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Volume 45 • Number 4 • Fall 2007



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On The Cover: Mike Sharp, ECA Ottawa president (left) presents the Douglas J.B. Wright Award to Glenn Carr, Campbell & Kennedy Electric (Ottawa) Ltd. at ECAO's annual meeting held in June in Ottawa (see article page 18). *Photo by Dawn Elaine Photography*

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Fred Black

President's Remarks

This is the first issue of the *Ontario Electrical Contractor* magazine since my election as ECAO president at the annual general meeting held during the national conference in June. I am honoured by the confidence shown in my leadership by you, my peers, and look

forward to working with the ECAO membership, allied associations, labour and government for the betterment of this great industry.

My association background has been mainly in the area of human resource development as a contractor representative to the Toronto Joint Apprenticeship Council, Provincial Advisory Committee for the electrical trade and chair of the ECAO Human Resources Committee. Every president brings a little of themselves to the job. In my case it is a great respect for the apprenticeship system and the trade of electrician, which together form the foundation of our vocations and our businesses. I know I can count on you over my term and beyond to help preserve and strengthen that foundation.

I also want to take this opportunity to congratulate Glenn Carr, who appears on our front cover. Glenn is the prime mover behind contractor licensing and is the latest recipient

of the DJB Wright Award, ECAO's foremost recognition of industry service.

Throughout this issue you will find a number of reports arising out of the proceedings of the national conference. Many have relevance beyond the event itself and have become association agenda items. These include the address by International Brotherhood of Electrical Workers (IBEW) President Ed Hill about redefining the union, the panel discussion attempting to define "working live" and the presentation by John McKendrick from Infrastructure Ontario regarding the new approach to building Ontario's public infrastructure.

In addition, our regular contributors provide insights on family business financial planning. Stanley Tepner reviews alternative, less traditional investment instruments and Gerry Skipwith continues his series on succession planning with *The Golden Age*.

I hope you find this issue of the *Ontario Electrical Contractor* informative and entertaining. As always your feedback and opinions are welcomed and valued.

Thanks again for your support.

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The National Gallery of Canada at sunset. Photo by Ray Pilon

CECA 2007

National Industry Conference & Product Exposition

“Change is Good!” was the theme for the Canadian Electrical Contractors Association (CECA) National Industry Conference hosted by the Electrical Contractors Association of Ontario (ECAO) in Ottawa in June. After an enjoyable day of golf at the Stonebridge Golf & Country Club, the conference officially kicked off with a Mix & Meet Reception at the stunning National Gallery of Canada where the guests had the privilege of a private viewing of the only exhibition in Canada of the Renoir Landscapes – a precious opportunity. Delegates that arrived earlier in the week also had a choice of country or city activities – whitewater rafting on the Ottawa River or a tour of the city’s attractions by rickshaw followed by Afternoon Tea at the Fairmont Chateau Laurier.

The next morning Warren Macdonald inspired the delegates with his story of the challenges of overcoming the loss of both his legs in a climbing accident in Australia and his passion and persistence in seeing the positive and embracing the change to his life. The delegates then focused on industry issues such as renewable energy, energy conservation and safety regulations and practices (see box on page 12) before heading off to the Electrical Industry Product Exposition while the spouses enjoyed a tour of Ottawa and the natural attractions in the surrounding area.

Guests were greeted at the door by a bona fide RCMP officer at the Ottawa Welcome Party Thursday night

sponsored by the Electrical Contractors Association of Ottawa after which the delegates kicked up their heels to a contemporary country tribute.

Friday morning started early with a presentation from Ed Hill, International President of the IBEW who spoke on the responsibilities of both management and labour in their essential partnership (see story on page 16). The delegates then concentrated on various aspects of running an electrical contracting business such as getting paid, risk management and pre-construction planning. Meanwhile the spouses headed off to a demonstration and tasting at Le Cordon Bleu Culinary Institute before rejoining the delegates for lunch with Mike Duffy who entertained and informed the group with his political tales.

Friday night the majority of the delegates took a ride on the Hull-Chelsea-Wakefield Steam Train and enjoyed the view of the Ottawa River and a four course dinner.

Saturday morning the delegates attending the Annual General Meeting (see separate story) and then spent the afternoon visiting the many shops, museums, restaurants and galleries in the heart of downtown Ottawa. The President’s Gala Saturday night was a fitting finale with a mix of dining and dancing.

Thanks to this year’s sponsors for their support of this memorable and valuable event.



Rafters Darren Binns (second from left), Howard Brounstein (front left) and Bob Ritzmann (front right) manage the rapids. Photo by Dawn Elaine Photography



Golfers (from left) Bill Debosky, Gary Carr, Ron Johnson and Jim Kellet enjoy the game at Stonebridge. Photo by Dawn Elaine Photography



A view of the Peace Tower from the Gallery's Great Hall. Photo by Dawn Elaine Photography



Delegates line up for the buffet at the Opening Mix & Meet. Photo by Dawn Elaine Photography

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Warren Macdonald infuses the crowd with his passion for life in his keynote address. Photo by Dawn Elaine Photography



Exhibitor Matt Maddocks plies Panduit's wares at the Product Exposition. Photo by Dawn Elaine Photography



CECA President Rick Brodburst speaks to the delegates at the President's Gala. Photo by Dawn Elaine Photography



ECAO President Brad Vollmer welcomes guests to the Opening Mix & Meet at the National Gallery of Canada. Photo by Dawn Elaine Photography



Mike Sharp (right) makes a point during Infrastructure Ontario's presentation at ECAO's AGM. Photo by Dawn Elaine Photography

PANEL DISCUSSION ON THE DEFINITION OF WORKING LIVE



The big question for the electrical industry is what is the definition of "working live?"

With more emphasis being focused on ARC Flash this question has come up many times over with ECAO contractors. The challenge that arises when looking at a definition such as this is when it is contained in multiple documents and therefore leaving the definition open to interpretation.

To address this challenge a panel group was invited to participate in a session at the CECA/ECAO conference in June. Representation from the Electrical Safety Authority, Construction Safety Association of Ontario, Ministry of Labour, Canadian Standards Association and Hicks Morly Hamilton Stewart Storie all came prepared to discuss their interpretation of the definition.

The session was designed to be an interactive discussion between the panelists and delegates. Questions ranged from - What is the parameter for working live? Where is the line on limits of approach? Will the NFPA 70E hold up in court in Canada? - to list a few.

At the conclusion of the session, it was apparent that a consensus could not be reached that day on a definition that would be acceptable to all industry stakeholders. However, what it did accomplish was to bring forward the issues surrounding "working live" and to start the formulation of a working document that will provide the industry with the means to move forward to creating a definition that would be clear, concise, standardized and accepted by all industry stakeholders.

Minutes of the session were taken and will be distributed in the near future to the conference delegates and all ECAO members.



