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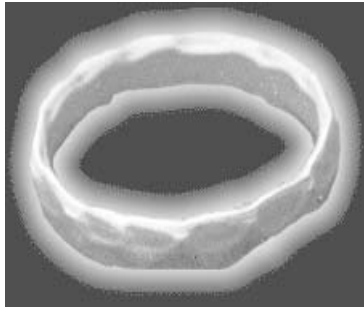
# the IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

<http://iwarrior.uwaterloo.ca/>

volume 24 issue 3 | 26 February 2003

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## Engineering Play - Moonchildren

**Sandra Le**



**4B Systems**

This term, the Engineering Society will be presenting a comedy called Moonchildren by Michael Weller. Directed by Dallas Card and Matt Woolsey, this play set in the late 1960s promises to be very hilarious. It involves an impressive cast of more than 16 engineers, supported by many other ones in the technical crew and the production team.

Moonchildren follows the story of 7 university students living together in an apart-

ment throughout a school year, in the 1968 anti-war and free love environment, exploring the the mysteries of life, death, cats, sex, jealousy, hamburgers, and love.

Are you interested? The play will be presented March 13th, 14th and 15th. Tickets will soon be on sale in the Orifice, and be quick, because they might sell out very fast!

For more information, and if you are interested helping, email [bsoc\\_drama@engmail](mailto:bsoc_drama@engmail).

## Engineering Society Candidates Announced

WEEF Director: Erin Young

All of the University of Waterloo Engineering Society nominations are in, and the candidates are:

President: Josh Levitz  
VP External: Jeff Alfonsi  
VP Internal: vacant  
VP Education: Emma Saask  
VP Finance: Dave Johnson

All of the candidates are acclaimed for their positions, and have to be ratified during the next EngSoc meeting, held on Wednesday, February 26th. By-elections will be held in order to determine the VP Internal position, which is vacant.

## IRS Not Held at Fed Hall

The Iron Ring Stag, the party for graduating UW Engineers, was not held at Federation Hall, as it has been for the past few years, due to the fact it was shut down by the University administration.

Gradcomm's position, from an email from Kevin Kaczmarczyk, is that "FEDS will NOT allow us to use Fed Hall on Tuesday, February 18th. Regardless of the fact that university administration was willing to cooperate...". However, Chris DiLullo responded by saying "the University did not meet with us. This is important

because we have been instructed by the University that NO ONE can serve alcohol in Fed Hall, this includes them.", then "if another event comes in and requests alcohol service and we say no, they can point to the IRS, say you're discriminating against us and we could be sued." [This will allow the University to say] "how well it runs with our bar staff, or maybe see how safe it is when we run the show." Which would lead to the loss of control of the bars to the University Administration.

Thus, the Iron Ring Stag party was held at the Wax Nightclub in Kitchener, instead.

## Changes in [www.engsoc](http://www.engsoc)

**Joseph Fung**



**3N Computer**

Over the last couple years, the EngSoc web site has undergone a lot of changes - some positive, some negative. This fact is in part due to the constantly changing webmasters. Recently, though, a lot of changes have happened to make the web site not only more current and topical, but also more useful to engineering students.

Other than having new methods in place by which the webmasters can easily update the site's listing of EngSoc documents and EngSoc events, a number of features have been released this term.

The first and most popular feature is the EngSoc Exam Bank. This online repository of \_\_\_ midterm and final exams is provided as an alternative to the hard copies stored in the Orifice. These exams can be downloaded by EngSoc members in a PDF format.

A similar service, which was also recently established, is an online Work Term Report Center featuring an Outstanding Report Repository - a source of Work

Term Reports that received a mark of "Outstanding", and a list of Peer Editors - a place for students to get help editing their reports. Still in its fledgling stage, this Center will house a large list of peer editors and sample reports.

Finally, EngSoc students now also have the ability to make P\*\*5 submissions online - something previously unavailable.

With these new features, and with a number of additional projects still in the works (including new photo galleries and an online suggestion box) the EngSoc web site promises to be a useful resource for the rest of this term, and for many terms to come.

Additionally, available at [engsocweb@engmail](mailto:engsocweb@engmail), the webmasters are willing to work closely with directors to post updates and information.

Next time you're not sure about what EngSoc has to offer for you, it's recommended that you check out <http://www.engsoc.uwaterloo.ca/www>.

Useful links:  
Work Term Center:  
<http://www.engsoc.uwaterloo.ca/www/wtr/>  
Exam Bank: <http://www.engsoc.uwaterloo.ca/www/exambank/>

## Guelph Cub Prawl Pics



Top right to bottom right: 1) A bunch of fun-lovin' female engineers. 2) This is the "Charm School for Engineers?" 3) Wheee!!! Snow Angels!

## Letter from the Editor

Jonathan Ng

4B Computer

Editor-in-Chief



Alright, let's get this show on the road!

### 1) Iron Ring Stag

There were a few non-Engineers (Mathies really, since other faculties did not have class that day) that took offense with us causing a ruckus during Iron Ring Stag on Tuesday, that took offense at us trying to hold the party close to campus (where it would be safer for us), and took offense with us having the day at all. I don't begrudge the position of Gradcomm, who was trying to plan this event in spite of the fact that our on-campus bars were shut down, nor do I begrudge the position the position of the Federation of Students, who has to deal with the fact that they can't cater exclusively to the engineers. As a matter of fact, the Wax is a perfectly fine nightclub and was able to host our event quite nicely, though the costs associated with the operation are mostly likely higher than normal.

