



# No-Dig North

NEWSLETTER OF THE GREAT LAKES AND ST. LAWRENCE CHAPTER OF THE NASTT

## Trenchless Materials Workshop A Resounding Success

by Grant Murphy, P.Eng., Toronto Hydro-Electric Commission

It was a sunny, clear autumn day when we held our regional workshop on Trenchless Materials in Markham, Ontario, on November 6, 1997. The objective was to provide a balanced overview of materials used in trenchless technology applications. "Trenchless Materials - A Balanced Perspective" was co-sponsored by CATT and our Chapter and was well attended by over 110 people.

The event was kicked off by Mr. Dalo Keliar, Commissioner of Community Services for the Town of Markham, who provided a warm welcome to all participants and attendees. Mr. John Haasen, Vice-Chair, CATT, provided a brief overview of CATT and Mr. Grant Murphy of Great Lakes and St. Lawrence Chapter, NASTT chaired the event.

The speakers were selected because of their extensive knowledge of materials, which allowed attendees to gain an understanding of the chemical properties, their use and their application.

Mr. Peter White, General Manager of Multiurethanes Ltd., provided valuable insight into the use and application of a variety of grouting materials.

He demonstrated several practical examples of the placement of grout material and the benefits achieved through its use. Later that morning, we really got down to it with an overview by Mr. Mark Kittson of Bay Mills Ltd. on cured-in-place pipe (CIPP) liners and the various weaves available for use within the Trenchless industry. Mr. Bruce Curry from Alpha/Owens-Corning in Tennessee, U.S.A., spent time with attendees reviewing various aspects of polyester and vinylester resins. Everyone realized that both these subjects required more time than was available on this particular day; perhaps future workshops will be able to deal with both of these matters in greater detail.

Just before lunch, Dr. J-F. Masson, of the National Research Council of Canada, grabbed everyone's attention with his analogies of a line of Russian Dancers and a bowl of spaghetti to describe the cross linking properties of PVC and PE material. Mr. Andy Guay from Lafarge Canada discussed concrete pipe and the various design considerations associated with these types of material.

Mr. Clark Tummon, from Baroid Canada, stepped up as a pinch hitter for Mr. Frank Cannon. Clark did a great presentation on various drilling muds in use and the characteristics of these materials in a variety of sub-surface conditions. His hands-on approach and "laboratory style" experiments were well received by the audience.

In summary, the workshop was a resounding success due to the quality of the speakers and the information provided. In addition, it was a first for our Chapter to have booths and displays established so that attendees could see some of the trenchless products available and to meet with suppliers.

The key to an event like this is to get chance to see what others are doing and to share your experiences with your peers. In our ongoing efforts to provide affordable access to trenchless technology professionals, another regional workshop will be coming up in Ottawa in February 1998. You will read later on about this workshop but if you need more information contact Harry Baker at NRC (613) 993-3807 or via e-mail at [harry.baker@nrc.ca](mailto:harry.baker@nrc.ca)

### MARK YOUR CALENDARS NOW FOR THE NEXT NASTT REGIONAL SEMINAR

#### ***"Trenchless Technology... Sharing the Knowledge"***

Wednesday February 11, 1998  
8:00 AM-4:30 PM (Lunch provided)

#### **Location:**

Institute for Research in Construction, National  
Research Council of Canada  
1500 Montreal Rd. Ottawa

#### **Registration:**

Members of NASTT, CATT, CERIU - \$65/person  
Non-members - \$95/person

#### **Registration Information:**

Debbie Geddes (519) 888-4770  
Cheques payable to "CATT, University of Waterloo"  
Send to: CATT Office  
University of Waterloo  
Department of Civil Engineering,  
Waterloo, ON, N2L 3G1

*Other inquiries:* Call Harry Baker at (613) 993-3807

## Chair's Report

By K. Grant Murphy, P.Eng., Scarborough PUC

Happy New Year to all! 1997 has been an extremely busy year for many of us in the trenchless business. As Chair of the NASTT Great Lakes and St. Lawrence Chapter, I have been fortunate to work with a core group of very dedicated souls. We established a series of goals which have been very successfully achieved. The main thrust of our efforts have been focused on getting the word out about trenchless technology to municipalities, consultants, and companies.

