

Exhibit 1
A Description of the Proposed Program

CNR held an experimental radio station license, class of station -- XD FX, for this program which expired on 1 February 1996; reference Call Sign KG2XAG; File No. 1749-EX-R-94.

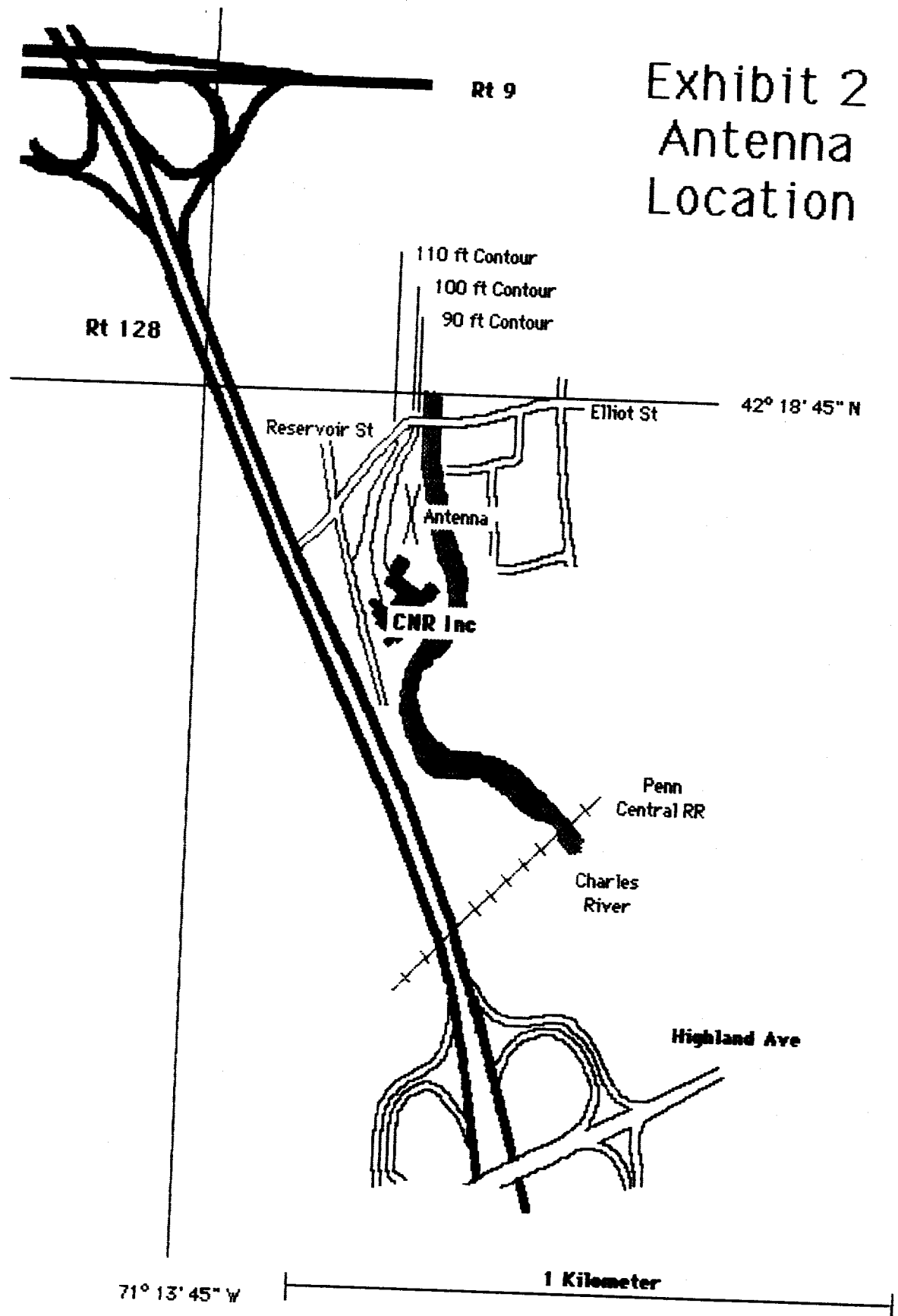
CNR has developed a novel HF communications system. This system incorporates automatic frequency management, link setup, link maintenance, and adaptive data rate; adaptive data rate is achieved using a novel class of error correcting codes/ The system automatically adapts its data rate to changing channel conditions, allowing lower rate communications under adverse channel conditions and higher data rates under better channel conditions. The system uses these codes to assure error-free communications under all channel conditions; this is a vital capability for systems transferring error intolerant binary traffic, e.g., cryptographic data.

The system we have developed functions by scanning a preset number of carrier frequencies, looking for the best frequency for a given link. The frequency having been chosen, the adaptive rate error correcting code is used to maximize channel throughput on that carrier frequency. The frequency selection and data rate control are fully automatic.

The communications system described above has been developed and tested during the past eleven years, using laboratory and live link tests. We have added a number of system capabilities, including higher rate waveforms and secure voice mail, which require further verification of their performance with live link tests.

Our requirements are for the usage, on a not-to-interfere basis, of 10 to 20 carrier frequencies in the 2 to 30 MHz range.

Exhibit 2 Antenna Location



Antenna siting has been reviewed by local conservation officials and found to be environmentally benign. Site is already in use by other high powered radio transmitters (PE > 1 KW).

Exhibit 3

Request for Withholding From Public Inspection

We request that the Commission withhold Exhibit 1 of this appeal from public inspection. Wideband and adaptive HF concepts are an active area of current research at CNR and elsewhere. We believe that several of the proprietary features of our approach to the problem will allow us a substantial competitive advantage in this field; therefore, we request that the disclosures of Exhibit 1 remain proprietary to CNR, Inc., and that they be withheld from public inspection.