However, to eliminate IRS, or to reduce it to a mere formality, would be devastating to all future engineers that would come out of this fine establishment. The Iron Ring is supposed to remind us of the burden to society that we have to carry. We are only allowed to wield the ring after we have made a binding oath that we will take our responsibilities seriously. To me, the IRS is the last day we will be "free" - free of the social responsibilities that wait for us in

the workplace, lurking, just waiting for the chance for us to slip.

Now I'm bound to the ring and its responsibilities. I will try not to resent them, because lives depend on them.

### 2) Okay, What Really Happened at IRS?

We had our champagne breakfast, we visited old profs and classes, we were in POETS for the count-down and some mingling, and generally had a great time.

However, I think the classes could intermingle a little more. There are classes that I've been with here for all four years and I'm familiar with, and then there are classes whom I haven't seen for four years and would like to meet. I mean, these are the people who are graduating with you, show them some love!

As for IRS night, a lot of people dancing, a lot of cloth ripping, and a lot of Tool touching marked the night.

All in all, a fantastic time, and I don't think I could trade this day for anything.

### 3) Nonsense Weather Patterns

Thursday: Nice, warmish weather.  
Friday: Nice, warmish weather.  
Saturday: A snowstorm hits.  
Dumps a lot of snow, causes a lot of traffic accidents.  
Sunday: Not much snow, but a lot of wind and cold.

Did the reading weekend's weather make sense to you? Now, I suppose two days of nice, warmish weather is better than zero days,

but right now it's still cold out, and the on-again, off-again snow doesn't seem to be diminishing.

At least there's only three more days until March, which means winter is ending soon.

### 4) Increasing Social Disconnect

There was a recent study by Reuters that showed that young people are starting to date less. There are a whole plethora of explanations surrounding this phenomena - that they didn't go on dates anymore, that they went as a group, dinner and a movie became more expensive, they play too many video games, etc.

But I feel that there *is* a growing social disconnect. It's not like there's *the* place to hang out. There are some, but they are pretty loosely connected.

If someone knows the real places to hang out please tell me.

And that, once again, wraps up another edition of the Iron Warrior.

Questions? Comments?

We welcome letters and feedback from all our readers. Please email us at:

[iwarrior@engmail.uwaterloo.ca](mailto:iwarrior@engmail.uwaterloo.ca)

the IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

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The Iron Warrior encourages submissions from students, faculty and members of the university community. Submissions should reflect the concerns and intellectual standards of the university in general. The author's name and phone number should be included. All submissions, unless otherwise stated, become the property of The Iron Warrior, which reserves the right to refuse publication of material which it deems unsuitable. The Iron Warrior also reserves the right to edit grammar, spelling and text that do not meet university standards. Authors will be notified of any major changes that may be required.

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# Canadian Government Attacks Public Privacy



Joseph Fung

3N Computer

George Radwanski, the Privacy Commissioner of Canada, recently submitted a report to Parliament illustrating how the government is "undermining the whole edifice of privacy protection that has been in place in this country for nearly two decades".

In 2001 Radwanski was commissioned to seek resolutions to issues concerning public privacy, and to report on his actions in the spring of 2002. Despite several extensions of his deadline, he was unable to produce a satisfactory report as the aftermath of the terrorist attacks on New York and Washington produced several major issues regarding the balance between public privacy and national security. While Radwanski states that the report is incomplete, it still manages to bring attention to a number of issues in the Liberal government's actions since 9-11.

While Radwanski claims he has no desire to interfere with measures and programs intended to defend against terrorist attacks, he maintains that the Government has other purposes, and that some measures involve intrusions on privacy that have no

demonstrable association with anti-terrorism.

In his report, Radwanski focused on Canada Customs and Revenue Agency's new "Big Brother" passenger database, enhanced state authority to monitor communications, a proposed national ID card making use of biometric technology, and government support for video-surveillance on public streets by the RCMP. Radwanski purports that these intrusions are not only disturbing, but also cross a dangerous threshold towards an Orwellian Canada. In his report, Radwanski suggested that in a short time Canadian might resemble the following:

"Any time we travel within Canada, we will have to identify ourselves to police so that their computers can check whether we are wanted for anything or are otherwise of interest to the state."

"Police and security will be able to access records of every e-mail we send and every cellular phone call we make. Information on what we read on the Internet, every Web site and page we visit, will likewise be readily available to government authorities."

"Our movements through the public streets will be relentlessly observed through proliferating police video surveillance cameras. Eventually, these cameras will likely be linked to biometric face-

recognition technologies that will match our on-screen images to file photos -- from such sources as drivers' licenses, passports or ID cards -- and enable the police to identify us by name and address as we go about our law-abiding business in the streets."

Radwanski's concerns, however, have received less than widespread support from Parliament members.

"He has a view, which is natural - he's the privacy commissioner," said Transport Minister David Collenette. Collenette is responsible for collecting air traveler information.

Similarly, Citizenship and Immigration Minister Denis Coderre dismissed Radwanski's comments. "We all know the commissioner. He's got the right to say what he says; he's got the right to think what he thinks. I believe we need the debate." Coderre submitted the proposed biometric ID cards.

In fact, Radwanski went as far as claiming that "the Government is turning a resolutely deaf ear" to these problems.

Since 1983, when the Privacy Act was introduced, the Canadian government has abided by a convention of listening to a Privacy Commissioner when they point out a practice or initiative that is in conflict with privacy rights. In recent history,

however, Federal initiatives have been introduced and debated with little attention paid to Radwanski.

His frustration with the government and with the public is obvious. Despite several public presentations on these issues, public support for his position has been weak. Many citizens, he says, are hiding behind a 'why should I worry' argument which is "at the intellectual level of a bumper sticker."

