

## DCC increases support to deployed operations in Afghanistan

At DND's request, DCC is taking on an expanded role in Afghanistan, providing skilled and experienced personnel to assist with projects — from camp construction to program planning — to assist with rebuilding the country's infrastructure.

"We've been involved with deployed operations for approximately 10 years, in Bosnia and Kabul," says Hans Gartner, DCC manager of Infrastructure Support Services.

"During that time, we contributed one or two personnel at a time to assist with inspections and quality control. This is a change, however. DND is committed to Task Force Afghanistan until 2009 — maximizing our contribution will help the client ensure that sufficient numbers of military engineers are available to sustain the mission until then."



From left: MWO Gilles Caouette, André Sirois — DCC Project Support Officer, Sgt Eric Dagenais, MWO Boyce Parril, Capt Rick Leighton, WO Stormy Knight, Sgt Al Plume, Maj Dorothy L. Aleknevics, MWO Al Mandigo, MCpl Ken Craig, WO Kenny Purcell.

Gartner, who spent two weeks in Kandahar last December with the military General Engineering Support inspection team, notes that DCC currently has two personnel working there: Ben Kaus from the Shilo site office and Keith Dyer from the Ottawa site office. "That will grow to six within the next year, and possibly up to 15 in two years," he says.

A recent request for volunteers gained 31 responses from qualified DCC personnel, he notes. "DND specifically requested experienced DCC people, so that they can work independently within the camps, thereby allowing military engineers to concentrate on riskier ventures outside the camps," he explains.

Those personnel — who will stay as long as six months, working

inside Canadian camps with military engineers and the multi-agency Provincial Reconstruction Team (PRT) — will be involved with program management, which involves determining which project should go ahead; project management, once each project is approved; and contract management, which includes ensuring that the correct authority and processes are used to tender the contract, as well as quality control.

"The neat thing is that we're sending contract administration assistance over too, to assist with file management and document control," Gartner notes. "This is to meet audit requirements, and also to have the right documents available to hand over to local authorities when the mission is finished."

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# Revitalizing runway systems at 5 Wing Goose Bay

Pilots can expect smooth landings on 5 Wing Goose Bay's Runway 08-26 when a two-year resurfacing and repair project finishes in fall 2007.

"The existing runway is basically at the end of its life cycle," explains Mike MacIsaac, DCC manager of site operations at 5 Wing. "The project focuses on rehabilitating it so that it will last for years, and also reduce maintenance costs for DND."

The \$20-million project includes resurfacing the runway, which serves as the airport's major landing and take-off strip; replacing the concrete "buttons" where aircraft turn around at each end of the runway; installing a new approach lighting system; and building a new taxiway for a nearby runway.

MacIsaac explains that planning for the project began in fall 2005, with the work split over two years to accommodate the challenges posed by a northern climate and remote geography — including the logistics of shipping materials by ship or via a road that features some 900 kilometres of gravel.

"It adds to the challenges," MacIsaac notes, adding that planning, design and approval was fast-tracked in order to get the tender out by April 2006, to take advantage of a short building season that begins in mid-May, and may be finished as early as October. "It's one of the driving reasons why it was done over two years. In some areas we could have done this work in one year — it would have been very difficult and risky to do that here."

"It's worked out very well," says DND's Ray Clement, head of the airfield pavements section at 1 Canadian Air Division in Winnipeg. He notes that the availability of DCC personnel, such as Mike MacIsaac, with runway experience is a key factor. "Part of the problem with aircraft pavements is that it's a specialty and you really want someone in there with the expertise. You have to know what you're doing while it's happening — if you don't get it right while it's going on, it's too late."

DCC's expertise also assisted the client during the contract's planning stages, providing project management support and input into design and logistics questions.

"The fact that this is a two-phase project, with the majority of the asphalt being laid in the second



From left: Ray Clement, Project Manager, Captain Zoltan Szabo, Project Director, and Mike MacIsaac, DCC Manager of Site Operations at 5 Wing.

phase, meant there would be significant risk on the part of the contractor to carry the price of the asphalt over a period of time in a volatile market," MacIsaac explains. "We put a Consumer Price Index clause for asphalt in the contract to try to take some of the risk off the contractor and to ensure that the client would receive good value at the same time."

Phase 1, which finished in fall 2006, included reconstructing the concrete buttons at each end of the runway (where turning airplanes require a more robust material than asphalt) and construction of a new parallel taxiway for the alternate runway. During this phase, the 11,000-foot runway was temporarily shortened by 3,000 feet, allowing work to proceed on both ends of the runway while minimizing effects on operational requirements.

