

Abstract

Acoustic Hailing Devices and Non-Lethal Acoustic Weapons

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Acoustic hailing devices (AHD) are in general use in Iraq and elsewhere. Their function is to enable military or police forces to communicate with individuals or crowds in order to defuse confrontations and avoid the need to use deadly force. Some consideration has been given to employing AHD as non-lethal weapons that will 'deter' potentially aggressive people, thus avoiding the use of deadly weapons through forced compliance by sound. This paper will briefly review the history of sound in warfare and some misperceptions and myths of non-lethal acoustic weapons. In addition AHD will be contrasted with non-lethal acoustic weapons in terms of missions, the physics of sound, and human responses to sound. A brief review of commercially available AHD will be presented along with a discussion of the potential for future non-lethal acoustic weapons.