"We all have something to hide in terms of our interests, our relationships, our attitudes, choices we've made, mistakes we've made, financial circumstances, our personal habits," Radwanski said. "Not because they're illegal. Not because they're shameful. (But) simply because they are private."

Radwanski's report covers the period from April 1, 2001 to March 31, 2002 for the Privacy Act and from December 1 to 31, 2001 for the Personal Information Protection and Electronic Documents Act. His involvement with the second year of the Personal Information Protection and Electronic Documents Act will be included in his next annual report.

For more information online, see the Privacy Commissioner of Canada's 2001-2002 Annual Report to Parliament at [http://www.privcom.gc.ca/information/ar/02\\_04\\_10\\_e.asp](http://www.privcom.gc.ca/information/ar/02_04_10_e.asp)

# Where Are Your Tax Dollars Going?



Jeff Henry

3N Computer

Last week brought a first for John Manley. The 2003-2004 federal budget, however, seems as much Jean Chretien's work as the successor of Paul Martin's. In all, \$25 billion in new spending stretching well into presumably Mr. Martin's reign adorned this fiscal year's books in what Mr. Chretien called "a people's budget."

Indeed, for those across the floor of the House of Commons who demand nothing but all of their tax dollars back it was another disappointing budget. After all, any surplus on the government's hands is only there because of taxpayer dollars -- and what right does the government have to spend that money on the social pro-

grams and priorities that Canadians demand the government to spend it on.

\$34.8 billion for health care over the next five years through an accountable and transparent series of federal-provincial transfer payments agreed upon by most of the premiers is indeed a hearty spending spree and conservatives certainly have much to complain about. Especially since their provincial affiliate governments demanded much more spending on the hands of the federal government.

With \$3.1 billion over the next five years to the National Child Benefit, there is relief for low-income families. Additionally \$606 million over the next two years is earmarked for affordable housing and the homeless and more than a billion dollars is allocated to aboriginal health and social programs. The left wing and native leaders complain it isn't enough.

The Alliance decries that the middle class

was snubbed this year after \$100 billion in phased across the board tax relief from the last two budgets. But the RRSP cap was increased from \$12,500 towards a goal of \$18,000 in 2006 and EI premiums were dropped by almost 6%. \$1 billion will eventually end up in daycare providing much needed relief for many working families.

Students and universities also got relief through many CASA lobbying successes in student loan interest relief and permanent funding of the indirect cost of research which could net this university \$7 million annually. \$200 million was set aside to create Canadian Graduate Scholarships mirroring the successful Millennium Scholarships presented in a past Liberal budget. Still the Canadian Association of University Teachers gave Mr. Manley a failing grade on the funding.

The \$800 million in new annual spending for the military was viewed as enough to tread water and not nearly enough to keep

up our responsibilities.

The \$2 billion on tackling Kyoto over the next five years thus funding incentives and research necessary for implementation was mostly ignored in budget reaction along with the other \$1 billion targeted for the environment even though most Canadians had wondered where the money to implement Kyoto would come from.

In all, this year holds the largest increase in spending since the last gasp of the Trudeau era twenty years previous and is labeled by many as a return to the traditional "tax and spend" liberals. Very few people walked away happy -- not the left, nor the right. But with a decade of centrist liberal governments and a Canadian public that above all else values its social programs, all of that might just mean this budget hits that unsatisfied middle ground covering most of the Canadian political landscape.

# UW Engineers are Without Borders

Afsheen Khan  
2A Chemical

I was really fascinated by the effort made to set up this whole "Engineers Without Borders National Conference" and was happy to see such a big number of UW engineers turning out to attend it. They have shown great spirit and look forward to prove themselves as engineers without borders and many of them have done so in

past during their work terms as well. The two speakers who were supposed to speak on Friday Jan 31st, 2003 were Stephen Lewis and Flora Macdonald. But due to some non-preventable reasons Stephen Lewis was not able to present his keynote speech on "A Challenge to Make Change" and therefore Claire Danscreau, executive director of CUSO spoke, instead.

Flora Macdonald in the light of her own personal experiences addressed the topic "A Life of Public Service". She related the

over seas problems and need of engineers to rebuilt and construct taking the example of war hit under developed countries such as Afghanistan. She showed numerous photographic slides to support her argument and drew the attention of the crowd of UW engineers towards a place, which has suffered 24 years of continuous conflicts, foreign invasion and civil war. At the same time it has been afflicted by 4 years of drought and there are still 700,000 troops with arms in the country. There are 2 million men killed in the war situation in

last twenty years leaving the imbalance population of 70 percent females. She greatly emphasized how important it is for females to get educated in such circumstances and as a stepping-stone has laid the foundations of first female high school during her stay there. She praised these war widows greatly for their talents and their ways and means to raise enough

*Continued on page 5. See EWB Conference.*

## ENGINEERING SOCIETY EXECUTIVE REPORTS

### President Report



Dave Clegg

President

Over the last few weeks we've had very few events because of midterms and reading days, but what events have occurred have been very successful! Our first DUSTED ever went off without a hitch on February 8th, and this past week we've had Shadow Day, Arts Week, and Waterloo's first-ever Pi-Throw. We've also had three Cub Prawl, two in town and one for the grads in Guelph. And of course, who could forget IRS!

Congratulations to all the grads who have worked very hard to get that ring. I guess the POETS clock now counts down for the class of 2004...How many days?

Coming up we have our Semi-Formal, Mudbowl, National Engineering Week, plus more trips to Blue Mountain and the Brunny. We also have Wheelchair Basketball, the EngPlay and TalEng on the horizon, so stay tuned!