Our membership has grown steadily and we now have a total of 98 members in our Chapter, a 25% increase over 1996. One of the reasons for this increase has been our efforts in promoting partnerships with CATT, CERIU and NRC, in order to provide regional workshops to our membership. The idea behind this is that the best people to know what information is needed are the people in the local area being served. But to get trenchless moving we need your participation!

These initiatives have been very successful and have been growing in both frequency and size. Thanks goes out to the local organizing Committee for the November workshop held in Markham. Ernie Ting and Bill Garibaldi took the lead and their cooperative efforts with CATT provided for the most successful workshop ever. Coming in February, Harry Baker from NRC will be organizing a regional workshop in Ottawa and I know that Joe Loiacono is working on something for the March or April in Montreal. So stay tuned for more details! If you are interested in running a Trenchless Technology workshop, contact Ernie Ting at (905) 477-7000.

Tim Dennis and our editor, Emma Walker have been working very hard at getting the newsletter out to our membership. As always, they need your input and ideas for articles. So please feel free to e-mail your articles or photos to Emma at ewalker@ch2m.com.

My term as Chair will soon be over and elections for a new Board of Directors will be coming up in mid-January. I will be staying on as Past-Chair, along with Ernie Ting, Bill Garibaldi, Harry Baker, and Piero Salvo. Thanks go out to Joe Loiacono, Tim Dennis, Ralph Davidson, and Charles Hamilton for their active support of the Chapter. So look out for your ballot and get involved in our election by voting for your new 1998 Board of Directors.

On behalf of the current Board of Directors, all the best in 1998 and if you have any ideas as to how our Chapter can work for you, e-mail me at gmurph@spuc.org.

Til next time... Grant

### *About Albuquerque...A Land of Legends*

One of the best-kept secrets in the country, Albuquerque will be yours to explore and enjoy come April 1998. Called the most culturally-diverse city in the country, Albuquerque is magnificently positioned with the Sandia and Manzano Mountains forming its eastern border and the legendary Rio Grande River dividing it east and west.

## On The Net with Harry Baker

### **WaterOnline**

News from around the world in the water and wastewater industries  
[news.wateronline.com/industry-news/ind7061203.html](http://news.wateronline.com/industry-news/ind7061203.html)

### **Underground Information**

All areas of underground technology  
[www.undergroundinfo.com](http://www.undergroundinfo.com)

### **NASTT Scholarship**

For Research in Trenchless Technology  
[www.bc.irap.nrc.ca/nodig/scholars.htm](http://www.bc.irap.nrc.ca/nodig/scholars.htm)

### **Standards Council of Canada**

[www.scc.ca](http://www.scc.ca)

## *Achieving New Heights in Trenchless Technology*

### *North American NO-DIG '98*

April 5-8, 1998

Albuquerque, New Mexico, U.S.A.

Just an idea of some of the concurrent session topics:

### **April 6, 1998**

Assessment of Rehabilitation Methods  
Research and Development for New Installations  
Waterline Inspection and Rehabilitation  
Larger Diameter Tunnels and Rehabilitation

### **April 7, 1998**

Rehabilitation with Liners  
Planning for Microtunneling  
Waterline Investigations and Designs  
Microtunneling Construction  
Sewer Rehabilitation Case Histories  
Rehabilitation of Gas Distribution Lines  
Rehabilitation Liner Design  
Directional Drilling Case Histories

### **April 8, 1998**

Rehabilitation Case Histories - Owner's View  
Pipe Bursting

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Chicago, IL 60611  
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Home Page [www.bc.irap.nrc.ca/nodig/](http://www.bc.irap.nrc.ca/nodig/)

## NEWS FROM THE NATIONAL RESEARCH COUNCIL

### Introducing CITAC - The Canadian Infrastructure Technology Assessment Centre

There has long been a need for technically sound, objective evaluation of new or innovative infrastructure technologies. That need is now being addressed with the creation of the Canadian Infrastructure Technology Assessment Centre (CITAC).

