

ASPECT

Definition: 'as - pekt / 1. a position facing a particular direction
2. appearance to the eye & mind.

THE DEGIFS NEWSLETTER

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The "Editorial"

Sharon Scott, P.Geo., Eng. L.

Seasons Greetings!

Well another year is almost over. As this is the last issue of ASPECT for this calendar year it is time to reflect on the significant events that have transpired. Things like:

- The WorkSafe BC ruling that limited the participation of P. Geos in conducting TSA's for forest roads and DEGIFS assistance to APEGBC in the process of P. Geo. Limited Licencing. Hopefully you have reviewed the recent proposed changes to the WorkSafe BC Occupational Health and Safety regulations with respect to P. Geo. involvement/TSA's currently being presented for input and have communicated your views to the executive.
- The recent addition of DEGIFS members to APEGBC Council: Tim Smith as President and Kevin Turner as a councillor.
- Member involvement on committees and with working groups was significant this past year as reflected in the March 2006 publication of "Guidelines for Legislated Landslide Assessments for Proposed Residential Development in British Columbia" and the successful completion of another two days of technical talks at the AGM.

The new year will be sure to present challenges and opportunities for our members. Our involvement will ensure the successful completion of various ventures currently in progress, including improving the state of continuing education (considering that both the Forestry Continuing Studies Network and the Forest Management Institute of BC have shut down). Professional development is critical in this fast paced environment we live and work in.

This editorial would not be complete without giving heartfelt thanks to all those who contribute including the DEGIFS executive, Editorial Board, DEGIFS members and APEGBC for support. Kudos to Jennifer Clarke, Julie Orban and Rob Wilson who have been co-editing this newsletter for a significant time period and who have stepped down this fall due to work and family commitments. You have all done an excellent job and rest assured your dedication has been appreciated.

And finally... to the members...you make ASPECT what it is so take time to contribute your thoughts in articles and letters. Let's all have a successful new year!

Please note: DEGIFS Executive does not necessarily support or agree with the opinions and conclusions indicated in the editorial.

DIVISION OF ENGINEERS AND GEOSCIENTISTS IN THE FOREST SECTOR

Volume 11, No. 4

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PROFESSIONAL RELIANCE – APEGBC'S PERSPECTIVE

By Peter Mitchell, P.Eng.

"Reprinted with permission from BC Forest Professional, November-December 2006"

From the Association of Professional Engineers and Geoscientists of BC's (APEGBC's) perspective, trust is the fundamental issue which underlies professional reliance and its successful implementation under the *Forest and Range Practices Act* (FRPA). For professional reliance to work, the public, industry and government must be able to trust that they can rely on the professional activities carried out by members of self-regulated professionals practising in the forest sector. The premise is that this trust obviates the need for industry or government to carry out a further review of professional activity once the work, in its final form, is submitted by the registered professional upon completion of the particular professional activity.

Historically, professional reliance has been occurring for many years in some practice areas of professional engineering and geoscience in British Columbia. The concept of working in an environment when there is an absence of prescriptive regulations as well as a formal review of a registered professional's work is not a new one for professional engineers and geoscientists. The first appearance of the application of this type of professional reliance in BC occurred in the late 1970s, when professional engineers were being requested to sign off on the design and field review aspects of buildings. Here are additional examples of BC provincial legislation where professional engineers and geoscientists are engaged using the professional reliance model:

- *Occupational Health and Safety Regulation* in WorkSafeBC
- *Contaminated Sites Regulation, Organic Matter Recycling Regulation, and Riparian Areas Regulation* in the Ministry of the Environment

- *Municipal Sewage Regulation and Sewerage System Regulation* in the Ministry of Health
- *National Instrument 43-101 and 51-101* in the BC Securities Commission
- *Regulations under the Mineral Tenure Act* in the Ministry of Energy Mines and Petroleum Resources
- *British Columbia Building Code* (enacted under the Building Regulations of BC)

As you can see, professional engineers and geoscientists are well experienced in working in a professional reliance regulatory model.