Some good news on the on-line exam bank front: as of February 18th 10981 exams had been downloaded! That's incredible! Thanks for making use of this new feature guys! And keep sending those bugs that you find to [engsocweb@engmail](mailto:engsocweb@engmail). Also, the Orifice is getting its badly needed

upgrade to Nexus very shortly, and it will cost less than \$800 for the whole thing. Not bad for having to completely revamp 3 computers, don't you think?

In FEDS-land I have submitted my first report to the Advisory Committee on the Collection of Incidental Fees, which can be viewed at [http://www.engsoc.uwaterloo.ca/www/documents/engsoc\\_fee\\_collection.doc](http://www.engsoc.uwaterloo.ca/www/documents/engsoc_fee_collection.doc). This is the committee that is reviewing the possibility of allowing students to pre-opt out of all refundable fees on the fee statement, including the EngSoc fee. As for news on the Bomber and Fed Hall, it is looking increasingly likely that neither of these establishments will re-open again this term. I will continue to let you know if there is any progress in this

area.

Finally, EngSoc nominations closed on the Wednesday before reading days, and all positions except VP Internal had only one candidate running for them (VP Internal had none). Pursuant to the constitution these people sought ratification by the general EngSoc council on Wednesday February 24th. A by-election will be held for the VP Internal and any positions not ratified at the general council meeting.

As always, please feel free to send me any questions or concerns at [bsoc\\_prez@engmail](mailto:bsoc_prez@engmail). I'm here working for you, and I want to hear what you have to say!

### Vice-President Finance Report



Mark Mollison

VP Finance

Hello everyone. I hope midterms went well and if you are reading this hopefully they are all over by now. My favourite event is coming up B\*\*\*5. It has

always been a blast. 4-hours of bowling, food, and perhaps some fermented and/or distilled type beverages. I suggest you keep your eyes open as there are only a limited number of lanes available. Semi-formal is also coming up, it has always been an awesome time.

As for our money situation we have received our fees, which are more than I had expected so our deficit has been lessened, which is great news. I have been

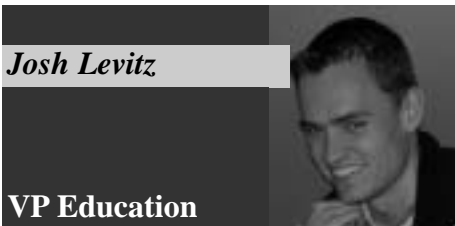
very busy and I apologize to those that have had expense forms in for the last while. By the time you are reading this they have all been issued. From now on there shouldn't be a problem in releasing funds. Please ensure that you submit your expense forms as often as you can so I may better track what money has been spent. Remember I have finals too, so try and not swamp me with tones of expense form near the end of the term. If you would like to find out how much remains on your

budget please come see me anytime or you may now follow the link on the website.

If you have any questions about your budgets or general questions please do not hesitate to ask.

I hope everyone has an awesome remaining term!

### Vice-President Education Report



Josh Levitz

VP Education

Hey guys,

Well, the term is officially half over and with that come elections, rankings and midterms. On the co-op side of things not much has changed. The new system is

coming, and with that comes many new changes. I would just like to take a second to remind all of you who will be going through co-op in the fall that you will need an HTML version of your resume. With this new online system mark submission will be optional and, hopefully, even submission of your past co-op evaluations will be optional as well. On an exam related note, as part of the extra \$25 co-op fee, students reserved the right to use unused rooms in the co-op building as study rooms. This was not really possible over midterms as co-op was in full swing with most rooms being used for interviews, etc.

However, these rooms should be available for studying for finals. The process for using interview rooms as study rooms has yet to be determined, but it will most likely involve scheduled sign-outs for blocks of a couple hours at a time.

Basically what's been happening on the education front is a very informative basic car care workshop; the development of an online work report database and critiquing site - check it out at [www.engsoc.uwaterloo.ca/www/wtr](http://www.engsoc.uwaterloo.ca/www/wtr). On this site you can peruse past outstanding work reports for ideas on formatting and structure. Also, if

you are looking for help editing your report, a list of critiquers is also available on this site. If you feel you would be a good work report critiquer you can sign up to volunteer your time as well.

One final note - watch for debt load surveys coming out soon. Please take the time to fill these out as they provide very useful information on how much the tuition hikes are killing us. Many of you (like me) have double school terms coming up and with the extra 15% tuition hike that just went through we'll need to start saving now.

### WEEF Director Report



Denis Viens

WEEF Director

WEEF Proposals are open until March 7th, please see the WEEF website for more info.

[www.eng.uwaterloo.ca/~weef](http://www.eng.uwaterloo.ca/~weef)

Please note that all proposals require a hard and a soft copy. And as a reminder for some, late proposals will NOT be accepted, under any circumstance.

If you have any questions, don't be afraid to drop by the WEEF office or send me an email at [weef@engmail](mailto:weef@engmail).

Denis Viens  
WEEF Director

## Women In Engineering Calls for Women in Technology Night

Afsheen Khan  
Initiative Developer, WIE

Mark your calendars! On February 27 from 4:30-6:30pm in the DC Fishbowl (DC 1301) the Women In Engineering (WIE) and Mathematics (WIM) committee will together host a

Women In Technology Night. Guest speakers include Vivienne Ojala who works for SS technologies and is a graduate of university of Waterloo systems engineering in 1984 and Diane McKelvie from Co-op services coming in to talk about Sexual Harassment and the protocol for us as a co-op student in dealing with it. They will be on hand to share their experiences and provide some insight to how they have

managed. This night is anticipated to be very informative regardless of gender and of course enjoyable! Food and refreshments will be provided free of charge. All are welcome to attend!