CITAC's staff will plan and manage national performance benchmark evaluations for innovative technologies and feed the development of new standards and specifications for input to the National Technical Guide for Urban Infrastructure.

CITAC offers an array of benefits for all stakeholders in the construction and repair of Canada's infrastructure systems. CITAC will:

- Expedite testing and assessment of new technologies
- Publish findings of new standards and specifications
- Reduce time and costs associated with new technology introduction
- Encourage interprovincial trade
- Enhance business opportunities internationally

CITAC is managed by the Institute for Research in Construction's Canadian Construction Materials Centre (CCMC), a well-established centre for the evaluation of new and innovative construction products. CITAC operates as a fee-for-service unit of CCMC, identifying appropriate experts who will assist in defining the testing needs and analysis requirements for evaluating the performance of new infrastructure products, materials, services, equipment, and systems.

With the introduction of CITAC, a full range of infrastructure services reside at the National Research Council, including:

#### **Canadian Infrastructure Technology Assessment Centre**

Evaluation of new and innovative technologies

#### **Urban Infrastructure Rehabilitation Program**

Research and development

#### **National Technical Guide for Urban Infrastructure**

Creation of standards and codes

#### **Industrial Research Assistance Program**

Support to small and medium-sized enterprises

For further information contact:

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Website: <http://www.nrc.ca/ccmc>

## TRENCHLESS NEWS

### "MUNICIPAL INSIGHTS INTO TRENCHLESS TECHNOLOGY"

#### NASTT's First International Video Conference

**January 21, 1998**

Noon - 3 p.m. EST

PARK PLAZA HOTEL

4 Avenue Road, Toronto

NASTT is pleased to announce its first international video conference entitled "*Municipal Insights Into Trenchless Technology.*"

This interactive videoconference will give participants the opportunity to hear experts from Germany, the United Kingdom and the U.S. present leading edge technical information and well documented municipal case histories on the use of Trenchless Technology for the maintenance and construction of underground infrastructure. Speakers will include:

**Robert Stein**, Managing Director of Stein & Partner, consulting engineers, Bochum, Germany

**Richard Thomasson**, Director, Maintenance Bureau, Washington Suburban Sanitary Commission

**Art Kidder**, President of CAT Contracting Inc. and until recently Senior Project Manager with the City of Houston responsible for that City's \$356 million trenchless construction program

**Deborah Clarke**, Partner, C&B Associates Ltd. and President of the Directional Crossing Contractors Association

**Steve Vick**, President of Steve Vick Ltd. and the holder of several patents related to flow stopping techniques associated with live main insertion

In addition to the above noted speakers, a European panel of experts will provide participants with a unique opportunity by responding to questions from the audience. The cost of the conference is \$75 U.S. for NASTT members and \$95 U.S. for non members. Space is limited.

If you haven't received registration information you can obtain it from Tim Dennis of the City of Toronto at (416) 392-6787 or through NASTT's head office at (312) 644-0828.



The Great Lakes and St. Lawrence Chapter of the NASTT would like to thank CH2M Gore and Storrie Limited for their assistance in printing this newsletter.

## URBAN INFRASTRUCTURE WEEK 1997



## LA SEMAINE DES INFRASTRUCTURES URBAINES 1997

by Joe Loiacono, CERIU

After an intense week of activities, the curtain has gone down on the 1997 Urban Infrastructure Week. The annual event has met and even surpassed the objectives set by the Centre for Expertise and Research on Infrastructures in Urban Areas (CERIU) for its third edition.

