

Exhibit #1

from page 3, question 10

The research for which this application is submitted will develop and establish a new methodology for studying animal behavior. A compact video-imaging system (consisting of a lens and CCD chip) coupled with a radio (video) transmission system will be harnessed to subject animals using non-invasive, non-obtrusive harness systems. This mobile transmitting station will enable researchers to receive images from the animal's perspective in real time. As such, scientists will be able to accompany relatively wide ranging study animals, directly observing animal interactions with the physical and biotic environment from a remote and discrete position. This tool will provide scientists a new means of documenting animal behavior as it develops over time and under natural influence.

In order to gather data of natural animal behavior, the system will be of minimum size and weight, and capable of transmitting the visual information over sufficient distance between the subject animal (transmitter) and the researcher (receiver) in order to assure undisturbed and uninterrupted data acquisition during natural interactions between the animal and its environment. The transmission wavelength will be selected to ensure noninterference with other transmissions as well as to achieve maximal transmission over varied terrain. Low frequencies selected will optimize penetration of the video transmission through foliage and other complex environmental conditions. No existing wireless video transmitters meet these requirements, thus the imperative for this application.

Initial research objectives are focused on assessing the technical viability of an animal platform remote video-imaging research program. This phase of the project will involve experimenting with existing and new technologies in order to configure an appropriate video/data transmission system. Once such a system is achieved, efforts will be directed toward field tests with several species (wolverines, bison and other fauna indigenous to the United States). These tests will be conducted using frequencies selected to avoid interference with other radio communications activities. Given current battery constraints, we estimate output power to be restricted to less than 1 watt. (At present, the precise power requirements for the proposed operation have not been determined. We anticipate that power in the approximated range of one watt may be sufficient in many if not most situations. However, since more power may be required, in some circumstances, we are requesting authority to operate with up to 10 watts, so that we will be able to make such adjustments as we may determine necessary in the course of the project. Therefore, for purposes of this application, since available battery and potential solar recharge technologies are not fully explored, we are requesting license to use up to 10 Watts maximum RF output power at the transmitter terminals.)

Three ancillary sources of radio emissions are expected in this experimental design. First, the anticipated video transmission system will be capable of being remotely activated and

deactivated by radio. We anticipate use of the "hobby/land remote control" band (e.g. 72. MHz) to achieve this battery saving function. Second, the conceptual design includes a remotely activated detachment system which will permit radio release of the system and harness without the need for recapturing subject animals at the end of deployments. Finally, we expect to be able to track subject animals by radio telemetry. Frequencies used for this final function are expected to fall within extant Biological Tracking and Telemetry frequency assignments (e.g. 148-152 MHz).

The licensee is willing to submit periodic reports (e.g. every six or 12 months, as specified by the Commission) summarizing the results of the project to date. The summary would include such pertinent information as the geographic area in which research was conducted, the subject species, frequencies of operation and duration of field exercises.

Exhibit #2

from page 3, question 12

The proposed experimental system will entail no permanent construction of towers, buildings or the like which would be likely to have any significant environmental impact. Accordingly, no Environmental Assessment is submitted herewith.