CANADIAN ACOUSTICAL STANDARDS NORMES ACOUSTIQUES CANADIENNES

DO WE NEED CANADIAN ACOUSTICAL STANDARDS?

Cameron Sherry - Enviro-RISQUE

Do we, Canadian Acousticians, really need to concern ourselves with the development and maintenance of acoustical and vibration standards? Surely we can carry out our acoustical research or our acoustical measurements without having to think about standards. Or can we?

The series of papers that will be presented in this session will take a look at which standards some Canadian Acousticians feel require input from the Canadian community. The papers will include information on what the effects would be of ignoring the rest of the world and what the benefits could be of participating in international acoustic standard development.

Is there really a field of endeavour in which acoustics does not play a role? The most obvious is the role of voice communication, one with another. There is on going research to determine how we speak, how we learn to speak, how we hear, how we can discriminate one sound from another and what actions we take on hearing a command.

When it comes to leisure time or a party, we often turn to music. To make sure we are providing high quality sounds to a discriminating ear we need information about how the ear perceives sounds, how enclosures affect the sounds we make and how sounds can be mixed with each other to produce the effect we want.

We live and work in enclosures but how much privacy is required and how much communication is required. Since we all sleep at some time, is there a limit to how high the noise background can be?

The acoustical concerns can be extended to questions about the nature of our planet whether it be in the air, on the land, under the land or underwater. We use machines that create both pleasurable and annoying noises depending upon their location and use. Our machines cause vibrations to buildings and ourselves. What are the limits of acceptability from both a health and annoyance point of view?

The common acoustical tools required to develop an understanding of each of the subject areas is standards. They come in many guises such as terminology, measurement procedures, specifications for instrumentation, guidelines, practices and classifications.

WHICH NATIONAL OR INTERNATIONAL ACOUSTICAL STANDARDS SHOULD CANADIANS DEVELOP AND MAINTAIN?