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MAY 10 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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May 10, 1993

H. Franklin Wright, Chief
Frequency Liaison Branch
Office of Engineering and Technology
Federal Communications Commission
Washington, D.C. 20554

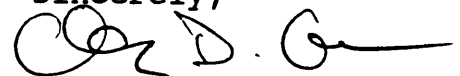
**Re: Paramount Wireless Limited Partnership
Station KM2XEN
File Number 3072-EX-PL-92**

Dear Mr. Wright:

On behalf of Paramount Wireless Limited Partnership, we are submitting its third quarterly report on the progress of its experiment, as required by the conditions set forth in its experimental authorization.

Please refer any questions or correspondence to this office.

Sincerely,



Charles D. Cosson

PARAMOUNT WIRELESS LIMITED PARTNERSHIP

M/A Address:

P. O. Box 66436

Baton Rouge, LA 70896

504/927-6815

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MAY 10 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

May 4, 1993

H. Frank Wright
Frequency Liaison Branch
Office of Engineering and Technology
Federal Communications Commission
Washington, D.C. 20554

Re: Station KM2XEN
File No. 3072-EX-PL-92

Dear Mr. Wright:

Pursuant to Condition 3 of Station KM2XEN's experimental license, which was granted on August 10, 1992, this constitutes the third of our quarterly reports regarding the progress of the authorized experimental PCS operations.

In the time since our last quarterly report was filed, Paramount Wireless Limited Partnership (Paramount) has purchased and has received partial shipment of wireless PCS base station and handset equipment.

Paramount is continuing dialogue with equipment vendors for Intelligent Network (IN) / Signaling System 7 (SS7) subsystem equipment. We envision ordering subsystem equipment before the end of May 1993.

Paramount is continuing experiments using Low Bit Rate Digitized Voice Transmission in conjunction with Voice Recognition.

The following explains the process by which we are carrying out the experiments:

The Voice Recognition Module uses an 8 bit Pulse Code Modulation (PCM) digitizing scheme to create a template of a specific voice command. The Voice Recognition Module is "trained" to execute a specific function when this template is matched to a spoken command template. When the user speaks a command, that command is digitized into a template using the same 8 bit PCM scheme as before. The spoken command is matched to the "trained" command template, which is stored in computer memory, and the specific function assigned to that voice template is executed. If there is no match to a stored voice template, then no function is executed.

The low bit rate voice digitizing phones are full duplex Linear Predictive voCoder (LPC) modules designed to encode/decode voice for transmission via digital facilities. The low bit rate phones are able to transmit voice at six (6) different voice coding rates. The phones use either a Pitch Excited LPC algorithm, a Code Excited LPC algorithm or a combination of both algorithms to provide increasing levels of voice quality while encoding/decoding speech at higher transmission rates.

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The experiments being performed with this equipment are focused on the ability of the Voice Recognition Module to distinguish between distinct voice commands while employing low bit rate voice digitizing phones at multiple transmission rates and that rate's accompanying voice quality. In the experiments, a digital sampler is used to provide a constant voice command. This constant command is used to create a "trained" command template as well as each spoken command template. These conditions may seem "ideal", but in order to examine the ability of the Voice Recognition Module to distinguish between distinct voice commands, the commands must be the same tone, volume and pitch. Therefore, the digital sampler is being used to provide a constant "recording" of the original voice commands to run the tests at the various transmission rates.

The results of the preliminary tests were inconclusive; therefore, several more detailed experiments are being performed to provide a better insight of the possibility of using low bit rate voice digitizing equipment in conjunction with voice recognition equipment over a digital radio channel.

It is clear from an empirical standpoint that low bit rate compression (as low as 8 Kbps) is satisfactory for reasonable quality mobile voice communication. This provides significant opportunities for spectrum conservation. The penalties, if any, associated with compression of mobile voice must be explored pertinent to the emerging competitive environment.

Upon shipment of all ordered PCS equipment, Paramount will begin conducting studies concerning signal propagation, signal coverage and signal interference characteristics.

Any technical questions should be addressed to:

Robert A. Hart IV
Hart Engineers
P. O. Box 66436
Baton Rouge, LA 70896
Phone: (504) 927-6815
Fax: (504) 927-6818

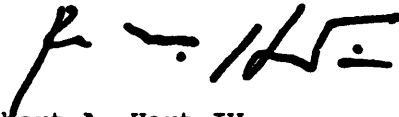
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Any other questions concerning this report should be addressed to:

Charles D. Cosson
2120 L Street, N.W., Suite 810
Washington, DC 20037
Phone: (202) 296-8890
Fax: (202) 296-8893

Sincerely,

Paramount Wireless Limited Partnership

A handwritten signature in black ink, appearing to read "R. A. Hart IV". The signature is stylized with a large "R" and a distinct "IV" at the end.

Robert A. Hart IV