Noise Monitoring and Auditing

Noise measurement exercise is part of the basic procedures in the monitoring of existing environmental setting or in identifying a particular noise source and/or its quality within a particular environment. It is often called for in a transportation project to identify impact of traffic noise for a particular project such as a new or an improved highway or railway before, during and after the implementation.

Owing to the unhealthy competition within the industry, the fee for conducting a noise monitoring exercise has dropped down to a very unreasonable rate. As such, the monitoring work has landed onto the hands of untrained technical staff. The results of noise monitoring are usually unreasonable and become unusable. This has brought to our attention that some of the monitoring works carried out for government consultancy had suffered this kind of deficiency. The persons involved did not really know the basic monitoring procedures and cares that need to be taken during the noise measurements. The results from such measurements were found to be questionable.

HKIOA is very concerned about such malpractice that took place in the industry. During the latest Executive Committee meeting, such issue was discussed and it is now felt that strengthening the training of technical staff for noise monitoring is needed. A task force working group has been set up looking for ways of improving the situation. The initial idea is to certify trained personnel to carry out noise monitoring exercises. The certification will need to be renewed after a period for the use of certain types of equipment. Thus, it will ensure that the persons involved would be able to keep up with latest development of advanced equipment.

This investigation should come up with a scheme that is practical and would be accepted by Government. At the end of the day, the community gets its money well spent and we achieve the objective in improving the noise monitoring exercise.

Message from the Editor

This newsletter is the last issue in 2004. May I make use of this chance to wish all members a successful and prosperous year of 2005. Hope that the economy will continue to grow steadily for improved job security and prospect.

The keen competition for acoustic related projects resulting in unhealthy development in the industry has become more pronounced in recently days. In fact, this was pointed out in the series of interview with leading industrialists carried out and published in the previous issues of the newsletter. In view of the worsening situation, our Chairman in his Message from the Chairman is trying to alert members and to initiate remedial actions from the Institute.

We received again an article from our long supporting member WP Ko who had recently come back to Hong Kong for a short vacation. It is nice to have a gathering with members and to receive encouragement from them. We need your continuous support. Besides, three reports on activities in the past few months are included and your active participation in upcoming ones is sought for personal as well as industrial development.

Seminar: Enhancing Continuous Public Involvements by Noise Mapping and 3-D Visualization Techniques

A joint function “Seminar on Enhancing Continuous Public Involvements by Noise Mapping and 3-D Visualization Techniques” organized by Chinese University of Hong Kong (CU), Environmental Protection Department (EPD), Highways Department (HyD), Hong Kong Institute of Environmental Impact Assessments (HKIEIA), Planning Department (PlanD) and Hong Kong Institute of Acoustics (HKIOA) was held at the Lecture Hall of North Point Government Offices in the morning of 19th June 2004. Over 300 participants including consultants, scholars, engineers, planners, government officers, professionals in computer simulation, geographic information system (GIS), environmental protection and acoustics took part in this seminar. Due to the exciting response, another seminar room with video conference equipment was opened to facilitate the participants.

After the keynote address from Professor KC Lam (Chairman of Advisory Council on the Environment), Mr Elvis Au (EPD), Mr Freeman Cheung (HKIEIA), Mr NC Cheung (HKIOA), Mr CW Chow (HyD), Mr Silas Liu (PlanD), Mr CW Lee (EPD) and Professor KC Lam (CU) took turn to present their speeches. A lot of wonderful demonstrations and 3-D visualizations were shown in their presentations. Discussion session was held at the end of the seminar. Both speakers and participants shared their experiences on how noise mapping and 3-D visualization techniques may enhance continuous public involvements for the communications and consultations.

Report on Visit to TVB City at Tseung Kwan O

A half-day technical visit to the new TVB City at Tseung Kwan O (TKO) was organized on 12th June 2004. The reaction was very good and the quota for participants was full only after four days of announcement.
Participants including acoustic consultants, contractors, product suppliers, laboratory specialists gathered in this one of the largest TV production facilities in Asia in that morning. Acoustic demanding locations such as the drama studios, live studios, recording studios and their control rooms, dubbing suites, plant rooms, etc. were in our route. The low and high frequency absorptive wall lining, very high performance sound insulation dry wall system ($R_w = 70\text{dB}$) with many conduits and air ducts passing through, the side by side and box in box recording studios, the high performance sound insulating windows (both double glazed and single glazed), the “Old China City” and the outside shooting area near the jet engine testing facility, etc. were introduced. Due to the acoustical awareness and early consideration of TVB, various possible serious consequences had already been thought of and tackled either during the design and construction stages, meeting the operational requirements of the facilities.

The tour was finished at around noon. No doubt we have broadened our views and found the morning interesting. The Institute would like to give special thanks to TVB and their Mr. Kelvin Leung to make this event possible.

On 27 October 2004, the HKIOA has the honour of inviting Dr Gilles Daigle of National Research Council (NRC), Canada to deliver a talk to members on “Air-coupled surface waves devices and beam-forming”.

Dr Gilles Daigle is the Senior Research Officer for the NRC Institute for Micro-structural Sciences. His research areas include sound propagation, scattering and diffraction by simple shapes and curved surfaces, acoustic reflection and refraction, porous acoustical material, acoustic impedance, surface waves, propagation constant, beam forming, acoustics of the outer ear and ear canal, hearing aid technology, telecommunication and multimedia acoustics, environmental acoustics, noise control, signal processing. Dr Daigle has served as Associated Editor for the Journal of Acoustical Society of America, Vice President of the Acoustical Society of America, President of the International Commission for Acoustics and is currently President-Elect of International Institute of Noise Control Engineering.

Dr Daigle gave us an overview of air-coupled surface waves, and how the surface waves devices and beam-forming are applied increasingly in the aspects of improving sound pickup for acoustical applications. Dr Daigle also guided us through the development of the techniques in the past years and in what direction would the technique be advanced.

Members found the talk very insightful, interesting and informative. The seminar no doubt brought the local acoustic and noise control professionals and practitioner a new dimension.

After I left Hong Kong for four years, I had the opportunity to go back to Hong Kong for ten days in September. Hong Kong has changed a lot. More buildings, freeways and railways were built. After landing, I was very happy to meet my relatives and best friends. In the evening of September 16, I attended the Welcome Party organized by HKIOA Committee at Wu Kong Shanghai Restaurant in Empire Hotel, Wanchai. I had the chance of meeting with the present Chairman NC Cheung; past Chairmen: Prof. Daniel PC Chan, Dr Westwood Hong, Maurice Yeung, Dr KM Li; Committee Member YN Au Yeung; and Members: Dr KW Cheng, Nelson Tam. In the dinner, I shared my American working and research experiences with the members. From our conversation, I am confident that HKIOA will continue to shine lights on all the acoustic matters in Hong Kong. Being an overseas HKIOA member, I gave a souvenir to HKIOA – a plaque with words of GREAT FRIENDSHIPS.

Thanks are to the HKIOA Committee for making all the arrangements and we had a very enjoyable dinner. Also, I was very thankful to Maurice Yeung for taking the photographs for us.

I hope I will visit Hong Kong soon, if not I hope to get together with all of you in the United States very soon.

The contents of articles published in this Newsletter do not necessarily reflect the views and opinion of the Hong Kong Institute of Acoustics. Sounding Bound is an official journal of the Hong Kong Institute of Acoustics.