For more information on this and future events such as Women In Engineering Reception (Wine n Cheese) and Pot Luck dinner for all the under graduates that are

coming up in March, please check out the recently updated WIE web site at:

<http://www.eng.uwaterloo.ca/~w-in-eng/>

## What Men Want

Ruchi Bhalla  
1B Software

Men want girls with bigger boobs than brains. Now, that I have revolted, annoyed or amused most of you, I will go on to say that this article is based on my limited experience in this fine world. I concede that there are exceptions to every rule and the generalizations I make are do NOT apply to all men folk. Without further ado, I reveal to you the mysteries of our male society.

Men want stability. When it comes to life and relationships, their goal is to feel safe. They spent their entire life tackling problems and challenges and thus, when it's time to come home, security is the thing to look forward to. While women enjoy gossiping about people, men find that their time is better spent talking about things. Hot lunch topics range from drinking stories and video games to latest rendezvous with the flavour of the month.

To put it this way, men enjoy comparing things. Comparing the size of their male members is common and a great many insults are born from this specimen. Apparently, bigger male members are more desirable and considered manly. Now that we are talking big, another thing that comes to mind is ego. Some men have egos the size of a room and others, the size of a peanut. And these egos need to be fed by their accomplishments, no matter how small. I would like to ask the female readers, ever notice that if your boy toy bought a new shiny monitor, everyone that comes within a 20 meter radius has to know about it. There are stories of achievements that you have probably heard over and over again. And you find yourselves wondering, if men were to hear themselves talk, would they think the same thing that women, think?

Men want sex, regular sex. They are like a

landlord, only instead of monthly payments, weekly or bi-weekly relief is needed. Will it be straight up or girl on top? Losing their virginity is another big issue. If you are an 18 year old male and a virgin, the only options are to use cliché phrases like "I'm waiting for it", or to lose it as fast as you can and make sure that the this top secret is never leaked to your friends. What happened to sex after marriage? Erm...That'd be a woman thing. As sacred as virginity is to women, for men, it is an embarrassment. Stories circulate among close friends about this virginity-losing ritual as memories of "back then".

When it comes to relationships, men want to make women happy. The most dreaded phrase to hit the male ear must be "Honey, we need to talk about our relationship". According to guys, the fact that girls need to talk about their relationship with their significant other indicates that there is something wrong. Guys have an insatiable need to fix things. When girls indicate that they need to talk, guys, assuming that something is wrong, take it as a green light to start fixing. Also, while women like to improve on the good things of a relationship, men would much rather prefer for things to stay the same, unless there is a problem.

Men enjoy attention, especially from their girlfriends. They like it when girls play with their hair, give them hugs and rub their arms. They seem to respond with their senses. This is the reason why, for example, if you are having dinner with your boyfriend in a restaurant and a "hot" girl walks in, the guy's eyes will immediately fly to her and follow her until she is out of sight. As shallow as it sounds, if men see something they like, they seem drawn to it, like bees to honey.

So what do guys want? Stability, sex, admiration, happiness, and attention. Now, if only guys could figure out what girls want.

## EWB Conference

...continued from Page 3.

money by sowing and gardening to get their children a tutor to teach them some thing every evening.

After briefly clarifying the Geo-political situation of Afghanistan she commented on how countries walked away after the war destruction and have backed out their pledge of reconstruction. The frugality is even more threatened looking at the situation in Middle East now. She described in great details the living style of the villagers in the rural area with 75 percent of pastoral community. There are millions of refugees living in tents and are deprived of their very basic needs such as food, clothing and proper housing to stand such harsh winters. People and children are highly talented and enthusiastic with great spirits to improve their situation and get educated and trained.

An International organization future Generation America and Care Canada are trying to overcome the impact of drought and rebuilding regions heavily shelled. The land is very fertile and there are areas of mine lands but water is an important resource needed in plenty to harvest the

land and make it in use.

Thus, proper network of irrigation is needed, and ways to use water intelligently for several different purposes. The sanitation systems, rebuilding of schools, universities and hospitals all these are the works of engineers who can find their means to work in limited resources and bring a great change in the lives of these people who been victimized for years. In answer to one of the questions she said that "The need education, security, and jobs - so that they are able to do something with their skills. They have lost everything and need our basic help."

Flora Macdonald inspired the UW engineers to the extent that they stood up in applause and agreement to her speech and far not the days when any one them in the hall get inspired and actually take an initiative to go there and work with them.

Claire Danscreau gave a brief introduction of her self and her organization. She has been an executive director of CUSO for last two years. It is an organization, which help countries over seas in funding their projects. The major aims are recruitment, social justice, irradiation of poverty, and

## What Women Want

John Olaveson

1B Civil



Okay, guys, I'm going to be as truthful as I can with this. What do women really want? If we knew, we'd avoid many disastrous problems. This list of things has been compiled from my vast experiences throughout the world. Here we go!

Women want a place where they can be safe from the world, a place where they can be free to do what they want and to be what they want. Somewhere no one else will ever see or desecrate. Now the sanctuary can come in different forms, depending on the woman. The following are not the only forms the sanctuary can take; they're the ones I find are more popular. And they're in no order beyond what I think of first. Fathers, boyfriends, bedroom or bed, art studio, car, chair or couch, bathtub, best friend. If anyone would care to refute these, please feel free to conduct a survey of where women go when they need to escape.

