Ministry supports avalanche awareness
Claire Dansereau, centre, with a $5,000 contribution to the Canadian Avalanche Foundation. The deputy minister attended Mount Seymour's Avalanche Awareness Days with Canadian Avalanche Association president Chris Stethem, left, and Jack Bennetto, manager of MOTh's snow and avalanche programs and vice president of the Avalanche Foundation. (See story page 4)

Centralized data system streamlines accounting
The ministry’s Cache Creek to the Rockies program is using a brand new, custom-designed project management system that provides a single source of information for project accounting, monitoring and planning.

The centralized source of data also streamlines information-gathering and increases efficiency. As an example, regional accounting staff can now input project information once instead of forwarding several entries to Victoria for later reconciliation.

Senior business analyst and project manager David Friesen describes the new architecture as “the nucleus of a new corporate project management system that will soon be used for the ministry’s entire capital program.” It is already being employed on several major projects, including the South Fraser perimeter road and the Okanagan Lake Bridge.

CCR program director Gregg Singer sponsored development of the new system to enable Thompson-Okanagan and Kootenays regional staff to share project information with colleagues in other offices. Since being introduced, the consolidated source of data has improved communication and decision making as well as overall project management.

The new technology replaces the outdated DOS-based project management software used on the Vancouver Island Highway Project, which Singer also oversaw.

Nancy Merston, planning and major projects senior manager of finance and project services, ensured the new system equaled or exceeded the business requirements of major projects.

The new capital project management system, which cost just $270,000 to develop, was put into use in December, just seven months after it was approved for development.

The new system was built quickly using “rapid application development methodology,” which placed the development team in direct contact with the eventual users of the system.

“Technical staff were in the fortunate position to have instant feedback and ongoing testing,” recalls Friesen.

“Credit must go to the staff here in the project office who rose to meet the challenge,” Friesen said. “This, combined with overwhelming support from the ministry’s executive, is what made this IT project a success.”
The past year has been a busy one in the area of capital projects and we can look for big challenges in the coming year, too. I think we can be proud of the ministry's delivery of the capital programs and I want to thank the many people who are making it happen.

While we are very good at project delivery, there are always ways to improve and I would like to touch on some of those. To my mind, project management is an area where we can strive for continuous improvement. This leads to better quality investment for the funding available.

One of the directions from the ministry executive is to move to a single project management system. As a result, the Vancouver Island Highway and CCR project teams have been developing a new project management system that will allow us to integrate the project management and financial functions. The team spent many extra hours in developing this system, which is the first of its kinds in the provincial government. More details about this new technology appear elsewhere in this edition of the Road Runner.

Last November, MoTH staff from around the province met in Kamloops for a two-day workshop where we looked at project management in the ministry.

The workshop, which was subtitled Building on our Experience, highlighted the many benefits of sharing our collective expertise, learning from our mistakes and striving for this continual improvement. Many of the topics we explored are covered in a new project management manual developed by the ministry's investment management branch in Victoria. The results of this work will be available soon.

On another front, Dan Doyle and I have been meeting with the consulting engineers to examine how their work can be improved. We have been discussing areas such as quality assurance procedures and contracting approaches that will result in better designs.

Our expanded use of value engineering and value analysis is also resulting in better products and lower costs.

An example of the benefits of value engineering can be found in the South Coast region's work on the newly-constructed Highway 1 westbound lanes between the Sumas and Vedder canals. In this case, $1.7 million was saved on bridge costs and the elimination of access ramps through the extra time taken to conduct value engineering. It is estimated that the long-term benefits of the value engineering, due to additional safety and reduced maintenance costs, will save a further $2.2 million during the 50-year life cycle of the project.

Progress in these areas is exciting. Ministry teams around the province are pulling together to improve our capacity to build highways on time and on budget, and to offer better value for the taxpayer's dollar.

Employment equity policies ensure the ministry's workforce reflects the diversity of the province. Equity programs can also help adjust the composition of the ministry's workforce.

Members of the ministry's employment equity/multiculturalism committee work individually and as a team to promote and employment equity and multiculturalism awareness and activities.