Girls just love a man in uniform.
Photo by Dawn Elaine Photography



*Lori and Scott Porter move with the tunes from
The Stevens and Kennedy Band at the President's Gala.*
Photo by Dawn Elaine Photography



The "Dixie Chicks" heat up the party.
Photo by Dawn Elaine Photography

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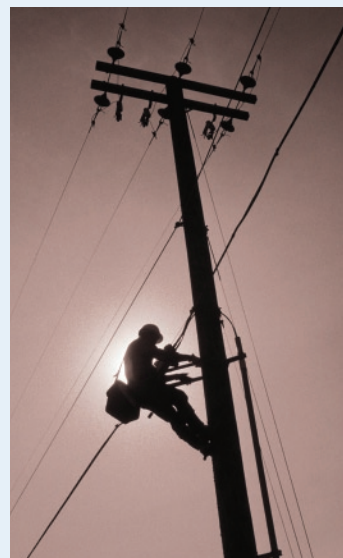


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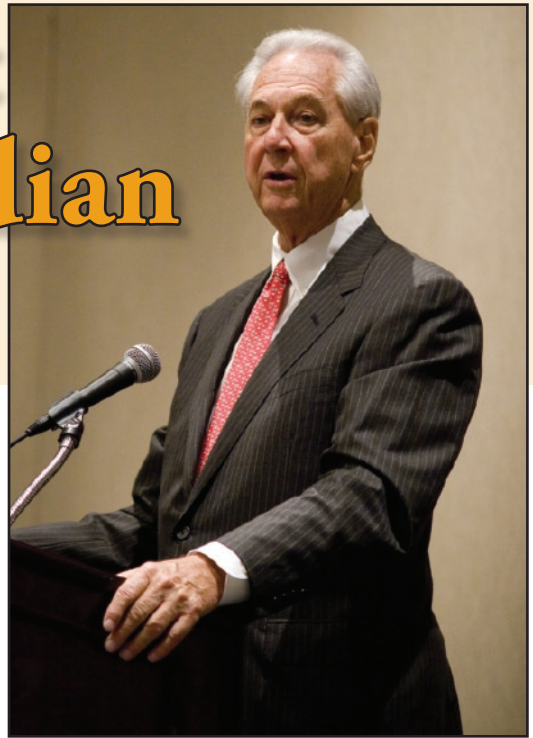
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IBEW President Addresses Canadian Contractors

International President Edwin Hill addressed the contractor delegates to the CECA National Industry Conference in Ottawa accompanied by his Canadian Vice President Phil Flemming. Hill characterized his presidency, which commenced in 2001, as one dedicated to generating "...nothing short of a major cultural change within the [IBEW]." Hill highlighted his administration's success in fostering a grassroots movement for the pursuit of excellence within the union and the receptiveness of the majority of the members in rising to the challenge. "Do not underestimate the capability of our men and women in this industry to respond to an appeal to the best that is inside of them," said Hill.



Hill promoted the "Code of Excellence" as a major element in the movement to rejuvenate the IBEW. The Code is a set of agreed performance standards and responsibilities for both union members and employers to ensure quality and productivity on select job sites. In Canada, the Code is being piloted by LU 894, Oshawa at the Pickering nuclear site, LU 804 at the Bruce and in New Brunswick by LU 502 and 37 at Point Lepreau. Hill's goal for the Code is to "...make sure we [are] living up to our own claims day after day on every job site." Since the address to the CECA/ECAO delegates, the IBEW began distributing the new Code of Excellence DVD to all IBEW construction locals and, through NECA and CECA, to every signatory contractor in the US and Canada.

Turning to the challenges of trades training, Hill urged Canadian contractors and unions to resist the movement to fragment the electrical trade and lower trade standards in response to perceived skill shortages. He praised the actions of CECA and the Canadian IBEW in establishing the National Electrical Trade Council (NETCO) in response to the "need for a broad, national program in Canada to promote national standards for apprenticeship and ongoing skills upgrading for journeymen." (See NETCO on page 40)

Following the speech and lively question period, Ed Hill and Phil Flemming met with the CECA and ECAO executive to discuss the specifics of implementing various aspects of the IBEW program in Canada.

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ECAO's Annual General Meeting

ECAO held its Annual General Meeting on June 16th in Ottawa, Ontario, in conjunction with CECA's National Industry Conference. Prior to the formal business portion of the meeting, Executive Vice-President Eryl Roberts presented ECAO's safety awards. Congratulations to the following member companies on their achievements in safety excellence:

- **Gemor Electric** (Category: Rate Group 704 – up to 50,000 Total Work Hours)
- **Mid South Contractors** (Category: Rate Group 704 – 50,001 to 200,000 Total Work Hours)
- **Tee-Jay Electrical and Instrumentation Services Ltd.** (Category: Rate Group 704 – 200,001 to 500,000 Total Work Hours)
- **Aecon Industrial** (Category: Rate Group 704 – over 500,000 Total Work Hours)

There were no applicants for Category: Rate Group 830.

Following the safety awards, the 2007 Douglas J. B. Wright Award for contractor contribution and dedication for the betterment of the electrical industry was presented by Mike Sharp, President of ECA Ottawa. This year's recipient, Glenn Carr, is President of Campbell & Kennedy Electric (Ottawa) Ltd. in Nepean, Ontario, Chair of the Electrical Contractor Registration Agency of the Electrical Safety Authority, past Director of ECAO and past President of ECA Ottawa.

In his tribute, Mike Sharp stated "Glenn Carr's dedication and commitment in setting standards of quality and professionalism among electrical contractors is the foundation of his contribution to the electrical contracting industry. Legislated provincial contractor licensing exists today, in large part, due to his tireless efforts."

Congratulations Glenn!

Following the awards presentations, President Brad Vollmer paid tribute to retiring directors Dave Mason, Greg Galbraith and Dennis Tatasciore, thanking them for their years of service on the board before calling the meeting to order. The nominating committee report was accepted as presented, installing the 2007-2008 directors. The new board held its first meeting following the AGM. The 2007-2008 directors are:

- Ove Bakmand
- Rick Ball
- Gary Beer
- Fred Black
- Ed Braithwaite
- Peter Bryant
- Gary Carr
- Wayne Crockett
- Doug Dinniwell
- George Docherty
- Gary Ganim
- Jim Kellett



John McKendrick, Infrastructure Ontario speaks to the membership about opportunities for contractors in upcoming projects. Photo by Dawn Elaine Photography



President Brad Vollmer (left) recognizes retiring directors Dave Mason, Greg Galbraith (not present) and Dennis Tatasciore (not present). Photo by Dawn Elaine Photography



President-elect Fred Black (left) presents outgoing President Brad Vollmer with a gift of appreciation on behalf of the membership. Photo by Dawn Elaine Photography

- Chris Krueger
- Dan Lancia
- John Salmon
- Bill McKee
- John Raeppele
- John Salvatore
- Joe Spadafora
- Brad Vollmer
- Brad Walker

Outgoing President Brad Vollmer gave an update of the progress on ECAO's Strategic Plan and thanked the Area ECAs for their part in expanding the membership of ECAO. He also thanked the ECAO directors and committee members, ETBA representatives and ECAO staff for contributing to the strength of ECAO before turning over the gavel to President-Elect Fred Black.

President-Elect Fred Black expressed the association's gratitude for Mr. Vollmer's efforts during his two year term commenting on his commitment to the renewal and revitalization of ECAO and his contribution towards a mutually beneficial relationship with the Electrical Safety Authority. Mr. Black then advised the members of his intent to focus his energies on current issues the industry is facing such as threats to the trade of electrician and lien rights for electrical contractors.

At the board of directors meeting following the AGM, the following officers were duly elected:

- Brad Vollmer, Past-President
- Fred Black, President
- John Raeppele, 1st Vice-President
- Bill McKee, Secretary-Treasurer
- Eryl Roberts, Executive Vice-President.

Following the meetings, John McKendrick, Infrastructure Ontario, gave a presentation on

the progress to date of the over 40 major infrastructure projects that Infrastructure Ontario has been assigned through the governments five year infrastructure plan which range in size from \$50 million to hundreds of millions. He advised

the membership that \$14.5 billion of these projects will be going to market within 17 months and although the projects are large and complex, there is still opportunity for small to medium contractors to participate (see story on next page).



