

Dr. David Rasch
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National Geographic Television
1145 17th St NW
Washington, DC 20036

July 17, 2002

To:
Carl Huie
Federal Communications Commission
445 12th St. SW
Washington, DC 20554

**Request for Special Temporary Authority to transmit
10-200mW (ERP) AM video at 430-438MHz in Remote Locations**

Dear Mr. Huie:

For the past six months we have been developing small RF video transmitter devices to attach to animals, such as eagles and grizzly bears. Through this project, National Geographic and our scientific collaborators hope to gain insight into the behavior of the animals that might not occur in the presence of humans.

We have interest from the American Eagle Foundation to deploy a light-weight video transmitter system on an eagle planned for release into the wild around Pigeon Forge, **Tennessee**. We also have a Grizzly Bear system in development, which we hope to test in early August 2002 at Chichagof Island in Alaska.

Both systems rely on using commercially available low-power fixed-frequency AM 433.92MHz transmitters with RF output power in the 10-200mW range. These transmitters derive their frequency reference from tiny Surface Acoustic Wave (SAW) filters and oscillators, which are readily available at the spot frequency of 433.92MHz, but seem difficult to obtain at other frequencies that fall within our existing license. Our transmit antennas are limited to quarter-wave whip antennas.

National Geographic Television's Remote Imaging group currently holds an experimental license (KA2XXD) to transmit video/sound in remote areas in the 420-432 MHz and 470-608 MHz bands.

We wish to apply for a **Special Temporary Authority** to broadcast AM video in the range of **430-438 MHz** in **Remote Locations** on occasions over the next six months, in order to conduct trials of various low-power transmitters as described below. Duration of the tests will vary but are generally restricted by battery capacity to less than 3 hours.

We understand that our activities are to be conducted on a "non-interference basis" and we are happy to liaise with representatives of the ARRL and any other authorities, in order to best coordinate our activities with other services. The remote nature of our operations plus the low transmit power we plan to use will also help us achieve this goal.

We would be happy to provide any additional information that you may need. Thank you for your time and consideration.

Sincerely,

Dr. David J. Rasch

July 17, 2002