Women want people to listen to them. It doesn't matter the subject. Women need to rant sometimes. (I'm not talking about complaining about everything wrong in their life; I'm saying women need to say things about life, their lives, other's lives, or anything else. I know how they feel. I wish I had things to say). Women need to express their feelings. Most often, women only rant to people they know or trust. But when a women rants, for all you hold sacred, listen to her! You don't necessarily need to act upon everything she says. In fact, she likely won't expect anything to come of her words. But you need to listen to her. Support her where necessary. Rant along with her (but be careful not to interrupt). And never ever contradict her during a rant. For all you best friends out there, the last few points really apply to you.

Women want independence and freedom. This applies to freedom from the world, freedom from their troubles, freedom from their friends and family at times. This one links into the sanctuary. When a woman retreats into her sanctuary, it's often best to leave them be for a while. In a grander sense, women want to be self-dependent. Guys, how would you feel if someone kept you isolated from the world because it was "too dangerous?" Women like to face adversity and challenge as well. Women need to know that they're capable of doing things for themselves. So let them. Don't interfere with their plans or dreams or jobs.

Women want personal space. Don't

removing gender imbalance. According to her: "Giving of funds is like an investment in your future". She encouraged engineers to help make people's life better as they have a great role to play in reconstruction and building of the world.

She gave her three rules of thumb for all the engineers to remember for all times in their professional careers through their lives." Go with the flow, Go in there with the intention of learning, Go in there thinking you will learn more than you can

always crowd them. Like men, women want time away to spend with their friends, with their family, and alone. Women don't need someone watching over them all the time. Guys, if you want to have a healthy relationship, you need time apart. You must let a woman know you trust her, and part of that comes from letting her have her own time.

That being said, women also want support when they're in trouble, or support when they're lost. To be more precise (because sometimes I can be quite vague about things), women want someone to go to if things get out of hand. If a woman is in emotional turmoil, she wants someone who can help her get back under control. But she may also want to sort things out for herself. This is a subject to be careful about.

Closely related to that, women want security. They want something they can depend on, something steadfast that will always be there. This may come in the form of a boyfriend/husband, best friend, family, or all of the above. Or even something else, a pet perhaps. Maybe a house to come home to or a car or a photograph. There are plenty of possibilities here.

When it comes to boyfriends, I've noticed a few things girls want (not me, usually; Dave Girodat knows why). Girls want a well-dressed man. This doesn't mean someone who always walks around in a business suit. This means someone with a coordinated wardrobe. Someone who wears things that stand out (but don't scream and yell at you). Women want a man who puts effort into his dress. This shows that the man has self-respect.

Women want a man who's not afraid to be himself. There's nothing worse than falling in love with a man, and then finding out that he's no good in public. Well, unless the public guy just happens to also suit the woman's tastes. But its much safer for guys just to be themselves so there are no relationship-ruining surprises later on.

Women want a man to be respectable. They want a man who is responsible, fun to be with, doesn't do stupid things (well, a few stupid things are accepted, luckily for guys everywhere). Women want a man who doesn't go out with the guys every night to get drunk at a bar. Sorry, guys, that's the way it is. Drinking is bad for the health, bad for the finances, and it can get a guy into too many compromising situations. Drunk people can't be trusted. And women want trust.

I think that covers the big things that women want. To all of you women out there, please let me know how well I did with this article.

teach". Her golden words of wisdom are true what ever we do and wherever we go, and are indeed a key to success.

Thus, the entire discussion was very moving and inspiring. It lifts our spirits and encourages us to look further away and think of possibilities of taking our ingenuity overseas and helping all those in most need of it today. We engineers are builders of the world and we use our skills and knowledge to make this world a better place to live in.

## Iron Ring

# Disaster on the St. Lawrence Seaway: The story of the Québec Bridge Disaster



Dave Clegg

4B Computer

Though the Québec Bridge Disaster of 1907 is often erroneously cited as being closely associated with the establishment of the "Ritual of the Calling of the Engineer" and the iron ring itself (please see the article "Humility and Celebration" for more details), the story of the collapse of one of the greatest engineering feats in history resonates clearly with anyone who takes the oath. The lessons learned from the story lie at the very heart of engineering responsibility, humility and service espoused by Rudyard Kipling and the Camp of the Seven Wardens.

In the latter years of the 19th century the Québec Bridge Company (QBC) granted a contract to the Phoenix Bridge Company (PBC) to build the largest cantilever bridge in history over the St. Lawrence seaway, linking Québec City to the south shore and facilitating trade with Maine and the other New England states. They also hired the renowned American bridge builder and engineer Theodore Cooper to oversee the engineering design and construction. [1] This bridge, spanning 1800 ft, was to be the largest cantilever bridge in history and the pinnacle of Cooper's career.

Because of delays in funding from the QBC [2] and because of an over-zealous desire to push forward with the project, construction on the bridge began after the preliminary drawings from engineer Peter Szlapka of PBC were approved by Cooper but before the working drawings were completed. When the working drawings were finally examined by Cooper he realized that the initial estimate from the preliminary drawings on the weight of the span was about eight million pounds less than what the weight would be in reality. [1] At this point Cooper had the choice to risk that this would not be a problem or condemn the design and start all over again, [1] which would risk the crowning jewel of his career, since restarting the construction might completely halt the project due to the financially precarious position of the QBC.

Cooper decided that the eight million pounds were within engineering tolerances [1] and decided to proceed with the project. As the bridge neared completion in the summer of 1907 many troubling reports began to surface. In June some girders were reported as being misaligned by a quarter of an inch, and in August it was reported that the same girders had further moved and now "appeared bent". [1] Though Cooper was concerned, the PBC assured him that the girders had been bent when they left shop, though they gave no explanation as to how that bend had worsened over time. [3] The greatest warning appeared on August 27th when chord 9-L of the south anchor arm showed an

increased deflection of an inch and a half within a week's time. [3] This alarmed Cooper enough to send a telegram from his office in New York to the PBC stating: "Add no more load to bridge till after due consideration of facts."