President Brad Vollmer presents the R.H. (Hugh) Carroll Safety Awards to (from left) Jack Gibson, Aecon Industrial; John Salvatore, Mid South Contractors; John Baxter, Tee-Jay Electrical and Instrumentation Services Ltd. (not present) and Gerry Snyder, Gemor Electric.

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Infrastructure Ontario

In July 2004, the Ontario government introduced a strategic plan to build and revitalize key public infrastructure, called the Building a Better Tomorrow framework. This established that, while infrastructure will be renewed using both public and private sector resources, public control and ownership of vital assets such as hospitals, schools, water and waste treatment systems will be maintained.

As part of this plan, Infrastructure Ontario was created and was given a mandate to work with the private sector and manage its assigned public infrastructure projects using a made-in-Ontario model called Alternative Financing and Procurement (AFP).

AFP ensures appropriate public ownership and control, while transferring the risks associ-

ated with design, construction, finance and maintenance to the private sector, where they are better managed. By harnessing the private sector's rigour and innovation, everyone benefits by getting projects built on-time and on-budget.

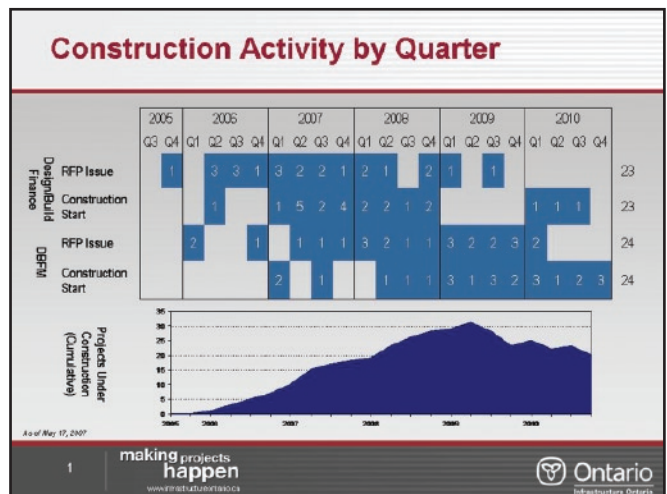
Since its creation in late 2005, Infrastructure Ontario has brought more than two dozen major projects to market, worth more than \$5 billion. Nearly every week, significant project milestones are reached - whether it be a Request for Qualifications (RFQ) for a hospital in Hamilton, a Request for Proposals (RFP) for a data centre in Brampton, or a construction start on a courthouse in Oshawa. This pace shows no signs of letting up.

In about 20 months, Infrastructure Ontario has grown

from an anonymous organization to a team of professionals committed to creating value for money and restoring the province's infrastructure.

Infrastructure Ontario sets project criteria through pre-transaction analysis and advice, leads the procurement and implementation phase with the RFQ, invites bids through the RFP process, negotiates with bidders and oversees the construction project with the local public-sector sponsor, typically a Ministry or hospital.

The province has assigned over 45 major infrastructure projects to the organization, with more to come. Over 100,000 jobs are expected to be generated in the province from the AFP projects assigned to Infrastructure Ontario alone.



These projects represent significant investments in communities across the province. For example, the value of the North Bay Regional Health Centre project is more than \$550 million (all dollar amounts net present value); the Sault Area Hospital project is worth more than \$400 million; and the Durham Consolidated Courthouse project is worth \$334 million.

Infrastructure Ontario is committed to engaging its stakeholders and having an open and positive dialogue with industry. In particular, Infrastructure Ontario recognizes the significant role that electrical contractors play in the success of its projects, and agrees that it must maintain an open dialogue if it is to deliver Ontario's infrastructure projects in a manner that leverages the valuable insights of ECAO and its members.

In June, John McKendrick, Infrastructure Ontario's Senior Vice President of Project Delivery, spoke at ECAO's Annual General Meeting. He provided an overview of the AFP model, and provided some insights on how ECAO's members could get involved with future projects.

A couple of weeks later, Infrastructure Ontario's President and CEO, David Livingston, and AFP Committees Chairman, Jim Dougan, met with ECAO and the Mechanical Contractors



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Association of Ontario and their respective members to discuss issues of concern to electrical and mechanical contractors.

At this meeting, ECAO members said they would like to be made more aware of upcoming project opportunities. Infrastructure Ontario has been working to increase awareness of project opportunities through its website (www.infrastructure-ontario.ca), which is updated on a regular basis. In addition, project RFQs are posted on MERX, and are advertised in the Daily Commercial News. And Infrastructure Ontario recently launched a monthly newsletter, which highlights upcoming project opportunities.

ECAO members also made clear that they wanted better access to Infrastructure Ontario's tender documents. Currently, project RFPs are posted on Infrastructure Ontario's website once they have been distributed to short listed bidders. Moreover, local construction associations have been provided with access to Infrastructure Ontario's electronic data room

in order to download project plans, specifications, addenda and amendments.

As a result of the efforts of ECAO, Infrastructure Ontario now provides electrical contractors who are determined to be bona fide bidders direct access to project RFPs, Project Agreements and addenda. For more details on how to access these documents, please contact ECAO.

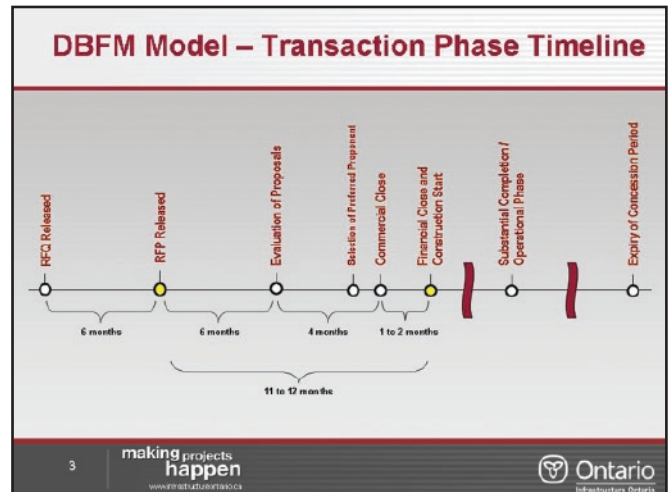
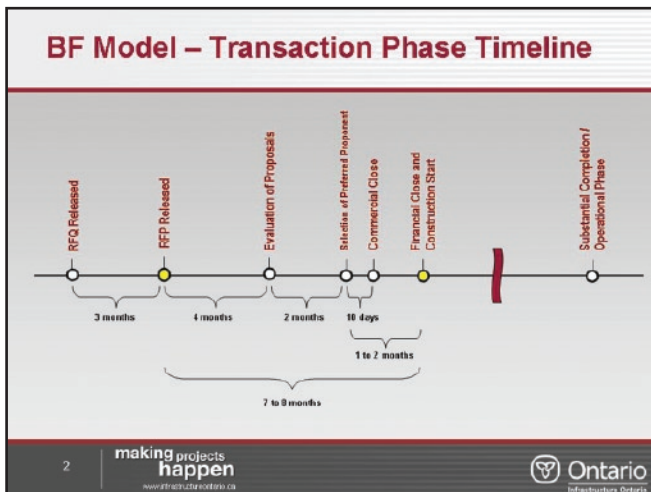
Another suggestion made by ECAO's members at the June meeting was for a session for contractors to hear from their colleagues on the lessons learned on a current Infrastructure Ontario project. To that end, Infrastructure Ontario will be hosting an invitation-only session for electrical and mechanical contractors on Thursday, October 11, 2007.

