## **Microwave Vibration and Pulse Effects**

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Personnel who worked on microwave equipment describe "tickling about the head and ears," as well as "buzzing vibrations and pulsations." <sup>1</sup> These sensations appeared to be associated with radar pulses. <sup>1</sup> An early microwave hearing article separately observes vibration induction in human subjects as a different sensory modality. <sup>2</sup> Even deaf (cochleotomized) rats have a startle response to microwaves of sufficient pulse power. <sup>3</sup> Another microwave hearing article in humans mentions "the perception of severe buffeting of the head" without apparent vestibular symptoms, as well as a "pins-and-needles sensation" at parameters different from those necessary for microwave hearing. <sup>4</sup> A high power microwave pulse review of sub-lethal single pulse reports quotes that the rats appeared "stunned and hypoactive," or had seizures followed by an "unconscious state" for 4-5 minutes. <sup>5</sup> These observations suggest a gradient of response to increasing pulse intensity. Vibration is a frequent complaint of some victims who attribute vibration, and other effects to remote harassment by some form of radiation.

## References

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<sup>&</sup>lt;sup>3</sup> Raslear TG, Akyel Y. CW microwave fields evoke body movement in bilaterally cochleotomized rats. Engineering in Medicine and Biology Society, 1992 14th Annual International Conference of the IEEE 1992:1:295-6

<sup>&</sup>lt;sup>4</sup> Frey AH. Human auditory system response to modulated electromagnetic energy. J Appl Physiol 1962;Jul 17:689-92 [Also Online] [Accessed 5/2/2014] URL: http://www.thatte.net/frey.pdf

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