With this type of professional reliance comes the responsibility for each profession to regulate members in an appropriate fashion. For those members of APEGBC providing professional services in the forest sector and specifically under the FRPA, APEGBC has in place the following proactive and reactive regulatory tools:

A) Proactive Tools

- i) The APEGBC Division of Engineers and Geoscientists in the Forest Sector (DEGIFS)
DEGIFS was formed in 1995 to advise the APEGBC Council on issues relevant to the practice of Professional Engineering and Geoscience in the land based forest sector. On this basis, DEGIFS guides the development and monitoring of standards of practice for Professional Engineers and Professional Geoscientists providing professional services in this area.
- ii) Practice Reviews
Random reviews of the practices of members who carry out professional services in the forest sector.



iii) Standards of Practice
 APEGBC has published guidelines which relate to the practice of professional engineering and geoscience in the forest sector (*APEGBC Guidelines for Terrain Stability Assessments in the Forest Sector* and the *APEGBC/ABC FP Guidelines for Professional Services in the Forest Sector – Crossings*).

iv) Joint Practice Board (JPB)
 In order to deal with issues related to the overlap between professional engineering and geoscience and the work of forest professionals, a Joint Practice Board was formed. The JPB has been instrumental in dealing with various overlap issues.

B) Reactive Tools

i) Disciplinary Process
 APEGBC has a rigorous investigation and discipline process for members who breach the *Engineers and Geoscientists Act, Bylaws* and *Code of Ethics* or who have demonstrated unprofessional conduct, negligence or incompetence. A discipline inquiry, conducted in a court of law, can, upon finding of guilt, result in a variety of penalties including fines, suspensions and ultimately, revocation of membership. In fact, an APEGBC member practicing in the forest sector was recently disciplined under this process.

ii) Enforcement
 This involves APEGBC taking action to ensure that professional engineering and professional geoscience as defined in the

Engineers and Geoscientists Act is undertaken by an appropriately registered member.

Finally APEGBC has worked closely with the BC Institute of Agrologists, the College of Applied Biology and the ABCFP through the Professional Reliance Task Force in developing a paper which delivers a common message on professional reliance from the above professions. This paper is entitled *Professional Reliance in Forest and Range Management in British Columbia – From Concept to Practice** and has been endorsed by the councils of the four referenced associations.

This document facilitates the development of a common understanding of professional reliance by the public, industry, government officials and forest resource professionals.

It is vitally important, not only for the forest resource sector but also for professional associations, that the move by government and industry to implement a regulatory model which relies heavily on professional reliance is successful. Since the introduction of the *Forest Practices Code Act of BC and Regulations* in 1995, professional associations have approached government and industry to implement a regulatory regime which recognizes legislation governing members of professional associations. With the introduction of FRPA, this goal has now been achieved. Registered professionals can now exercise their judgment in a more efficient and effective fashion while providing innovative solutions to complex problems in the forest sector. The danger is that if the professional reliance model is not successful, the implementation of a prescriptive regulatory regime could result again and this would be a lost opportunity for the forest sector as well as for the professional associations and their members.

The professional associations and all members providing professional services in this area must work with the public, government and industry to ensure this new approach works, while protecting



the public's interest, as it is a unique opportunity for all.

Peter is the associate director, professional practice at APEGBC. His key responsibilities include the administration of the Practice Review Program, and providing staff support to numerous committees, task forces and boards dealing with professional practice issues including the Consulting Practice Committee, Building Codes Committee, Seismic Peer Review Committee, Practice Review Committee, and the APEGBC/ABCFP Joint Practice Board. He also provides staff support to the Division of Engineers and Geoscientists in the Forest Sector (DEGIFS), and the Division of Structural Engineers (DSE).

*Professional Reliance in Forest and Range Management in British Columbia – From Concept to Practice Paper Link:

[http://www.abcfp.ca/publications_forms/publications/documents/PRTF-FromConceptToPractice\(July%202006\).pdf](http://www.abcfp.ca/publications_forms/publications/documents/PRTF-FromConceptToPractice(July%202006).pdf)

DEGIFS MEMBER PROFILE:

Doug Underhill, P. Eng., R.P.F.

Forest Engineer

Helifor Industries Ltd.

Interview by: Sharon Scott

Who are you and how did you get to where you are now?

I grew up in southern New Brunswick and graduated with a BSc in Forest Engineering in 89. After a brief attempt at steady employment on the east coast, I moved to Vancouver and went to work for Interfor as an assistant engineer. I worked my way up through the ranks and worked in several different camps and operations. I joined Helifor at the beginning of 2000 and have been there ever since. It was a lucky decision for me as most of the operations that I worked at

previously are gone, victims of the 20% take back.