But it was too little, too late. At 5:32 PM on the afternoon of August 29th, chords 9-L and 9-R of the south anchor arm buckled, and the Québec Bridge collapsed. [3] 75 workers plunged over 150 feet to their deaths that day [1] because of a mistake which the ensuing Royal Commission placed squarely on the shoulders of Theodore Cooper and Peter Szlapka. They stated in their report that "The failure cannot be attributed directly to any cause other than errors in judgment on the part of these two engineers...A grave error was made in assuming the dead load for the calculations at too low a value...This error was of sufficient magnitude to have required the condemnation of the bridge, even if the details of the lower chords had been of sufficient strength." [4]

The Québec Bridge was eventually completed in 1917, though it had to suffer one more disaster before it earned the right to stand. On September 11 1916, when the new center span was being hoisted into place after being floated down the St. Lawrence river, one of the rocker arms lifting it into place failed, plunging the span into the river below and killing 11 workers. [5]

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**"...engineers bear the burden of a great responsibility to society, and that burden cannot be shouldered lightly."**

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The history of the Québec Bridge is one of the few stories Canadian engineers will not soon forget. Though the bridge still maintains its record as the longest cantilever bridge ever built [5], that title came at a huge cost for both Canadians of the time and for the families of those 86 workers.

Engineers of the day were perhaps thinking of the Québec Bridge disaster when they pushed for a more tightly bound engineering community in 1922, though there is no direct evidence that connects them. Even so, the lessons of 1907 are still as relevant today as they were back then: engineers bear the burden of a great responsibility to society, and that burden cannot be shouldered lightly.

[1] Québec Bridge Collapse, [http://www.mysteriesofcanada.com/Quebec/quebec\\_bridge\\_collapse.htm](http://www.mysteriesofcanada.com/Quebec/quebec_bridge_collapse.htm), accessed February 23rd, 2003.

[2] Québec Bridge 1 - Prelude to Failure, <http://www.civeng.carleton.ca/ECL/report/s/ECL270/Prelude.html>, accessed February 23rd, 2003.



*The Québec Bridge after its collapse in 1907. The disaster killed 75 workers.*



*The Québec Bridge after its center span collapsed in 1916, killing 11 more workers.*



*The completed Québec bridge as it stands today.*

[3] Québec Bridge 1 - The Slow Fall, <http://www.civeng.carleton.ca/ECL/report/s/ECL270/Falling-Slowly.html>, accessed February 23rd, 2003.

[4] Québec Bridge 1 - Judgement, <http://www.civeng.carleton.ca/ECL/report/s/ECL270/Judgement.html>, accessed February 23rd, 2003.

[5] Infamous Bridge Disasters, <http://filebox.vt.edu/users/aschaeff/quebec/quebec.html>, accessed February 23rd, 2003.

All photos courtesy of the Department of Civil Engineering at Carleton University, Ottawa, Canada.

## Humility and Celebration: IRC and IRS at U of W



Dave Clegg

4B Computer

### Iron Ring Ceremony

The Iron Ring Ceremony, or IRC, is a tradition dating back to 1922, when the seven past-presidents of the Engineering Institute of Canada met in Montreal. Professor Haultain of the University of Toronto recommended to the group that an organization be created to 'bind all members of the engineering profession in Canada more closely together'. [1] His suggestion was well received by the group, and with their blessing he set about pursuing this goal to unite engineers.

To that end, Haultain wrote to his good friend Rudyard Kipling, the famous British poet, whose works had often prominently featured engineers. Kipling is mostly known to us through his poems 'Kim' and 'If', and by his story 'The Jungle Book'. In his letter to Kipling, Haultain asked the poet to fashion an oath, or 'obligation', and a ceremony befitting the goal to instil a sense of responsibility and humility upon certified engineers. Kipling agreed, and in 1923 delivered to Haultain and the newly formed Camp of the Seven Wardens 'The Ritual of the Calling of the Engineer'.

The ritual calls for the oath-taker to 'lay his hand on cold iron' and to adhere solemnly to the highest ideals of the engineering profession. It is not a call for engineers to show the world what can be done with their knowledge, but rather to be humble and to use that knowledge to serve society in the best way they know how. The iron ring is given to the oath-taker and newly obligated engineer as a reminder to them of the promise they have made to themselves: nothing more, nothing less.

This being said, there are several myths surrounding the ritual, the ring and their origins that are either deceiving or simply untrue. The first is that the ritual and the iron ring are a mandatory element of the Waterloo engineering degree, and that participating in the ritual is part of an academic requirement to graduate. This is not true. The ritual, the oath and the obligation are all done voluntarily, and in fact there are some graduating students every year around this time who choose not to participate. Likewise, the ritual and the ring are in no way connected to the professional designation P.Eng. that is bestowed upon engineers by provincial regulatory and licensing bodies, such as PEO (Professional Engineers Ontario), OIQ (Ordre des Ingénieurs du Québec), or APENS (Association of Professional Engineers of Nova Scotia), among others.

The second myth is that the Ritual of the Calling of an Engineer is performed by all engineers the world over. In fact, both the

ritual and the ring are copyrighted and registered respectively for use in Canada and by Canadian engineers only. This was at the request of Rudyard Kipling himself, who wrote the oath and designed the ceremony to solely be used by Canadian engineers. The current Camp of the Seven Wardens has adhered to Kipling's request and has not allowed the ritual of the ring to extend outside Canada's borders, despite many requests. This restriction extends even to our close neighbours, the United States.