The session will begin with a panel discussion with representatives from an electrical contractor, a mechanical contractor, a general contractor, a lender and Infrastructure Ontario, followed by a Question and Answer session. If you are interested in attending, please contact ECAO.

This open communication enhances the integration of design, construction and facilities management. But it also makes good business sense for Infrastructure Ontario. After all, more bidders means more competition - which leads to more value for money on projects, a key goal of the Province.

Looking ahead, Infrastructure Ontario has a number of major projects that have yet to come to market, including nine announced Design-Build-Finance-Maintain (DBFM) projects and another 10 that have yet to be announced. Infrastructure Ontario executives have indicated that there might be opportunities to expand outside the health, justice and corrections sectors, and into transit and transportation, and other public facilities.

Ontario has one of the most vibrant infrastructure development programs in the world. Thanks in part to the relationship between Infrastructure Ontario and the electrical contractors, the people of Ontario will be the beneficiaries for years to come.



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Industry Briefs



Gary Lehman (centre) poses at his retirement reception held on the Rooftop of the Park Hyatt in Toronto with (from left) Ken Berman, Roy Spence, Garry Fitzpatrick, and Stu Muir.



Friends and colleagues from the ECAO and IBEW gathered in August to bring well wishes to Gary Lehman upon his retirement. Mr. Lehman spent 25 years with Black & McDonald Electric Ltd. and served as president of the former Electrical Contractors Association of Toronto before becoming a consultant to the industry in 1994 on projects such as promotion of the unionized construction industry, management training and apprenticeship. Mr. Lehman will be co-managing a project of a more personal nature in the near future as he builds a log home with partner Lynn Blanch on Salt Spring Island in British Columbia. Happy trails!



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By Stanley Tepner, MBA, CA, CFP, TEP

**“Don’t want no cash
Don’t need no money
Ain’t got no stash
This note’s for you”**

- Neil Young, “This Note’s For You”

Neil Young composed and recorded his hit “This Note’s For You” in 1988, a musical rant against corporate sponsorship of just about everything. Back then, he probably never imagined that his diatribe would become the anthem for the latest innovation in financial products - structured notes.

Structured notes offer investors a lot of potential benefits. Some notes allow conservative investors the opportunity to earn potential profits from volatile market sectors without risking their capital; other notes provide growth-oriented investors a chance to enjoy returns that have the potential to beat the market.

Which note's for you? Structured notes may be acquired in different forms; in a moment we will look at two of the most prevalent forms of structured notes, principal-protected notes (PPNs) and principal-at-risk notes (PARNs).

What are notes?

In the investment world, notes are akin to IOUs; a borrower's promise to pay a certain amount of money at a certain time. A simple example of a note is that of a provincial government that issues a 5-year note with a 4.5 per cent semi-annual interest rate. Investors in this note have received a promise from this government that they will have their capital returned in five years, and receive 10 interest payments of 2.25 per cent (two payments a year that total 4.5 per cent for the year) over the 5-year term of the note. This type of note trades over-the-counter, and can be bought or sold prior to its maturity date.

Structured notes are also IOUs. But the governments and corporations that issue them typically move away from fixed-rate notes like the 4.5 per cent note described above. The future interest income is not pre-determined when the note is issued. The amount of interest paid is linked to the future performance of some external investment benchmark. For example, one note may pay income at maturity based on the upside of the S&P 500 stock index over the pre-determined term of the note. Another note may link its future

income payment to the performance of a basket of individual stocks in Canada. A further note may determine its future income payment based on the upside of a portfolio of commodity prices.

Investors can accumulate a portfolio of diversified structured notes as they would any combination of securities. Most new issues are made available over a 4 - 6 week distribution period, after which the offering is closed (although some issues can be acquired on the after-market). Larger investors and institutions can have structured notes individually customized to their specifications.

The tax treatment of these notes is important. In registered accounts like RRSPs and RRIFs, of course, there is no immediate tax when notes mature and pay income. In taxable accounts, income payments at maturity are typically taxed as interest. Structured notes can be sold prior to maturity. If they are sold at a profit prior to maturity, investors may consider treating their gains as capital gains, where only 50 per cent of the gain is taxable. Some notes are also structured such that the distributions are considered "return of capital". Essentially, it means the investor is receiving back his or her own principle (\$100 par value) and therefore it is not taxable. As we will note later on, it frequently makes sense strategically to sell one's notes prior to maturity.

Principal-protected notes (PPNs)

A PPN is an innovative financial product that combines key investment characteristics of both stocks and bonds. The distinguishing feature of these investments is that the principal amount - one's original investment - is 100 per cent protected if the PPNs are held to maturity, like bonds. The credit worthiness of the note (ability to pay back

the principle) is a function of the credit rating of the issuer. They are similar to stocks in that they give investors the opportunity to earn significantly more than they could by investing in bonds, because their potential returns are linked to the performance of asset classes with growth potential, such as stocks and commodities.

A simple format is one where a PPN provides 100 per cent of the upside of a stock market index, like the TSX, over a pre-determined period of time, say six years. At maturity, if the TSX has had a positive result since the acquisition of the note, the investor's principal will be returned, along with an interest payment equal to the percentage of the upside. The interest payment will be fully taxable in taxable accounts.

If the TSX performance was negative over the period, the investor will simply get their principal returned,

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and will have avoided the potential capital loss they may have endured had they owned the index directly (such as with exchange-traded funds or index funds). Note that the interest payment is based on the price movement of the TSX only; it does not incorporate any dividends that might have been paid over the 6-year holding period to direct investors in the index. Some PPNs, however, do provide a minimum guaranteed income rate.

As much as a PPN reduces the risk of investing in volatile markets, I do not view them as direct equity alternatives. I see them as bond or GIC alternatives for conservative investors, particularly in taxable accounts. Consider what a bond or GIC investor earns today from their conservative holdings – after paying income tax, the yield on their investment is probably only 2 per cent to 2.5 per cent per annum. That is no better than inflation.

A PPN can give the conservative investor the principal protection they are looking for, along with the opportunity to earn far greater returns that they could on their bonds and GICs, especially on an after-tax basis. For example, let's say a TSX-linked PPN appreciates a modest 6 per cent a year for three years, and is then sold. If the gain is treated as a capital gain, an Ontario resident in the top marginal tax bracket will pay 23.2 per cent tax on the gain. This results in an after-tax return of 4.61 per cent (per year, not compounded), which is significantly greater than the 2 per cent to 2.5 per cent after-tax return generated by the bond or GIC. In fact, the PPN only has to earn about 3.2 per cent pre-tax annually to provide an after-tax return on a par with a bond or GIC.

Conversely, if the TSX return is negative over the life of the PPN, the investor's "loss" is their opportunity cost, which is limited to the 2 per cent to 2.5 per cent after-tax interest that they would have earned on the bond or GIC. Their original principal is safe. This relatively small sacrifice is a big reason that so many conservative investors have added PPNs to their portfolios.

Strategically, I prefer to sell a PPN when it has earned a comfortable return, and replace it with another PPN. This locks in its gain permanently. It would be a shame to watch a PPN appreciate by 50 per cent (as we witnessed TSX-linked products do between the years 1998 and 2000), only to have its value drop to below the 1998 levels (as seen with these TSX-linked products in 2002 - 2003). Steady monitoring of PPN values and market prices are keys to successful PPN investing.

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concepts to be developed. The newest PARNs target growth-oriented investors who aren't satisfied with just earning positive market returns, because these PARNs are structured to deliver much greater than market returns at maturity, if the underlying market return has been positive. If the market return is negative, the PARNs simply match the negative result.

