MANUFACTURING AND PRODUCT INFROMATION:

Type of Authorization:	Type Acceptance of 1900MHz Picocell System
FCC Identifier:	**K3Y-PICO-1900**
Applicable FCC RULES:	**FCC Part 2 and Part 24**
Manufacturer:	Hughes Network Systems 11717 Exploration Lane Germantown, MD 20876
Applicant's Relationship to MFR:	same
Quantity Production Planned:	yes
Testing Dates:	April 12, to May 10, 2000
Manufacturer's Representative:	Mr. John Corrigan

2.983(d) Technical Description

The Picocell BTS includes 1 to 4 radio, one scanning receiver, a power supply module and master oscillator, and a BTS controller which includes T1 interface function. Only digital mode operation is supported, using full-rate traffic channels and a Digital Control Channel. The Wireless Station Base Unit is used in the 1900 MHz Domestic Public PCS. The system was tested using TIA/IS-136/IS-138, and will operate in digital mode at a maximum power output of 100 milliwatts. The system was tested for compliance with FCC Rule Part 15 and Part 24. Each radio supports one RF carrier, which has 6 TDMA time slot. In the full-rate digital operation, slot 1&4 is designated as digital channel #1, slot 2&5 as digital channel #2, and slot 3&6 as digital channel #2 and #3 assigned as Digital Traffic Channels (DTCs). The DCCH shall support private system registration functions as specified in IS-136A In call processing, whether it is origination or paging, the Wireless Base Station Unit (WBSU) is a slave unit under the control of the Wireless Office Service Controller (WOSC), which controls one or more Picocell BTSs. The WOSC communicates with each Picocell BTS using a dedicated control time slot (per Picocell BTS) on the T1 interface. This control interface is designated Abis, in that it is similar in nature to the interface between BTS and BSC in the GSM standard. The main duty of the controller function within the Picocell BTS is as a message translator between the air interface messages and the Abis interface messages. For more information on the unit please refer to manual included.

2.1033(c)(3) Instructions/Installation Manual
Refer to Exhibit**: Installation and Service manua**l.

2.1033(c)(4) Types of Emissions
DIGITAL= 40K0DXW {TDMA (pi/4 DQPSK)}

2.1033(c)(5) Frequency Range
Transmitter: 1930 - 1990 MHz
Receiver: 1850 - 1910 MHz

2.1033(c)(6) Range of Operating Power
-8dBm to +20dBm (Maximum)
.158mW to 100mW (Maximum)

2.1033(c)(7) Maximum Power Rating
Section 22.913(a); base transmitters and cellular repeaters must not exceed 500 Watts.

2.1033(c)(8) Applied voltages and currents into the final transistor elements
6 Vdc @ 400 mA

2.1033(c)(9) Tune-up/Optimization Procedure
Refer to Exhibit**: Installation and Service manual.**

2.1033(c)(10) Complete Circuit Diagrams and Functional Block Diagram
Refer Exhibits**: Schematics and Parts lis**t. Confidentiality
is requested for these items.

2.1033(c)(10a) Means for Frequency Stabilization
A 9.6 MHz Ovenized reference Oscillator (OCXO) is used. The OCXO has frequency drift of +/- 0.25ppm

2.1033(c)(10b) Means for Attenuating Higher Audio Frequencies
Built-in filters in Radio and Branching Board.

2.1033(c)(10c) Means for Limiting Modulation
DSP

2.1033(c)(10d) Means for Limiting Power
DSP

2.1033(c)(11) Equipment Identification
A drawing of the equipment identification nameplate appears under Exhibit**:**
PROPOSED FCC ID LABEL FORMAT.

2.1033(c)(12) Photographs

Photographs of the equipment, internal and external views, are found in the Exhibit**: Eut Photograph**s.

2.1033(c)(13) Description of Digital Modulation Techniques
Digital Mode: TDMA (p/4 DQPSK)

2.1033(c)(14) Standard Test Conditions
The transmitter was tested under the following conditions:
Room Temperature: 20 - 23 °C
Relative Humidity: 35 - 50%
DC Supply Voltage: 24 to 48Vdc
The transmitter was aligned and tuned up according to manufacturer's alignment procedure, prior to testing. All data presented represents the worst case parameter being measured.

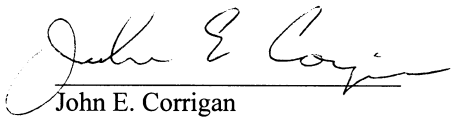
2.1033 Description of Various Base Station Configurations
Not applicable.

2.1033 Use of Various Power Supplies
Ac Adapter Input: 120Vac, 60Hz: Output: 48Vdc
Dc power supply form 24 to 48 Vdc

Engineering Statement

I hereby attest that the measurements shown in this report were made in accordance with the procedures indicated, and that the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

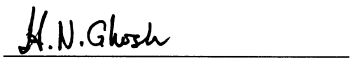
I further attest that, on the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Part 24 of the FCC Rules under normal use and maintenance.



John E. Corrigan
Sr. Vice President
Hughes Network Systems

Manufacturer's Statement Regarding Modifications

I hereby attest that the product will be manufactured with all modifications for Part 24 compliance as submitted in this report.



Hitendra Ghosh
Vice President, Quality
Hughes Network Systems