The committee is structured to represent the ministry’s departments and regions as well as the four under-represented groups in government: women, persons with disabilities, visible minorities and aboriginal persons.

Programs include mentoring—pairing two employees of differing levels of experience and expertise for mutual benefit—and ensuring equity for under-represented groups in government, such as women, persons with disabilities, visible minorities and aboriginal people. For more information on equity employment initiatives, follow this link: EmploymentEquity
A day in the life of an avalanche technician

For those of us who sit in front of computer terminals every day, snow avalanche technicians appear to have pretty exciting jobs.

As we answer our phones and go through our in-baskets, they climb snowy slopes, travel in helicopters and use high-tech equipment to trigger avalanches.

But that kind of activity is all in a day’s work, according to snow avalanche technician Scott Aitken.

“At first glance, it might seem like a glamorous job but we are always thinking about snow conditions and safety,” says the 14-year ministry veteran. “As professionals, we routinely use helicopters, skis and snowmobiles as tools of the trade to get the job done.”

Aitken, one of eight ministry snow avalanche technicians, works in Howe Sound and the South Cariboo, which includes the Highway 99 corridor between Horseshoe Bay and Lillooet.

During avalanche season, roughly November to May, Aitken’s typical day begins at 5:36 a.m. when the clock radio in his Whistler home wakes him with the first weather report of the day. By the time he arrives at the ministry’s Pemberton office he already has an idea of local conditions.

Once at his desk, he reviews weather observation and forecast data as well as information provided by road maintenance crews. Then, using field data on snowpack composition, layering and strength, Aitken and assistant Doug Tuck prepare a hazard forecast for the region.

Since avalanche control frequently involves highway closures and traffic delays, the team’s daily plan is usually reviewed with appropriate area and district highways managers as well as local road maintenance contractors.

When conditions indicate avalanche control is necessary, technicians use their training and experience to select the most appropriate method.

Predicting and managing avalanche conditions is partly science and partly art, Aitken says. “Snow is a fascinating, constantly changing medium and it’s sometimes a challenge working with it since it’s always close to its melting point.”

About 35 times each season, Aitken uses a laptop computer to remotely fire one of the ministry’s French-made Gaz.Ex exploders. The gas powered devices, which are permanently placed in avalanche start zones, trigger wide slab avalanches with explosive shock waves that radiate out as much as 80 metres.

Another method of avalanche control is carried out by dropping charges from a helicopter, something Aitken does about a dozen times a season. Conditions have to be ideal, however, for an air approach to be considered.

During large storms, sometimes the only option is to close the highway until the hazard is manageable.

When not in the field, Aitken keeps busy with paperwork, logging blasting operations, compiling snowpack data and participating in rescue and avalanche training sessions, both as a student and as an instructor.

Taking training courses adds to the skills Aitken brings to the job. Recently, he and his black lab Decker became a certified search and rescue team with the Canadian Avalanche Rescue Dog Association.

While he admits some days can be long, working as an avalanche technician suits Aitken perfectly. He enjoys the outdoors, loves skiing and is rewarded by protecting the lives of the travelling public and road maintenance crews.

“Some days I think I might have the best job in Western Canada,” he says.

And, because his interest in the outdoors also extends into the summer months, he says he’s glad the snow eventually melts.

“I love paddling, too,” he says with a smile.
DM backs Avalanche Association

Snow avalanches are the most deadly natural hazard in Canada. On average, over 100 people are caught in snow avalanches in Canada each year and 18 die. For each person killed, five more are caught by avalanches but survive. Many of these survivors receive serious injuries. More than two-thirds of these accidents take place where avalanche safety programs are not in place.

Deputy minister Claire Dansereau helped kick-off the three-day Avalanche Awareness Days event held at Mount Seymour on Jan. 14 with a $5,000 contribution to the Canadian Avalanche Foundation. Also attending the event was Jack Bennetto, MoTH’s snow and avalanche programs manager and vice president of the Canadian Avalanche Association. Representatives from BC Parks, the B.C. Snowmobile Federation, the Canadian Ski Patrol and the Canadian Avalanche Rescue Dog Association also took part in the event.

The newly-formed Avalanche Foundation plans to raise and administer funds for public avalanche information, promote awareness and safety. It also intends to support programs that prevent or minimize avalanche risk and support research projects.