This sounds too good to be true to most people. After all, most investment managers struggle to match

A PPN can give the conservative investor the principal protection they are looking for, along with the opportunity to earn far greater returns that they could on their bonds and GICs, especially on an after-tax basis.

the market's performance, and very few consistently out-perform the market.

Yet PARNs, by forfeiting the principal-protection aspect of PPNs, do exactly that. Recent issues have been structured to pay up to 165 per cent of the upside performance (or 100 per cent of the downside performance) of the market(s) to which they are linked. The PARN leverage exaggerates positive returns only; negative returns simply match those of the market. How many active managers do you know who can expect to return a 65 per cent bonus over a six or seven-year investment period, which is the typical term of these

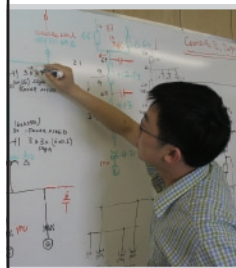
notes, if the benchmark returns a positive performance.

PARNs are attractive replacements for index funds and exchange-traded funds, because these funds will only match the market performance, not beat it by such an extent.

As with PPNs, investors in taxable accounts should consider selling their profitable PARNs prior to maturity in order to trigger the possibility of capital gains treat-

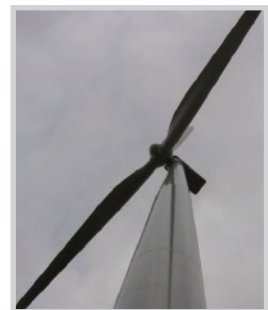
ment for tax purposes, rather than pay tax on interest income on any event realized at the note's maturity (a loss should be treated as a capital loss, at maturity, or if sold prior to maturity).

It may also make sense to sell a losing PARN to trigger a loss, and replace it with a new PARN. For example, let's say a PARN that was acquired for \$100 is now trading at \$80, because its underlying



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benchmark has performed poorly since the investment date. An investor could wait for the underlying benchmark to recover, and hope to see the PARN recover to \$100 with it, then hope that the benchmark continues to appreciate, because the PARN will pay an enhanced return if the benchmark remains positive over the original purchase price.

I prefer to sell the PARN at a loss and re-invest in a new PARN at the new lower benchmark. From that lower point, all positive returns in the benchmark can trigger the enhanced payment feature of the PARN.

PARNs aren't too good to be true, and they may be the right note for you.

No investment only has positive attributes, so it is important to consider the following about PPNs and PARNs:

1. While you may be happy to own stocks, index funds or mutual funds for longer periods of time, each structured note has a pre-determined term; while you may be able to defer recognizing capital gains in taxable accounts by holding on to your stocks, index funds or mutual funds for an indeterminate period of time, you

will have to recognize the gains in PPNs and PARNs no later than their maturity dates, and as we have seen above, probably much earlier than that.

2. The market value of PPNs and PARNs may move in the same direction of the benchmarks to which they are linked, but they will not move exactly in sync with the benchmarks. This is due to how each note is constructed. However, the longer you own a note, the closer its market price moves are in relation to the benchmark.

3. When investing in foreign stocks, market indices and commodities directly, the investment are usually made in one or more foreign currencies, and currency fluctuations factor into your investment results. Many PPNs and PARNs are currency neutral, or give you the opportunity to invest in either \$C or US\$. Foreign currency fluctuations can enhance or reduce an investment's return.

There are many structured notes available, and many things to consider before investing in one. If you would like a copy of the CIBC Wood Gundy Report on Principal-protected notes and Principal-at-risk notes, please drop me a line.


As you can see, PPNs and PARNs can be linked to a wide array of investment benchmarks, including individual stocks, stock market indices, mutual funds and commodities. Neil Young himself might be interested in a commodity-based PPN or PARN linked to the investment return of a particular shiny yellow metallic element; wasn't he once searching for a "Heart of Gold?"

Stanley Tepner, MBA, CA, CFP, TEP is a First Vice President and Investment Advisor with The Tepner Team at CIBC Wood Gundy in Toronto. He can be reached by telephone at (416)-229-5566 or 1-(800)-488-8688, or by e-mail at stan.tepner@cibc.ca.

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From the Editors of E/The Environment Magazine

Dear Earth Talk: Alternative energy sources like wind power, hydrogen and biofuels are getting a lot of headlines these days, but what about efforts to generate electricity from the ocean's waves?

- Tina Cook, Naples FL

As any board or body surfer will tell you, the ocean's tidal currents pack considerable wallop. So why wouldn't it make sense to harness all that formidable power, which is not too unlike that of the rivers that drive hydropower dams or the wind that drives wind turbines, to make energy?

The concept is simple, says John Lienhard, a University of Houston mechanical engineering professor: "Every day the moon's gravitational pull lifts countless tons of water up into, say, the East River or the Bay of Fundy. When that water flows back out to sea, its energy dissipates and, if we don't use it, it's simply spent." According to Energy Quest, an educational website of the California Energy Commission, the sea can be harnessed for energy in three basic ways: using wave power, using tidal power, and using ocean water temperature variations in a process called "ocean thermal energy conversion" (OTEC).

In harnessing wave power, the back and forth or up and down movement of waves can be harnessed, for example, to force air in and out of a chamber to drive a piston or spin a turbine that can power a generator. Some systems in operation now power small lighthouses and warning buoys. Harnessing tidal energy, on the other hand, involves trapping water at high

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tide and then harnesses its energy as it rushes out and drops in its change to low tide. This is similar to the way water makes hydro-electric dams work. Already some large installations in Canada and France generate enough electricity to power thousands of homes.

An OTEC system uses temperature differences between deep and surface waters to extract energy from the flow of heat between the two. An experimental station in Hawaii hopes to develop the technology and someday produce large amounts of electricity on par with the cost of conventional power technologies.

Proponents say that ocean energy is preferable to wind because tides are constant and predictable and that water's natural density requires fewer turbines than are needed to produce the same amount of wind power. Given the difficulty and cost of building tidal arrays at sea and getting the energy back to land, however, ocean technologies are still young and mostly experimental. But as the industry matures, costs will drop and some analysts think the ocean could power nearly two per cent of U.S. energy needs.

Several companies now work at the cutting edge of ocean power technology. Scotland's Ocean Power Delivery Ltd. has a wave system called Pelamis that it hopes to install in waters off of California's wave-battered central coast. And Seattle, Washington's Aqua Energy has installations off the coasts of Oregon, Washington and British Columbia and is in talks with utilities about providing the Pacific Northwest with hundreds of megawatts of ocean energy within the next decade.

Tidal energy pioneers are also hard at work on the U.S. Atlantic coast. The New Hampshire Tidal Energy

Company is developing tidal power in the Piscataqua River between New Hampshire and Maine. And a company called Verdant Power is providing Long Island City, New York with electricity through tidal river turbines and has begun installation of tidal power systems in New York City's East River.