DCC had two full-time people on site, MacIsaac says (himself and Royce "Butch" Guitard). "We acted as a site-based project manager, to help the client's project manager deal with issues as they came up," he explains, adding that Guitard's fluency in French proved invaluable in communicating with the Québec-based contractor.

"We also had an electrical inspector (Daren Wells) here with a significant amount of runway lighting experience — he provided quality assurance and contract coordination for the electrical part of the job," MacIsaac adds.

Phase 2 is set for 2007, including the replacement of the runway's asphalt surface. Clement explains that the work involves adding a "crown" to the runway that will solve the problem

of standing water — a safety hazard that could result in hydroplaning — and narrowing the runway by removing the shoulders, which will reduce maintenance costs.

"This is really getting things back on track in terms of an A-1 facility," Clement notes. "It's one of the things that we hope will entice our Allies to resume their training programs here."

## President of CCA receives Friend of DCC Award

Ron de Vries, Vice-President – Operations, presented Michael Atkinson, President of the Canadian Construction Association (CCA), with the Friend of DCC Award, on January 20th, at a reception held in his honour. The event marked his 25-year career milestone with the Association.

Mr. de Vries describes Mr. Atkinson as a person who has contributed immensely to the Canadian construction industry, "who always puts his members and his organization first", and who has always been supportive of issues affecting DCC.

The Friend of DCC Award was created to highlight the contributions of persons or groups who have a recognized working relationship with DCC, who have collaborated on projects that have resulted in mutual success, and that demonstrate characteristics that make them a valuable partner to work with.



Ron de Vries, Vice-President – Operations, and Michael Atkinson, President of the Canadian Construction Association (CCA).

# CFB Bagotville completes 10 km of work

When a municipal or provincial government announces a road or water system upgrade, a natural survival mechanism is triggered in the minds of everyday workers. They try to visualize the detours, shortcuts and alternative routes they can take to bypass the construction work. These projects often cause as many headaches for the users of these roads as for the contractor in charge of the project.



Audrey Boivin (left), the Contract Coordinator for the project, with Michel Gagnon, the civil engineer who conceived the project.

However, sometimes the work can be completed without hassle. This was the case for a recent infrastructure upgrade project completed at CFB Bagotville. Maryse Blackburn, Assistant Manager, Site Operations at DCC's Bagotville site office, said the DCC team is proud of the work that began a little over a year ago and was recently completed on the base located in the Saguenay region.

CFB Bagotville had to install a completely new water system and 10 kilometres of roadway. DCC began coordinating reconstruction of the system and roads in September 2005. The contract was budgeted at \$7.6 million and included sidewalks, replacement of water mains and standardization of road widths. In short, everything had to be rebuilt, as it had not been upgraded since the 1940s. At that time, CFB Bagotville was built quickly with the onset of the Second World War.

The contractor for the project was Excavations LMR. Although many roads were often closed or

diverted, and drinking water was cut off several times, communication between Excavation LMR employees, Base commanders and DCC personnel was excellent. Drinking water was properly delivered and road detours were clear and well organized. Blackburn received very few complaints throughout the entire project, which lasted from September 2005 to November 2006.

Approximately 40 employees worked on this construction project. Around 98 per cent of the workforce came from the Bagotville area.

When construction ended, Blackburn calculated a loss of only 5 per cent (time or additional expenses, unforeseen incidents, etc.) from the initial calculations. The warm weather this fall certainly made the completion of the 10 km of roadway on the base easier.

CFB Bagotville is the only Francophone air force base in North America.

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## The view from Afghanistan

André Sirois recently returned from two months at Camp Nathan Smith in Kandahar City as a DCC program support officer, working with the PRT. "It was unique," he says of his experience. "I think that's what attracts a lot of people. This is an opportunity to say 'this is where I can make a significant contribution.'"

He arrived in mid-October, and recalls an initial adjustment, getting used to living from a tiny space with just a barrack box and a suitcase, and using a flashlight after hours. "The living conditions are getting better, and in fact accommodation improvements are some of the important projects that DCC is managing over there," he notes.

Ben Kaus, for example, is working at Kandahar Airfield, managing the construction of steel frame semi-permanent buildings that will replace current tent accommodation for Canadian military and civilian personnel.

"DCC has always been there to support DND," says Sirois, who spent 17 years in the Canadian Forces as a military engineer officer. DCC's expanded responsibilities in Afghanistan include supporting DND's role within the PRT, which also comprises personnel from the Department of Foreign Affairs and International Trade, the Canadian International Development Agency, and civilian police including RCMP. The PRT focuses on governance and reconstruction projects for the Afghan people.