Fundraising is the primary initiative of the CAF in support of its objectives to prevent and/or minimize avalanche risk to the public.

The majority of the charity’s founding members are, like the ministry’s snow avalanche programs manager Jack Bennetto, senior members of the avalanche community dedicated to minimizing snow avalanche hazards. Margaret Kemper, whose son Michel Trudeau was killed in an avalanche, is also a founding member.

Lytton Bridge contracts awarded

Work is under way in Lytton to build a new bridge on Highway 12 over the Thompson River. Minister Lali announced the award of a $9.8-million contract to JJM Construction Ltd. of Delta on February 16. An open house was held in Lytton Feb. 28 to brief local residents on the project construction schedule.

The new two-lane bridge, with a pedestrian sidewalk, will replace the single lane bridge built in 1913. It is scheduled to open for service in June 2001.
Hail and Farewell to Dennis Hill

Dennis Hill, our manager of administrative services and former manager of financial services, retired after 38 years of service with the ministry. Region 2 staff honoured Dennis at a special retirement luncheon on March 23.

During his career, Dennis participated in the district office manager training program, which helped prepare many staff members for future career opportunities. Dennis is an avid baseball fan and a founding member of the Kamloops Highways A ball team. In recent years he has become an expert on the “good machines” at the local casino he visits in between his trips to Las Vegas and Reno!

We wish Dennis and his wife, Deidre, all the best for every happiness and continued good health in the future.

Building Bridges to Europe

If the connection between highways and the tiny Principality of Liechtenstein is not immediately apparent, read on.

Recently, the Central/North East region hosted a citizen of this tiny European nation (total area: 160 square kilometres; population: 32,000). Irene Ritter-Schachle, a human resources practitioner for the largest employer in her homeland, was sent by her company to learn English in Prince George.

The manager of the Prince George Language Centre is the daughter of former geotech staffer Len Thony. Len’s cousin is a teacher at a similar centre in Liechtenstein, and therein lies the connection. It might also explain why so many of the school’s clients are Liechtensteiners.

When not studying English during her six-week stay, Irene was learning about Canadian business practices. She worked two days a week with our human resources staff, noting many similarities and differences in work practices. In Liechtenstein for instance, there’s little focus on safety or equity issues. “You have very special questions that you can ask of candidates here,” she explained. “In Liechtenstein, we can ask almost anything.”

Irene’s language tutor obviously made great headway. “I didn’t speak a word of English when I first arrived,” she explained with perfect diction laced with a heavy German accent.

Irene enjoyed her time here and wishes her stay could have been longer. Unfortunately, Irene arrived during the winter’s coldest snap (back home, it was a balmy -4°, and even that’s considered chilly).

“I came in January because that’s a slow time for us, but next time, I’ll come back in the summer,” she said with a shiver.
Since Vancouver Island’s heavy rain and fog can make visibility a problem, particularly after dark, there is a real need for highway delineation methods that are reliable in most weather conditions. Fortunately, an ongoing testing project is producing some exciting results in the South Island district of region six.

Working with headquarters staff and ICBC representatives, region and district offices tested several new delineation methods on both Highway 17 between Island View Road and the Swartz Bay ferry terminal, and on the Malahat Drive section of Highway 1, between Goldstream Park and Hall’s Boathouse.

The light tubes tested on the centre median at Goldstream corner proved fairly successful, but the test ended when the manufacturer stopped producing the tubes. The ministry then tested high intensity reflectors installed along the top of the centre median, as well as regular reflectors mounted along the side of the median. This combination appears to be effective and well received.

The illuminated lighting on the Highway 17 median also proved popular. So popular, in fact, that theft became a real problem. After about 100 fixtures went “missing in action” over a period of less than two months, the district decided to replace them with a new test section of locally-made, solar-powered delineators—each one held firmly in place with bolts and epoxy glue to stymie would-be thieves.

Look for these test sections next time you drive between Victoria and the ferry terminal.
LOAD RESTRICTIONS

Safer roads and better relations

Each spring, the ministry imposes load restrictions on roads and highways around the province when thawing conditions leave them most vulnerable to damage. However, these restrictions can also hurt resource industries.

