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**Effects of a hearing aid noise management feature on user
perception and performance under noise**

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This paper presents the effects of a hearing aid noise management feature on user perception and performance under noise. Hearing-impaired subjects were exposed twice to seven different noise signals which simulate common mechanical system noise, once with the noise management feature enabled and once disabled. The seven noise signals vary in terms of level and spectral quality, but are all within the range of background noise conditions found in commercial offices. Performance is gauged on three types of tests (math, verbal and typing), while subjective perception is measured via a subjective questionnaire. The results of this investigation will show if the hearing aid noise management feature reduces detrimental effects caused by background noise. Additionally, the data from hearing-impaired subjects are compared to those from normal-hearing persons to assess if significant differences are present between the two groups. If so, they may lead to the development of different standards for noise criteria levels in spaces designed for the hearing-impaired. [Work supported by a Univ. of Nebraska Layman Award and an ASHRAE Graduate Student Grant-in-Aid]