Contacts:

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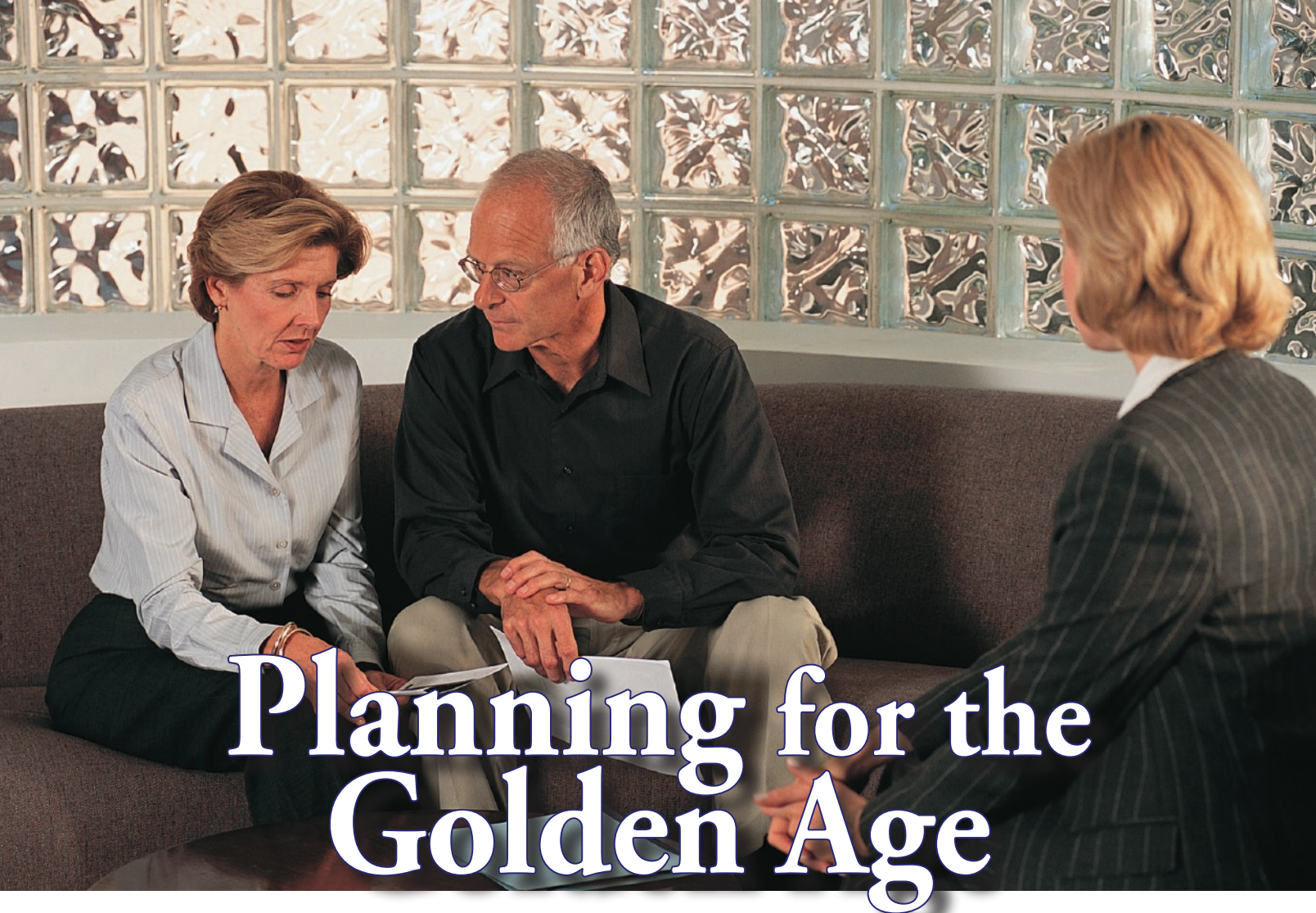
2007 Ontario Electrical Safety Code updates require flash and shock warning labels on panelboards.

The Electrical Safety Authority offers Arc Flash/Blast training to assist you in understanding PPE requirements (based on NFPA 70E).™ Group training is offered (for groups of 25 or less) for a group rate of \$1,615 plus taxes.

To arrange for training call 1-877-372-7233.



Visit www.esasafe.com for more information on these safety steps, and electrical safety training.



Planning for the Golden Age

In our last article we discussed the issue of succession planning. We looked at how you could sell your business, value your business and capture capital for all of your efforts.

How do you plan for retirement and what things do you need to think about in order to live comfortably after your career?

There are two issues. Let's look at some of the controllable strategies that you can prepare for:

- Where will you live: In retirement there are a number of things you need to consider. Do you want a home, townhome, or condominium? The type of residence may be something you can adjust to ahead of time. If you make these adjustments now, it will be one less stress for you at the actual time of retirement. (Perhaps within five years of your potential retirement date)
- What country do you want to live in? There are a number of places in the world you can go to and each may have advantages and challenges that you need to consider carefully. You may choose to have two

places to live during these times but be careful of the tax consequences and of the healthcare factors before you make a commitment. Your accountant can provide tax rules for other jurisdictions and your health and welfare insurance provider can help you with the rules for your healthcare after retirement and where you will be at that time.

- You need to think about the right time for you to retire based on your family situation and also based on what activities, hobbies and lifestyle you choose to have after you retire. You should also do cost estimates to determine what your needs will be in order to realize your dreams. Why retire if the timing isn't right for you?

Managing the Change

You will have a lot of changes to manage and they could be complicated. You'll have to replace the time you spend at work with other activities. Will you be able to separate yourself from what you were passionate about? How will you deal with the associates that you

spent your career with? How will your spouse and family deal with the new you?

Approving the Change

How much income will you have at retirement? You will have whatever government benefits that you have earned - the CPP will provide you with a current maximum of \$863.75 per month. There are also old age

security payments, but they could be clawed back depending on your income. The maximum old age security is currently \$497.83 per month, which is subject to clawback.

Splitting Income

Recent changes to the Tax Act will allow you to split income even if you and your spouse have RRSP's or pension income. You need to con-

vert your RRSP to a RRIF by age 71 and now can contribute until that time if you still have employment income. The later that you execute your RRSP, the more you will have available to provide an income.

Fools gold

Retirement plans fluctuate based on the nature of the investments that you have and very few investments are fully guaranteed and not subsequent to shrinkage of some kind. This creates a real challenge for you to create a continuous flow of revenue that you can count on.

Cash

Keeping investments in cash attracts low rates of interest and you will be fortunate to keep the buying power intact due to inflation if you are earning low rates of interest. Cash is very ineffective as a tax planning tool since the interest is taxed at your full personal tax rate.

Bonds and Stocks

Bonds and Stocks are a popular form of investment and can earn a better rate of return than cash. You should consult an investment professional when buying bonds or stocks because of the risk attached to the investment.

Pension Plans

There are basically two types of pension plans: Group Pensions or Individual Pension Plans (IPP). They do different things for you and can provide a guaranteed fixed income for you and your spouse and should be looked at closely. They are creditor proof, can provide a guaranteed income and are very tax effective. IPP's are for individuals who don't have a Group Pension Plan and once again can be very tax effective and

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make good sense for certain business owners. Feel free to call Skipwith and Associates to see if you qualify to have one.

RRSPS

Most business people today have an RRSP but not everyone understands how much income they might provide and also how safe the money is in the investments. Do you know how much to expect from your RRSPs when you do retire? Do you know your options? These are things you can prepare now for your retirement. You can have estimates calculated now for later on in life when you will want the money.

RRIFS

RRIFS are a popular method of converting RRSPs upon retirement. They can be designed with various investments to deliver a custom made income for you at retirement. You should contact Skipwith and Associates to help you plan for a RRIF and see if it is right for you.

Annuities

Annuities are often an overlooked method of guaranteeing your retirement with a totally risk-free fixed income. You can also use these products in conjunction with life insurance as part of a very effective capital preserving strategy for your estate and which are very tax effective.

THINGS YOU SHOULD PONDER ABOUT RETIREMENT:

- When do I want to retire?
- What type of residence do I want at retirement?
- Where do I want to live when I retire?
- What activities will you participate in at that time?

