EXHIBIT No. 1
Description of development program

An experimental radio service authorization is requested for the development of Wireless Data Linking equipment for use primarily within NPCS paging systems. This equipment will fill the need of communication between remotely mounted back channel receivers and central base stations within a two way paging system. The back channel of the NPCS system is the Radio Frequency channel from the subscriber units (pagers) to the paging system. The equipment to be developed will be used to replace telephone lines where these are either not available or overly expensive.

A single UHF frequency within the 450MHz to 470MHz band will be required for this development program. Below is a description of the system to be implemented.

A central base station located at our Quincy plant site will have a single transceiver attached to an omni-directional antenna with gain of 6dBi or less mounted part way up the existing tower. The maximum height of this antenna above ground will be 75 feet. Up to three land stations will be operated within 15 miles of this location. Each land station will have a single transceiver attached to an directional antenna aimed back at the central base. These antennas will have 8.6dBi of gain and will be orientated for vertical polarization. Transmitter output power will be 5 watts when using the D4PGL6880 transceiver and 10 watts when using the D4PGL6880S transceiver. Paging system information will be passed back and forth between the central base site and each remote land station site in a time shared manner.

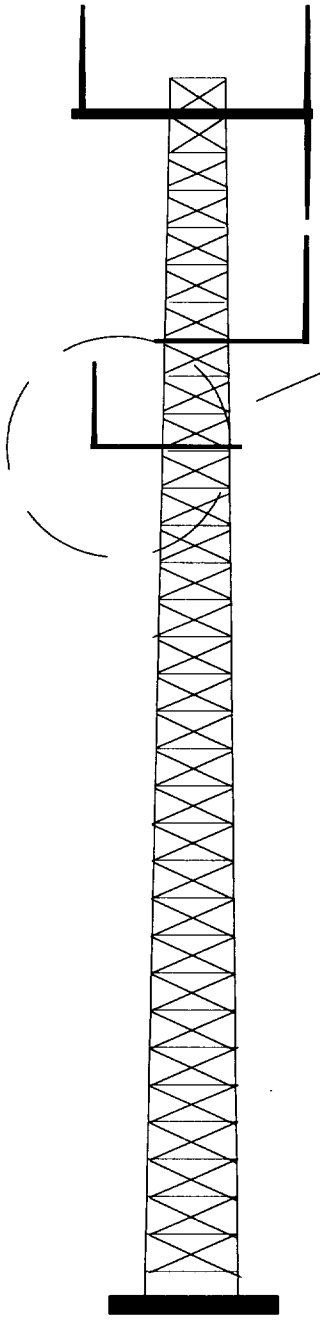
The transceivers used will be modified Glenayre GL6880s (FCC INDENTIFIER D4PGL6880 or D4PGL6880S) . These units will be modified to send and receive paging information. Modifications will format this information into a protocol that best fits the transmission and reception of this information. Modifications will not include changes to the Radio Frequency transmitter, in that no changes to the modulation or RF generation circuits will occur. Changes will not affect the authorized bandwidth of these units.

The frequency requested will be used to verify the performance of the overall wireless data link under various conditions. As part of this, we would like to move the land stations within the above described 15 mile radius, and would like to test various antennas. All land station antennas will be mounted on existing structures at a height not more then 6 meters above ground level or the top of a building. The antenna gains listed above are the maximum that we would implement.

EXHIBIT NUMBER 2

VERTICAL PROFILE SKETCH OF BASE STATION SITE

Existing 100 ft tower
and antennas



NEW ANTENNA
TOP OF ANTENNA
AT 75 FT ABOVE
GROUND