For example, oil and gas drilling activity in northeastern B.C.’s drops 85 per cent between February and May each year. This reduction represents a temporary loss of 4,500 jobs and reduces oil and gas royalties to the province.

However, in at least two areas of the province, the ministry has successfully used stakeholder consultations to improve the way it uses seasonal restrictions.

Reducing economic impact in the Peace

In the northeast region in early 1999, the ministry sponsored a focused consultation effort with the oil and gas industry in an effort to reduce the economic hardship created by seasonal load restrictions.

Representatives of industry, MoTH, ICBC and the North Peace Rural Roads Task Force took part in the discussions.

The group examined why restrictions are needed, the impact they have on the oil and gas industry, and possible ways to allow the industry to move goods and equipment while minimizing damage to public roads.

As a result of the meetings, specific roads were identified where less severe restrictions or increases in the maximum allowable gross vehicle weight could be put in place. Other routes were identified as being able to handle 16-wheel tandem axles. A follow-up survey confirmed the short-term measures had helped the industry and no detrimental effects on public roads.

The industry also received a boost when Premier Dan Miller announced the Oil & Gas Initiative #2 in November 1999. The province will invest $103 million over five years to improve the public road network in the northeast. These upgrades will allow heavy trucks to use the roads for longer periods throughout the year.

Increasing compliance in the Cariboo

In the Cariboo and North Cariboo regions, non-compliance with load restrictions was severely damaging highways and prompting a steady stream of public complaints to district offices.

The full extent of the problem became apparent after roadside inspections revealed about 90 per cent of inspected drivers were hauling loads exceeding legal weight limits.

To increase compliance, representatives from MoTH, ICBC, the RCMP formed an Overweight Committee and began meeting two years ago with stakeholders from the logging industry. As industry awareness increased, so did compliance.

Before long, local mills agreed to began recording truck load weights. As compliance improved, ICBC began issuing good partner decals to drivers who complied with load restrictions at least 90 per cent of the time. The decal enabled drivers to be exempt from roadside inspection.

The new agreement has resulted in less pavement gouging in local roads and provided savings of several million dollars for the province, according to Cariboo district highways manager Tracy Cooper.

Today, with an overall compliance level of 83 per cent in the area, preparations are under way to hold Trucker Appreciation Day on May 25 in Williams Lake. Event organizers will present awards for rookie of the year, safe trucker, and weight compliant truckers.

A similar event was held in region five last year, where the overload safety program has been working since 1995 to raise awareness about safety issues related to load compliance.

At the awards held in Terrace last June, 71 truckers achieved scores over 95 per cent and eight scored 100 per cent.

Hopefully, Cariboo truckers will respond to their program in a similar way.
New Places, New Faces

The following individuals have been confirmed in their new positions since November 16, 1999