- How do I want to spend my aging years?
- Do I have my legacy to leave?
- Does my spouse feel the same way I do about things?

THINGS YOU NEED TO KNOW ABOUT RETIREMENT

- How much money will I have at retirement?
- How much money will I need per month to live on?
- What will inflation do to my buying power?
- How much will my pension be at retirement?
- How much will my CPP and OAS be?
- What will I do with my RRSP?
- How should I invest my capital as I get older?

- Who will pay for my healthcare when I retire?
- How does out-of-Canada medical coverage work?
- What strategies are available to protect my hard-earned capital?
- Are there any strategies available to minimize the tax I will pay?

If you are unsure about these answers or any other questions, please contact Skipwith and Associates.

This is the third in a series of four articles provided to help you gain some insight into how you can integrate your personal goals with your business plan. For additional information, please contact Skipwith & Associates 1-866-529-2988 or info@skipwith.ca www.skipwith.ca

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New Products & Services

ThermaCAM GasfindIR-LW Infrared Camera

FLIR Systems' new ThermaCAM GasfindIR-LW Infrared Camera can sense sulfur hexafluoride (SF₆), the colourless, odourless, nontoxic and nonflammable "greenhouse gas" with an estimated atmospheric lifetime of 3,200 years.

Based on a unique, patent-pending technology, FLIR's GasfindIR-LW is an infrared camera designed to help utility companies better control sulfur hexafluoride (SF₆) emissions in order to preserve the environment now and for future generations. In addition to the "greenhouse gas" SF₆, the versatile GasfindIR-LW can also detect more than 20

other gases floating in the atmosphere.

SF₆ is used as an insulator in high voltage equipment by the electric utility industry. SF₆, although considered to be an excellent dielectric gas, has been targeted for emissions reductions because pound for pound, sulfur hexafluoride contributes more to the greenhouse effect than any other gas.

One pound of SF₆ has the same global warming impact of 11 tons of CO₂. It has 23,900 times

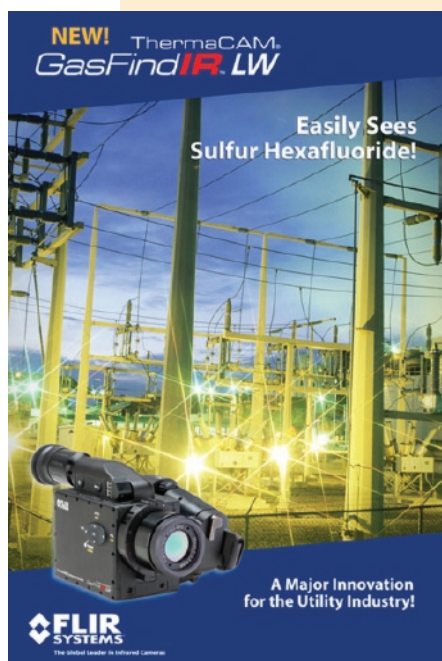
the global warming potential of CO₂. Together, the EPA and many of the major utilities companies are working to find ways to better control SF₆ emission to help to preserve the earth.

FLIR's revolutionary GasfindIR-LW is lightweight, ergonomic and easy to operate. It weighs only 4.6 pounds and is powered by a camcorder battery. The GasfindIR-LW enables thermographers to find SF₆ gas leaks up to hundreds of feet away quickly and easily. Capable of scanning large areas, the GasfindIR-LW delivers real-time, high-resolution thermal images of gas leaks that can be displayed on a standard TV or recorded digitally using the latest real time digital recording technology.

"I believe electric utilities are just as anxious to find these problems as the environmental enforcement community," said Tom Scanlon, vice president for FLIR Systems. "Until now, they have not had the right tool to quickly localize leaks and assess their severity. Utilities now have that tool and can take the corrective actions necessary to quickly decrease their SF₆ emissions."

The GasfindIR-LW camera can detect more than 20 other gases in addition to SF₆. These gases include: acetylchloride, allyl bromide, allyl chloride, allyl fluoride, 1,3-butadiene, ethylene, freon 11, freon 12, freon 112, freon 113, freon 114, methylsilane, methyl vinyl ketone, methyl vinyl ether, propenal, propene, styrene, trichloroethylene, vinyl chloride, vinyl ether, and vinylidene fluoride.

*For further information visit
www.flirthermography.com.*



Online Training Program

Intermatic, Inc. is taking the first step into the world of on-line/e-learning with the debut of Intermatic Connect U.

Intermatic Connect U is designed to meet the educational needs of Intermatic's internal direct sales team, representative agents, distributors, contractors, specifiers and installers.

The site contains brief learning modules, taking approximately 15 minutes to complete, that are available 24 hours a day, seven days a week to help sharpen the competitive edge for all parties involved. The modules also combine product knowledge with creative

animation to keep the training fun and entertaining.

Upon completion of each learning module, the learner will be able to:

- Explain the features and benefits of the product(s)
- Apply specs for the correct usage of the product(s)
- Understand and recommend multiple applications
- Install and operate the product(s)

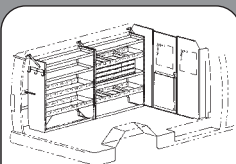
Log onto www.intermatic.com and click on the Intermatic Connect U button to learn about the EI200 Series Electronic Countdown Timer and the WP3100C While-In-Use Cover.

The course offering will be expanding to include surge protection, InTouch wireless controls, wireless pool and spa controls and HID lighting. New products and courses will be added on a regular basis.

The only way to access Intermatic Connect U is through Intermatic's corporate website but that site is linked to the websites of most of its rep agents, electrical and pool/spa national accounts and buying groups.

For more information on Intermatic Connect U visit www.intermatic.com

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CECA-IBEW Partnership

The National Electrical Trade Council (NETCO) is a joint labour-management partnership of the International Brotherhood of Electrical Workers (IBEW), First District, Canada and the Canadian Electrical Contractors Association (CECA). NETCO builds on the success of provincial and local labour-management training models by extending the partnership to a national level.

History

The need for a national, joint labour-management vehicle dedicated to strategic human resource planning was first identified in A National Labour Market Study of the Electrical Trade (1997) conducted by CECA and the IBEW. This study concluded that technological change was having a significant impact on the electrical trades and that an enhanced focus on skill development through apprenticeship and ongoing journey-person training was needed to build and maintain a skilled workforce and to capture new and emerging markets.

Since then, CECA and the IBEW jointly pursued several projects including sponsoring of a national Life-long Learning Symposium in 2004. Emerging from the symposium was a consensus on the need for a national focus on addressing human resource issues in the electrical construction industry. In 2005 plans to activate NETCO were on the drawing board and NETCO was brought on line in 2006.

Mandate

NETCO's mandate is to promote apprenticeship, continuous learning for journeypersons and national standards for the electrical industry in Canada. It does this

by providing human resource tools and supports to professionals involved in electrical apprentice and journey-person training and development (e.g., Joint Apprenticeship Committees, community colleges).

NETCO's focus is on "Connecting the Electrical Industry" by developing training and promotional products, encouraging information-sharing and providing a national perspective on public policy that impacts the electrical industry.

NETCO's Essential Skills Initiative

NETCO's Essential Skills Initiative is driving its 2006 Action Plan. This project won financial support from the Government of Canada to promote apprenticeship and national standards for Interprovincial/Red Seal occupations in the electrical industry (i.e., Construction Electrician, Industrial Electrician and Powerline Technician). A suite of laminated National Occupational Wallcharts are among its first products and others are under development.