"That was probably the most significant reason why I wanted to go," Sirois explains. "I wanted to contribute to something that meets the greater goal of our presence over there."

Sirois' project and contract management work included Afghan National Police substations and vehicle checkpoints; advising on electrical generator and water distribution improvements for Kandahar University; renovation planning for

Kandahar's technical college; and a paved road in the Panjwaii district that has improved safety for military patrols there.

"There are lots of unknowns and you have to really dig for information," Sirois says. "Assessing the site-specific constraints and understanding the roles of the PRT members was an interesting challenge, but we worked together and were able to take action rapidly to assist the military engineers and the PRT commander to achieve their goals."

His work left him with a better appreciation for the high level of commitment and training of the military, and he emphasizes that the skills and experience offered by DCC personnel are very compatible with supporting DND on deployed operations. "From my perspective, DCC remains ready to meet that challenge and will strive to increase its support to deployed operations in due course at DND's request," he says.



# CFB Kingston receives award for energy efficiency leadership

When CFB Kingston and Direct Energy partnered in 2005 to create the largest Federal Building Initiative project ever conducted in Canada, the result was a \$21-million energy performance contract (EPC) expected to save the base more than \$2 million annually in utility costs. With contract work well underway, the partners recently received recognition from the Ontario Power Authority's Conservation Bureau for their leadership in pursuing energy efficiency.

The project was quite significant, says Ontario's chief energy conservation officer, Peter Love, who presented certificates to both CFB Kingston and Direct Energy at the base last November.

"It's a two-year project and there were over 300 energy conservation measures, so it was very comprehensive. We estimate that CFB Kingston will save about 30 percent on their energy, which is huge for any organization," he notes.

Direct Energy's role was to demonstrate how it could conceptualize, engineer and implement cost-effective measures, financing them over a period of 10 years.

"At any point in time there's a number of buildings where the technology has gotten older and the systems don't work as well as they once did, and the infrastructure on all of these systems begins to use more energy," explains Michael Baetz, senior director of Canadian operations at Direct Energy. "You can go in and retrofit, and you can pay for the retrofit with the savings in energy. Sometimes these savings are guaranteed — that's an energy performance contract."

The contract is tendered and awarded based on the contractor's estimation of the potential work and savings in each building. During the contract's life, those estimates are adapted as further research indicates.

"You go to an energy performance contract because you buy capital and expertise," says Robin Wombolt, DCC contract coordinator for CFB Kingston's EPC. The improvements provide the base with more efficient systems, newer equipment and, in many cases, improved building quality — without any immediate capital outlay.

"An EPC requires a fluid response to the situation from DCC — including timely approvals

and flexibility," notes Wombolt. "It's unlike any other contract. Here we have a concept that's constantly changing and we build it, so it's not as easy as another contract with a hard specification — there has to be some flexibility in how we process things."

At CFB Kingston, energy efficiency measures — which will largely be complete by August 2007 — cover a number of base-wide initiatives, such as lighting upgrades, improved building controls and water conservation. Significant building-specific work includes:

- installing a new solar thermal heating system on the sports centre roof, upgrading an existing solar heating system on the heating plant (part of a \$2-million refit), and potentially installing a solar wall on another building;
- a major mechanical retrofit for the museum's heating, cooling and ventilation system, including variable-speed drives on motors, which are proven energy savers;
- a major retrofit for the sportsplex, including high-efficiency boilers, a heat recovery ventilator over the pool to capture heat that would otherwise be lost, and variable-speed drives on equipment; and
- a major mechanical retrofit for the Royal Military College academic building complex, including a more efficient "smart" chiller for the air conditioning system.

The award for CFB Kingston and Direct Energy was well deserved, says Wombolt. "It's a project that's going to save on energy and it's going to have an impact on greenhouse gases, and it takes the partners working together," he says.

Direct Energy is also involved in EPCs at CFB Gagetown, 9 Wing Gander and Garrison St. Jean.



From Left: Major John Sheahan – Base Construction Engineering Officer CFB Kingston, Harvey Rosen – Mayor of the City of Kingston, Dave Burley – CFB Kingston DCC Site Manager, David Bowden – Senior Vice-President, Direct Energy Business Services, Peter Love – Ontario's Chief Energy Conservation Officer as well as a Vice President of the Ontario Power Authority, and Randy McGee – DCC Manager, Ontario Region.

"People were always interested in saving energy and paying for it through the energy savings, but today you've got the added element of the environment and the drive to simply use less energy," says Baetz. "These contracts have never made more sense than they do today."

"We need to save energy where we work, where we live and where we play," adds Love. "I challenge other bases right across Canada to see what CFB Kingston has done."

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