Presented November 24th through 28th at the Montreal Convention Centre, the Urban Infrastructure Week drew more than 1125 participants at its various conferences, an increase of 33% in comparison to last year's edition.

Conferences were presented under four main categories: Trenchless Technologies, Pavement, Public Utilities, and Structures. Sessions regarding Performance Oriented Specifications and Experimental Projects, various panels and luncheons added content and diversity to the program.

The Trenchless Technology session, as well as the one organized by the Association québécoise des techniques de l'environnement - AESEQ, drew a total of 425 participants for its 25 presentations. The CERIU marked the opening of the week's activities with the launching of the Standardization Manual for CCTV inspection.

Throughout the Trenchless Technology session, speakers from the province of Quebec, Toronto, Ottawa, Waterloo, Boston, Atlanta, Ohio, Birmingham, and Lauzanne were on site to share their experiences. Their wide range of expertise and know-how allowed delegates to broaden their knowledge and to see how problems similar to theirs are dealt with elsewhere.

The INNOVA-TOUR exhibition presented on November 24, 25 & 26 was an excellent opportunity to present innovative technologies available in the rehabilitation industry. In fact, close to 50 exhibitors were on site to present products and services. The Boulevard of Demonstrations, along with the conference area, were very appreciated by delegates who had the opportunity to see close up the characteristics and functioning of new products.



La Semaine des infrastructures urbaines 1997 vient de se conclure et l'événement a comblé toutes les espérances de l'organisation du Centre d'expertise et de recherche en infrastructures urbaines (CERIU). En effet, présentée du 24 au 28 novembre dernier au Palais des congrès de Montréal, cette troisième édition de la semaine a vu défilé pas moins de 1125 participants à travers ses nombreuses conférences pour enregistrer une hausse de participation de 33%.

Les conférences étaient regroupées sous les grands domaines d'intervention des infrastructures urbaines, soient les technologies sans tranchée, les chaussées, les réseaux techniques urbains et les ouvrages d'art. Des sessions sur les contrats à obligation de performance et les projets d'expérimentation, des panels et des déjeuners conférences sont venus enrichir un horaire déjà bien chargé.

La session des technologies sans tranchée ainsi que celle de l'AQTE - AESEQ sur la gestion des réseaux d'aqueduc et d'égouts réunissaient quelque 425 participants qui ont assisté à 25 conférences. Le coup d'envoi de ces rencontres a été donné avec le lancement du manuel de standardisation des observations et de l'inspection télévisée de conduites d'égout, édité par le CERIU. Puis, pendant deux jours, les conférenciers se sont succédés pour nous offrir une vue d'ensemble de haut niveau. Des contributions sont non seulement venues des quatre coins du Québec mais également de Boston, Atlanta et Peninsula (Ohio) aux États-Unis, de Birmingham et Swindon en Angleterre, de Lausanne, en Suisse et, plus près de nous, de Toronto, Ottawa et Waterloo. Elles nous ont permis d'élargir notre champ de connaissances et de constater que nous faisons face aux mêmes problèmes.

La rencontre de l'industrie, de la recherche et du monde municipal s'est certes avérée une grande réussite. L'importance de l'affluence et l'intérêt suscités par Infra' 97 nous indique également que nous vivons les mêmes préoccupations face aux infrastructures et que c'est dans le partenariat que nous pourrions surmonter nos difficultés pour mieux gérer le bien public.

Enfin, les technologies commercialisables ont bénéficié d'une vitrine privilégiée avec l'exposition Innova-tour, qui se déroulait simultanément à la Semaine. Près d'une cinquantaine d'exposants ont en effet été en mesure de présenter les dernières nouveautés en matière de technologies et d'équipements. Le <<Boulevard des démonstrations>> et l'aire audiovisuelle constituaient deux lieux de choix pour démontrer concrètement les derniers développements dans le domaine.