What do you do?

My title is Forest Engineer but I do a mixture of forest engineering, forestry, and business management tasks. My main role is predicting helicopter logging productivity through careful analysis and calculations. I also spend some time in the bush looking at timber, landings, roads, and forest harvesting prescriptions. I have seen a lot of innovative practices over the last few years.

What has been your favorite project experience?

My favorite project experience was setting up Helifor's single stem program. A few years ago, I was given the task of determining how to estimate the helicopter productivity for this new technique. I had to first learn all of the factors that effect productivity as well as how to predict their impact. This is my favorite experience because it taught me that something that looks easy can actually be very intricate and a team approach by everyone involved is absolutely critical to its success.

If you could impart some advice to young DEGIFS members what would it be?

Working hard is necessary for advancement in your job, but all is lost if you don't put the same effort into advancing your professional skills. The days of going to work for "Company X" when you get out of school and staying there until retirement are quickly disappearing as companies evolve to meet the demands of global competition.



In your opinion, how can APEGBC or DEGIFS better meet the needs of its members?

I think that support for the members is the key to going forward in the FRPA environment. This support involves things like reacting to changes in legislation that effect members right to practice by providing short term options as well as long term solutions (example - WorkSafe Regulations). This support also involves promoting the professions of engineering and geoscience by meeting with other professional associations to resolve conflicts in practice rights and to work cooperatively towards improving the public's understanding of the role professionals play in the management of BC's forests.

And the fun question.... If you could be any kind of geomorphic event, what would you be?

I would have to say debris avalanche because while it is destructive, it does not completely destroy everything it touches. To me, debris avalanches are a signal from the hillside to the living organisms below that things are changing and you had better adapt.



CONTINUING PROFESSIONAL DEVELOPMENT OPPORTUNITIES

From APEGBC website

JANUARY 16 AND MARCH 8, 2007, FLUVIAL GEOMORPHOLOGY: WHAT ENGINEERS & GEOSCIENTISTS NEED TO KNOW.

Speakers: Dr. Michael Church, P.Geo. Department of Geography, University of British Columbia and Dr. Brett Eaton, GIT Department of Geography, University of British Columbia. Designed for professionals working in the fields of environmental geology or engineering, hydrology, river engineering, water resources, geotechnics, forestry, land development and construction. To avoid cancellation of this seminar, please register by January 2nd. Offered January 16, 2007 – Victoria and March 8, 2007 - Prince George For further information see:

http://www.apeg.bc.ca/prodev/events/fluvial_victoria.html

http://www.apeg.bc.ca/prodev/events/fluvial_pg.html

JANUARY 22 AND 23, 2007, AN INTRODUCTION TO SLOPE ANALYSIS.

Vancouver, BC. This two day workshop will provide an introduction to the tools and knowledge needed to undertake/interpret soil and rock slope stability analyses for hazard assessment. This will be achieved through a series of lectures led by Erik Eberhardt, Oldrich Hungr and Doug Stead. Accompanying the lectures will be a series of tutorials using a wide range of slope stability and runout analysis software. Information:

http://www.apeg.bc.ca/prodev/events/slope_analysis.html



JANUARY 24 AND 27, 2007. DIGITAL TERRAIN DATA STANDARDS WORKSHOP. Multiple Locations. The Ministry of Environment - Ecosystems Branch, the provincial custodian of terrain mapping information, will be hosting 1/2-day terrain information workshops intended for the terrain/bioterrain mapping community, GIS contractors and terrain mapping project clients/forest licensees. Topics will include follow-up from the Terrain Information/Inventory Workshop of February 2006, tips for finding terrain and related data, what you need to know about the Digital Data Capture Standards (Errata 2006-1 and planned changes), data capture tips for terrain mappers and GIS analysts and discussion regarding possible changes to the terrain/bioterrain digital data capture standards. Information:

http://www.apeg.bc.ca/prodev/events/digital_terrain_richmond.html

http://www.apeg.bc.ca/prodev/events/digital_terrain_nelson.html

JANUARY 29 - FEBRUARY 1, 2007. AMEBC MINERAL EXPLORATION ROUNDUP 2007. "Leading the World in Exploration" is the focus of the 2007 conference, which will bring together organizations and people representing all components of the global mineral exploration industry in scenic Vancouver. For further information see:

<http://www.amebc.ca/roundupoverview.htm>

JANUARY - APRIL 2007. UNBC: GEOTECHNICAL ENGINEERING AND RESOURCE ROAD WORKSHOP. This two day classroom workshop will focus on geotechnical engineering principles and their application in resource road planning, construction, and maintenance. Offered in 6 locations around BC. More information:

www.unbc.ca/continuingstudies/nrme/index.html#GeotechnicalEngineering.

FEBRUARY 5-7, 2007. UNBC SEMINAR: COMPUTER APPLICATIONS IN FOREST ROAD DESIGN. This 3-day course focuses on several key elements of forest road design including: route surveys, design parameters, horizontal and vertical alignment, earthwork volumes, mass haul diagram, construction survey and design presentation. More information:

www.unbc.ca/continuingstudies/nrme/index.html#ComputerApplicationsForestRoad

FEBRUARY 22 AND APRIL 4, 2007. CURRENT PRACTICE IN ACID ROCK DRAINAGE PREDICTION. Multiple Locations. This seminar will provide an introduction to the methods available to predict the reactivity of rock and the chemistry of drainage in contact with rock, and the use of the results to identify technologies to address ML/ARD. The seminar will appeal primarily to engineers and geoscientists working in the mining, transportation and utility industries. For further information see:

http://www.apeg.bc.ca/prodev/events/current_practice_cranbrook.html

http://www.apeg.bc.ca/prodev/events/current_practice_kelowna.html

MAY 27-31, 2007. 1ST CANADA-US ROCK MECHANICS SYMPOSIUM. Presented by the Canadian Rock Mechanics Association (CARMA) and American Rock Mechanics Association (ARMA). Theme: "Rock Mechanics: Meeting Society's Challenges and Demands." Sheraton Wall Centre, Vancouver. Information:

www.canada-us-rockmechanics.ca



JUNE 18-22, 2007. ALLUVIAL FANS. Three days of presentation sessions and two days of mid-conference field trips. Banff Park Lodge, Banff, Alberta. Dr. David Wilford, PGeo, of BC Ministry of Forests and Range will be one of the speakers. See details in first circular. Information:

alluvialfans2007@smu.ca,
husky1.stmarys.ca/~pgiles/AF2007/AlluvialFans2007.htm.

OTHER TRAINING OPPORTUNITIES:

FEBRUARY 22 - 23, 2007. SOIL AND ROCK SLOPE STABILITY. New York City Metro Area, NY. By Boss International.

For more information see:

<http://training.bossintl.com/html/soil-rock-slope-stability-trai.html>

Remember, once you complete training, record it!

<http://www.apeg.bc.ca/prodev/online.html>

For more information on continuing professional development guidelines see:

<http://www.apeg.bc.ca/prodev/cpdguidelines/cpdguideline.pdf>

ASPECT VOLUNTEER OPPORTUNITY!!!

With the recent resignations of Jen, Julie and Rob, there is an opening for a co-editor. In keeping with the idea of maintaining a balanced viewpoint for this newsletter (having both a "coastal" and "interior" editor), if any of our members (especially "interior" ones) would like to step forward please contact one of our executive members or the present editor (see contact information on next page).

ASPECT welcomes announcements, technical articles, letters to the Ed, project profiles, photos, tips, jokes, etc.....basically anything that would benefit DEGIFS members.



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Do Not Forget!!!

ASPECT SUBMISSIONS

LAST DATE FOR SUBMISSIONS TO ASPECT	NEWSLETTER RELEASE DATE
MARCH 15, 2007	MARCH 29, 2007
JUNE 15, 2007	JUNE 30, 2007
SEPTEMBER 15, 2007	SEPTEMBER 29, 2007
DECEMBER 1, 2007	DECEMBER 15, 2007

Electronic submissions in **Word format (only)** should be made to Sharon Scott (sharon.scott@hayes.bc.ca) by the date listed above.

Refer to Guidelines for Submission on the website <http://www.degifs.com/guidelines.doc> for submission requirements.