As a follow up to the 2004 Life Long Learning Symposium NETCO is sponsoring a National Training Symposium at the Kempenfelt Centre in Barrie, Ontario on Nov. 2-4, 2007. The agenda will feature keynote speakers, professional development activities and networking opportunities. NETCO will release all of the products currently under research and development at the Symposium. Mark your calendar!

A program on the National Training Symposium along with a registration package will be posted on the soon to be launched NETCO website link from the CECA/IBEW websites.



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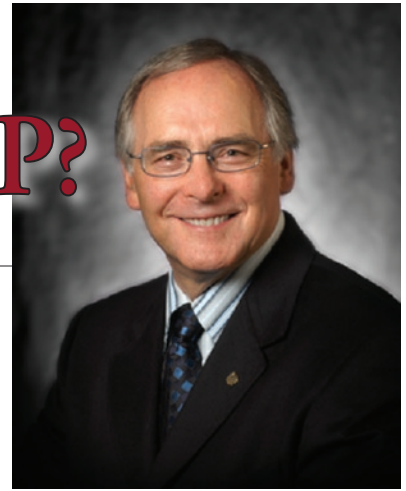
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WHERE DO I GO FOR HELP?

Isolated Decisions Can Produce Unacceptable Results



By Gordon D. Wusyk
Adapted from *Beyond Survival*
by Léon A. Danco

Now that you are an aging and successful owner-manager, has anxiety set in? Are you wondering what to do with your money, your people, your business, and your future? Are you anxious because you're running out of time and team talent just when you're business needs help?

If you answered yes to most of these questions...you may need to utilize outside advisors and stop doing it alone. You have to admit that eventually your talents may be limited in the face of growth, change and more success than you expected. In today's business world, if you're not seeking advice from the best advisors in town – you need to ask yourself why.

It can't be that you're afraid to explain to the experts your insignificant problems...but it is. Because you don't want to admit that you don't know everything.

Instead you do business with “who sis and what sis” three flights up because it's “comfortable” and you think it's going to be cheaper. It's like trying to save money on the soda instead of the scotch.

There are highly competent advisors available in your backyard. Why aren't you talking to them?

Get To Know Your Banker

If you don't respect your banker, then change banks. Bankers must be worthy of your trust, chosen for their competence and progressiveness and demonstrate genuine concern for and commitment to your future.

You'll get back from them what you ask for. Confide in them. Keep them informed.

When I was younger, I thought that bankers were backward because they wouldn't lend me money when I needed it. In recent years, I've developed an infinite respect for the judgment of quality bankers. They want to talk to business owners. They want to be honest with you and you with them.

I Now Have A Rule

If I can't sell my idea to a few different bankers...then I won't buy it myself.

Not All Policy Pushers

Don't assume that all insurance advisors are a tribe of glib, immoral, fast talking hustlers. The leading insurance advisors are committed to the needs of the people and their businesses.

Your chosen agent must get to know you and your company well enough to fully understand your needs. Insurance is a sophisticated field, overlapping in many areas with law, taxation, investment and banking. Effective estate planning strategies often use insurance coverage in the funding of buy and sell agreements, trust opportunities and transfer plans, tax funding and gifting programs.

Talk to the experts. Don't try to do it yourself. It's how the tool is used that matters most. Agents that have a C.L.U., CFP, and TEP will better your prospects of getting astute advice.

More Than Fixers

Talking to lawyers is not talking to God. Some are good and some are not. Find one that you can be honest with.

If you're using your lawyer to bail you out when your truck hits the school bus, to limit your company's liability, collect from deadbeats, act as novelist for the board meeting, or referee in family fights, you're not utilizing their full expertise.

Your lawyer should be involved in your estate and succession plans and the future management transfer of your company. If yours doesn't understand, find another one.

Group firms where each member has unique knowledge can be a great asset to you.

Not Just Tax Shelters

Is your accountant your personal gladiator with the tax department? Not withstanding our high tax rates... should we spend our business efforts trying to avoid tax or earn money?

You should be long past the individual practitioner. What you really need is a 35-year-old, buttoned-down CA who works for a first class firm. Just because you earn three



**I'm afraid you have the wrong number.
However...**

times what they do, doesn't mean they don't understand your business. They're not supposed to. Their strong suit is applying accounting disciplines and tax expertise. A second-rate bookkeeper just won't do.

Integrated Not Isolated

If you have sought advice from competent advisors, are they giving you isolated solutions that don't jive with each other? One of the most common compliments we hear from our family business clients is that they are relieved to find a trusted advisor that looks at integrated not isolated solutions.

*Gordon D. Wusyk is President,
Predictable Futures – Business Family Centre.*

This article is an excerpt from Beyond Survival, A Guide for Business Owners and their Families by Léon A. Danco, published by Predictable Futures Inc. – The Business Family Centre, Edmonton, Alberta.

Reprinted with permission, this article is the sixth in the series "Perpetuate or Liquidate."

Please don't hesitate to contact Predictable Futures – Business Family Centre for additional information about their resources for Canada's family business owners at 780-702-2499 or toll free at 1-866-241-2221 or by e-mail at solutions@predictablefutures.com.

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021: DIRECTIONAL BORING

General concerns

Boring often takes place near train tracks. When a train comes through the work area, stay back at least 20 feet from either side of the train tracks.

Minimum personal protective equipment includes hard-hat, safety glasses, work boots, gloves, and orange vest.

Wear respiratory protection and goggles when someone is mixing the bentonite or move upwind from the immediate area.

Monitor hydraulic hoses and electric cords for hazards. Do not walk on them at any time, and report any damage – no matter how minor.

Driller and Rodman

In addition to the minimum personal protective equipment, also wear insulating rubber gloves and insulating rubber boots.

Inspect equipment for any signs of damage or safety hazards, before operating.

Mark the location of all known utilities, so the bore stands the least chance of hitting a pipe or conduit. Verify per drawings and locating equipment.

Set the boring machine and outriggers to hold the machine in place.

Bond the boring machine to the nearest utility ground. Simply driving a rod creates an unbonded electrode.

Per Kirchoff's Law, the ground will not provide absolute protection. Electricity, contrary to popular belief, does not "take the path of least resistance." It divides proportionately among all paths. Grounding will reduce the magnitude of the shock potential.

Use a ground mat bonded to the boring machine.

Be alert for hydraulic leaks and electrical dangers – circumstances may have changed from when you first inspected the equipment.

Keep both feet on the ground mat when boring operations are underway. This equalizes the electrical path between your feet.

If you hit an electrical source, keep both feet on the mat. Do not move until someone uses a meter to verify the condition is cleared. Typically, this means a utility person will shut off the breaker. Do not touch anyone or anything not already on the ground mat with you.

If you hit a gas line, have a crew member shut off the truck. Typically, escaping gas lacks enough oxygen for it to ignite. As the gas disperses, that will change and a dangerous situation will exist. Get everyone as far as possible from the gas leak, and call 911 and the gas company immediately. If you can smell gas you are too close. If you cannot smell gas, you might still be too close. Try for a distance of 700 feet.

Driller only

Keep both hands on the boring machine. This equalizes the electrical path across your heart.

When the rodman is wrenching rods, keep your hands away from controls.

If you hit an electrical source, release the controls and keep both feet on the mat.

Rodman only

Ensure the driller's hands are off the controls before wrenching a rod.

Spoils truck driver

Place proper work zone protection for traffic and pedestrians.

Pull truck inside work zone protection.

Assign a flag person to control the traffic flow, as necessary.

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