

NORTHWEST TRIBAL TRANSPORTATION NEWS



WINTER 2004

USE OF ROBOTIC TECHNOLOGY IN HIGHWAY PROGRAMS TO BE FEATURED AT POLSON SYMPOSIUM - BY DAVID FREY

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SPECIAL POINTS OF INTEREST:

- 11th Annual Northwest Tribal Transportation Symposium in Polson, Montana p. 4
- 2004 Native American Transportation Safety Conference p. 6

Robotic technologies for transportation will be presented at the 11th Annual Northwest Tribal Transportation Symposium at Polson, Montana in April. In addition to the robotic Rover® 600 highlighted in the following article, the Western Federal Lands Highway Division will demonstrate a robotic submersible camera platform, the Seabotix LBV 300 Remotely Operated

Vehicle, in Flathead Lake. The folks at Federal Lands are also looking at using this technology in a robotic helicopter system. Brad Roberts, the Federal Lands Technology Deployment Systems Coordinator, is especially interested in your insights into potential applications of this technology in your transportation programs. In addition to new technologies, the Symposium

will explore program and project implementation, state-tribal coordination, IRR inventory, TEA-21 Reauthorization, transportation safety, and much, much more. For details on the Symposium see the registration announcement on page 4 of this newsletter or visit our website at www.cbpa.uew.edu/~ltap.

ROBOTIC INSPECTION OF CULVERTS AND DOWN HOLE APPLICATIONS - BY BRADLEY J. ROBERTS, FHWA-WESTERN FEDERAL LANDS HIGHWAY DIVISION, VANCOUVER, WA

Why?

The need to adequately assess the condition of existing culvert metal pipes (CMP) and geotechnical instrumentation were the two primary reasons for acquiring the Rover® 600 robotic inspection tool. This capability has al-

lowed our highway designers to accurately identify and verify locations suitable for trenchless technologies (sliplining or sleeving). The down hole capabilities have given our geotechnical and construction disciplines a QA/QC verification tool for newly installed measur-





ing devices, as well as condition assessments of existing installations.

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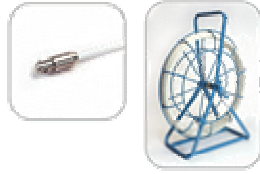
The Rovver® 600...

The Rovver® 600 is a portable and versatile self-propelled motorized crawler. It is ideally suited for many applications because of the modular reconfigurable component design. This enhances its versatility and ability to inspect inside pipes with diameters ranging from 2 to 36 inches. The Rovver® can be outfitted with two camera options.

The first option is the  axial camera head, which is a fixed manually focused low-lux lens providing quality digital video and still images. The second available option is the pan and tilt camera head. This is a fully  articulating manually focused low-lux lens that provides quality digital video and still images.

Down hole and push pole applications...

The camera heads can



operate independently of the Rovver® crawler assembly. This configuration allows various down-hole or push camera applications. This is achieved by utilizing the fiberglass cable reel pictured above and the push pole adapter. Our geotechnical engineers have utilized the down hole configuration to inspect drill shafts and various geotechnical instrumentation tubes and shafts. The ability to drop the camera lens into tight and inaccessible areas will allow our construction inspectors to verify structural reinforcement spacing, placing, and form clearances for QA/QC. The ability to push the camera into openings as small as 2-inches allows for the inspection of most in-place drainage systems.

The Cameras...

Both of these camera heads contain an embedded ring of LEDs around the lens to provide lighting. The high-resolution manually focused color images ensure a clear view that helps compensate for the lenses lack of zooming capabilities. Swapping the camera heads is relatively quick and easy. In down hole and push camera scenarios, the low-lux cameras with the LEDs are exceptionally suited for the majority of tight and confined locations with minimal to zero light environments. When used with the Rovver® crawler assembly in larger environments, two separate auxiliary light configurations can be employed.

Notables...

Some other notables about the Rovver® 600 include

- Rovver® 600 is fully submersible to 30 feet.

(Continued on page 3)

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Urban Planning Programs

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(Continued from page 2)

- Powered by AC Inverter connection to inspection vehicle battery.
- Three sets of wheels, small, medium, and large (single and doubled)
- 100m cable drum reel for power, and emergency extraction
- Digital Video camera capable of on the fly mpeg movies, digital stills
- Operator definable screen template overlays for all video mpeg movies, and stills.
- Real-time on-screen text and audio annotations.