<table>
<thead>
<tr>
<th>EMPLOYEE</th>
<th>LOCATION</th>
<th>POSITION</th>
<th>EFFECTIVE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dave Batchelor</td>
<td>Marine Branch, Burns Lake</td>
<td>Marine Engineer</td>
<td>November 24, 1999</td>
</tr>
<tr>
<td>Ernst Boeder</td>
<td>South Coast Region</td>
<td>Contract Administration Officer</td>
<td>January 24, 2000</td>
</tr>
<tr>
<td>Daniela Burgi</td>
<td>South Coast Region</td>
<td>Deputy Approving Officer</td>
<td>January 10, 2000</td>
</tr>
<tr>
<td>Sharon Cowden</td>
<td>Finance and Administration</td>
<td>Financial Clerk</td>
<td>January 1, 2000</td>
</tr>
<tr>
<td>Brent Dozzi</td>
<td>Howe Sound District</td>
<td>District Traffic Engineer</td>
<td>November 22, 1999</td>
</tr>
<tr>
<td>Hilda Earl</td>
<td>Vancouver Island Highway Project</td>
<td>Contract Processing Clerk</td>
<td>February 28, 2000</td>
</tr>
<tr>
<td>Christian Evans</td>
<td>Human Resources Branch</td>
<td>Administration Support Clerk</td>
<td>January 17, 2000</td>
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<tr>
<td>Christina Ewasiuk</td>
<td>Central/North East Region</td>
<td>Regional Design Secretary</td>
<td>January 24, 2000</td>
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<tr>
<td>Bruce Foster</td>
<td>Communications</td>
<td>Communications Assistant</td>
<td>November 29, 1999</td>
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<tr>
<td>David Godfrey</td>
<td>Information Systems</td>
<td>Systems Analyst</td>
<td>January 10, 2000</td>
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<tr>
<td>William Graham</td>
<td>North West Region</td>
<td>Financial Analyst, Professional Services</td>
<td>January 10, 2000</td>
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<tr>
<td>Lynn Greenall</td>
<td>South Coast Region</td>
<td>Administrative Services Clerk</td>
<td>January 24, 2000</td>
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<tr>
<td>Diane Guay</td>
<td>South Peace District</td>
<td>District Clerk</td>
<td>February 6, 2000</td>
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<tr>
<td>Brad Hannah</td>
<td>Construction and Maintenance</td>
<td>Radio and Electronics Technician</td>
<td>December 8, 1999</td>
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<tr>
<td>Julie Hansen</td>
<td>Central/North East Region</td>
<td>Operations Office Assistant</td>
<td>January 24, 2000</td>
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<td>Rhonda Haslett</td>
<td>South Coast Region</td>
<td>Engineering Assistant, Projects</td>
<td>January 26, 2000</td>
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<td>Jennifer Hegan</td>
<td>North West Region</td>
<td>Environmental Coordinator</td>
<td>January 4, 2000</td>
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<tr>
<td>Perry Holmes</td>
<td>South Coast Region</td>
<td>Project Management Technician</td>
<td>February 21, 2000</td>
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<tr>
<td>Patrick Kelly</td>
<td>Kootenay Boundary District</td>
<td>District Office Manager</td>
<td>January 4, 2000</td>
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<td>Susan Kwiatkowski</td>
<td>South Coast Region</td>
<td>Administrative Services Clerk</td>
<td>February 10, 2000</td>
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<td>Mary Laing</td>
<td>Central/North East Region</td>
<td>Project Management Clerk</td>
<td>December 27, 1999</td>
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<td>Kelly Mess</td>
<td>Thompson-Okanagan Region</td>
<td>Systems Technician</td>
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<td>Connie Nicoletti</td>
<td>Construction and Maintenance</td>
<td>Rehabilitation Engineer</td>
<td>November 18, 1999</td>
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<tr>
<td>Karen Orrell</td>
<td>South Coast Region</td>
<td>Assistant Secretary</td>
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<td>Dan Palesch</td>
<td>Central Kootenay District</td>
<td>Area Manager, Roads</td>
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<td>Cheryl Parkes</td>
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<td>Human Resources Technician</td>
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<td>Robert Penner</td>
<td>North West Region</td>
<td>Project Manager, Paving</td>
<td>December 13, 1999</td>
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<td>Don Rosberg</td>
<td>Information Systems</td>
<td>Business Analyst</td>
<td>January 17, 2000</td>
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<td>Brad Scott</td>
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<td>Engineering Assistant, Projects</td>
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<tr>
<td>Greg Smith</td>
<td>Kootenays Region</td>
<td>Project Supervisor</td>
<td>December 6, 1999</td>
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<td>Gregory Stewart</td>
<td>Marine Branch, Kootenay Lake</td>
<td>Marine Manager</td>
<td>November 16, 1999</td>
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<td>Vince Trozzo</td>
<td>Vancouver Island Region</td>
<td>Project Manager, Paving</td>
<td>January 24, 2000</td>
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<td>Stewart Turner</td>
<td>Investment Management</td>
<td>Municipal Policy Coordinator</td>
<td>December 27, 1999</td>
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<td>Mark Walters</td>
<td>South Coast Region</td>
<td>Provincial Highway Conditions</td>
<td>January 31, 2000</td>
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<tr>
<td>Tom Wight</td>
<td>Vancouver Island Region</td>
<td>Supervisor, Design and Surveys</td>
<td>January 4, 2000</td>
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