Safety, Time, Dollars...

We are only beginning to understand the present and future benefits of utilizing the Rover® 600 configurations. QA/QC, accurate field assessments for trenchless technologies, and pipe condition inventory systems, are just a few of the appropriate scenarios for this technology. This ultimately affects the all-important components of any organization, Safety, Time, and Money

2ND ANNUAL ALASKA TRIBAL TRANSPORTATION SYMPOSIUM

April 20th - 22nd, 2004

Hotel Reservations contact: Anchorage Hilton

500 West Third Avenue

Anchorage AK 99501

1-800-245-2527 or www.hilton.com

For symposium information and registration contact

Dan Moreno or Richard Rolland at 1-800-583-3187

or visit our web site at www.cpba.ewu.edu/~ltap

Be sure to make your hotel reservations by April 9th, 2004 to be eligible for the conference discount.

11th Annual Northwest Tribal Transportation Symposium

Building Partnerships in Tribal Transportation

April 13th, 14th, 15th, 16th; 2004

Best Western KwaTaqNuk Resort - Polson, MT

Call 1-800-882-6363 by April 5th, 2004 for symposium discount.

55 Lakeside rooms for \$40 and 57 additional rooms for \$35

Ask for the "11th Annual Tribal Transportation Symposium"

Hear from the Experts!

The 11th annual Northwest Tribal Transportation Symposium will give you an opportunity to learn about the latest developments in Tribal Transportation issues, such as:

- Program-Project Implementation ("638" Contracting & Compacting)
- Technology in Transportation
- Indian Reservation Roads (IRR) Inventory
- Transportation System Preservation and Management (Maintenance)
- Transportation Safety in Tribal Communities
- Workforce Development & TERO
- State/Tribal Coordination
- Reauthorization and Rule Making
- Strategic Planning for Transportation
- Equipment Rodeo

There will be many more topics to cover in the three days we have at the wonderful KwaTaqNuk Resort. A full agenda will be sent out in a separate mailing.

EQUIPMENT RODEO AND VENDOR FAIR

Be sure to sign up for our first equipment rodeo and take a few minutes to visit with the vendors.

Sponsorships

If your organization is interested in sponsoring one of the coffee breaks, the reception or one of the lunch's please contact David Frey at (888) 944-5454, Kirk Vinish at (360) 384-2307 or Dennis Trusty (701) 255-3285 ext. 1262.

11TH ANNUAL NORTHWEST TRIBAL REGISTRATION FORM

TRANSPORTATION SYMPOSIUM

APRIL 13, 14, 15, 16; 2004

SYMPOSIUM REGISTRATION: COMPLETE THE REGISTRATION INFORMATION SECTION AND **SEND BY MAIL, FAX OR E-MAIL** THE COMPLETED FORM AND PAYMENT TO:

<p>NW & Alaska Tribal TTAP Attn: Michele Siedenburg 216 Isle Hall Cheney, WA 99004 Fax: (509) 359-7485 E-mail: NW&AKTTAP@MAIL.EWU.EDU</p>	<p>Credit card information: Visa or Master Card Only</p> <p>Name on Card: _____</p> <p>Card Number: _____</p> <p>Expiration Date: _____</p> <p>Signature: _____</p>
<p>Questions? Call 1-888-944-5454 or 701-255-3285 ext. 1262 E-mail: NW&AKTTAP@mail.ewu.edu</p>	
<p><u>Pay by Check, PO, or Visa/MC (Please circle one)</u></p>	

Cost: \$125 per person (includes 1 breakfast, 2 lunches and 2 dinners)

Participant Name: _____

Tribe/Organization: _____

Address: _____

City/State/Zip: _____

Phone: _____ Fax: _____

E-Mail: _____

Any special needs (dietary or other)? If so please specify: _____

Office use only

Conf # _____

PayRec. _____

Receipt # _____

Comment: _____

EQUIPMENT RODEO REGISTRATION (Please check events you will be participating in.)

____ Front-end loader ____ Motor Grader ____ Back Hoe

Pre-registration is greatly appreciated and will help assure that adequate materials are prepared for all participants.

2004 NATIVE AMERICAN TRANSPORTATION SAFETY CONFERENCE

May 11th to 13th, 2004

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Transportation Safety covers a wide variety of issues. This conference is design to assist Tribal Leaders, Law Enforcement Officers, and Tribal Government employees to improve transportation safety in their communities.

To receive conference information electronically, please visit the website: www.cbpa.ewu.edu/~LTAP or phone (800) 583-3187

Resort Information:

Coeur d'Alene Resort Hotel 27068 S. Hwy 95 Worley, Idaho 83876

For room reservations please call: 1-800-523-2464 Ask for: "Tribal Transportation Safety Conference"



Sponsored by: Coeur d'Alene Tribe • Bureau Of Indian Affairs • Montana/Wyoming Tribal Leaders Council • Federal Highway Administration • Affiliated Tribes Of Northwest Indians • Inter-Tribal Transportation Association • National Highway Traffic Safety Administration • Alaska & Northwest TTAP • Northern Plains TTAP

TRIBAL TRANSPORTATION NATIONAL CALENDAR**APRIL 2004**

- 13 - 16 11th Annual Tribal Transportation Symposium, Polson MT Best Western KwaTaqNuk Resort .
For reservations call (800) 882-6363 or (406) 883-3636 ask for the 11th Annual Tribal Transportation Symposium. For more information contact David Frey at 1-888-944-5454
- 20 - 22 2nd Annual Alaska Tribal Transportation Symposium, Anchorage AK
Host Hotel: Anchorage Hilton for reservations call 907-272-7411 or Fax: 907-265-7140
or visit web site: www.anchorage.hilton.com
For more information contact Richard Rolland at 800-399-6376.
- 22 - 25 4th National Conference on Historic Roads; Portland Oregon
For more information visit web site: www.historicroads.org
- 24 - 28 APA 2004 National Planning Conference, Washington D.C.
For more information, please visit: www.planning.org/2004conference/index.htm

MAY 2004

- 11 - 14 Native American Transportation Safety Conference; Worley Idaho,
Coeur d'Alene Resort Casino Hotel ** See previous page for more information**
- 13 - 16 Lewis & Clark Bicentennial Festival National Signature Event
For more information, please visit: www.lewisandclark.state.mo.us/calendar/natsig.asp
- 17 - 20 ATNI Mid-Year Conference; Hosted by: The Confederated Tribes of Siletz Indians
Chinook Winds Casino and Convention Center; Lincoln City Oregon

JUNE 2004

- 22 - 23 TRB Native American Transportation Issues Committee; Coeur d'Alene Resort Casino Hotel, Worley Idaho
More information to come.

SEPTEMBER 2004

- 22 - 24 Ninth National Conference on Transportation Planning For Small to Medium Communities
Double Tree Hotel, Colorado Springs, Colorado

OCTOBER 2004

- 11 - 13 2004 Washington State and Tribal Transportation Conference,
Double Tree Hotel, Spokane City Center, Washington
- 24 - 28 Intertribal Transportation Association Annual Meeting, Las Vegas, Nevada; Golf Tournament October 24th

We are on the web!!!

www.cpba.ewu.edu/~ltap

**NORTHWEST & ALASKA
TTAP**

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The Northwest Tribal Technical Assistance Program (TTAP) is administered by the Urban Planning Program at Eastern Washington University under contract with the Federal Highway Administration. Funds are provided by the Federal Highway Administration LTAP, the Bureau of Indian Affairs Indian Reservation Roads Program, locally generated resources and individual contributions.

ADVISORY BOARD

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John Barkley Umatilla Tribes	Pacific Northwest TERO Rep
Blanchard Matte Makah Tribe	1 st WA Tribes Rep
Kirk Vinish Lummi Indian Nation	2 nd WA Tribes Rep
Mike Clements Warm Springs Tribes	1 st OR Tribes Rep
Todd Tripp Coquille Indian Tribe	2 nd OR Tribes Rep
Francis (Lux) Devereaux Coeur d'Alene Tribe	1 st ID Tribes Rep
Della Cree Nez Perce Tribe	2 nd ID Tribes Rep
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Kim Hoovestrol FHWA Oregon Division	FHWA-OR
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