Finally, contrary to popular belief, the original iron rings were NOT actually made from the iron found in the rubble from the collapse of the Québec Bridge. According to Robert Sabourin, President of amibug.com, Inc. and lecturer for the McGill University Software Engineering Practices course, the ring is NOT actually a reminder of the collapse of the Québec Bridge and should not be viewed in any other way other than what the original seven Wardens intended. This is supported by the actual chronological timeline of the Québec Bridge disaster, since the first disaster occurred in 1907 and the second occurred in 1916, a full 15 and 6 years respectively prior to the Haultain address. It is unlikely that at this time Haultain and the seven past-presidents had even considered the iron ring as an emblem for their organization.

The story of the Québec Bridge disaster, although unrelated directly to the iron ring and the ritual, is an appropriate reminder of the intention of Haultain and his comrades. Please see the article 'Disaster on the St. Lawrence Seaway' for details.

**Iron Ring Stag**

If the Iron Ring Ceremony at Waterloo can be compared to a wedding, then the Iron Ring Stag, or IRS, can be described as the reception afterwards. Though the couple has been waiting a long time for the solemn ceremony in which they are joined, there is an air of celebration as well, and the reception is where they let loose and celebrate in their own way this achievement in their life.

The Iron Ring Stag functions much the same way for engineers at Waterloo. Though the primary goal of the day is to receive the ring in a solemn ceremony, this is also a monumental achievement for engineers who have worked to get there for the last five years, and they celebrate, in their own way, this achievement in their life.

The celebrations surrounding the IRC/IRS

day (commonly called IRS day, or simply IRS for short) can be divided into two categories: pre- and post-IRC celebrations. Some classes begin the pre-IRC celebrations by pulling an IRS prank in the early morning. These are traditionally harmless pranks and are designed to start the day in a festive mood. In the past classes have hung banners from the roof of the school or filled computer labs with candy. This year the pranks included the construction of a brick wall and the relocation of several recycling bins into an engineering hallway.

Barring those who get up early for their pranks and for other events, the day starts for most people at the class champagne breakfast. IRS is an intensely class-oriented day, and at these breakfasts the class has usually pooled their money to purchase some assistance from volunteer lower-year engineers. Called 'IRS slaves' for short, the slave auction is organized by the Graduation Committee (or Gradcomm) earlier in the term as a fundraiser, and the younger years volunteer their time to help out with the graduating classes while at the same time raising money for Gradcomm. This camaraderie in engineering is characteristic of many of the events that take place during the year.

At the champagne breakfast, usually held as someone's house, the slaves typically act as hosts, cooking and serving the meal while the grads socialize with one another and drink champagne to toast the occasion. Most people generally dress up in crazy clothes, the purpose of which becomes more apparent at the actual stag in the evening. For now however, it remains part of the tradition and celebration surrounding the pre-IRC festivities. Costumes can vary from pimps to astronauts to ninjas to sailors to Simpsons' characters, and even cross-dressers!

At around 10 AM the classes usually finish their breakfast and head to school. As most professors cancel lectures on IRS day, the classes spend a few hours celebrating in the hallways of the school in which they have spent the last five years earning their degree. This can involve anything from chilling in POETS, the engineering lounge, to visiting past professors.

The school visitation can also involve interrupting engineering classes and tutorials in session. This is part of the celebration that grads go through in order to mark the achievement of their day, and in most cases this disruption is tolerated. This is analogous to the way that newlyweds, their wedding party and their guests stream

from the church to the location of the photos, honking horns and stopping traffic as they go. In most cases the regular flow of traffic is disrupted for a few minutes at most while the wedding train passes, and most drivers don't mind the disruption out of respect for the importance of the day to the couple. In the same way do classes seldom get disrupted for more than a minute at a time, and there are rarely any complaints so long as the students and professors are aware of the significance of the day to the participants.

During the school visitation another group of lower-year volunteers called IRS Security tends to walk around with the classes to keep excessive rowdiness under control and to guide the classes in appropriate directions. These are once again engineering students helping out, and like the IRS slaves, the engineering grads respect these people immensely, for they are helping make their day more enjoyable. This is another example of the engineering camaraderie alluded to earlier.

POETS begins to serve drinks at noon on IRS day, and by mid-afternoon most classes usually convene there for a little relaxation and to watch the IRS clock countdown. The rollover of the POETS IRS clock is akin to the ringing in of the New Year, and the celebration in POETS at that time is comparable. The clock countdown usually marks the end of the pre-IRC celebration, as most students then return home to change for their ring ceremony or go out for dinner with family or friends that have come to Waterloo for the occasion.

After the ring ceremony the post-IRC celebrations, or namely, the Iron Ring Stag itself, begin. In past years the stag has been held at many places, including Fed Hall as well as off-campus venues. The stag can generally be distinguished from an ordinary party or gathering by two things: the attire of the participants and the appearance of the Engineering mascot, the Tool.

The attire at the IRS is the first tradition associated with the post-IRC celebration. All attendees end up wearing black, since non-black clothing is traditionally ripped off once the person steps on the dance floor. This is the reason for the crazy clothes mentioned earlier: many people buy their crazy clothes, wear them all day, and then bring them to IRS and get them ripped off on the dance floor. The tradition states that all non-black clothing is removed, and so underneath their crazy clothes most people wear the black IRS shorts that they received when purchasing

their IRS ticket. Girls additionally wear a black t-shirt or sports bra.

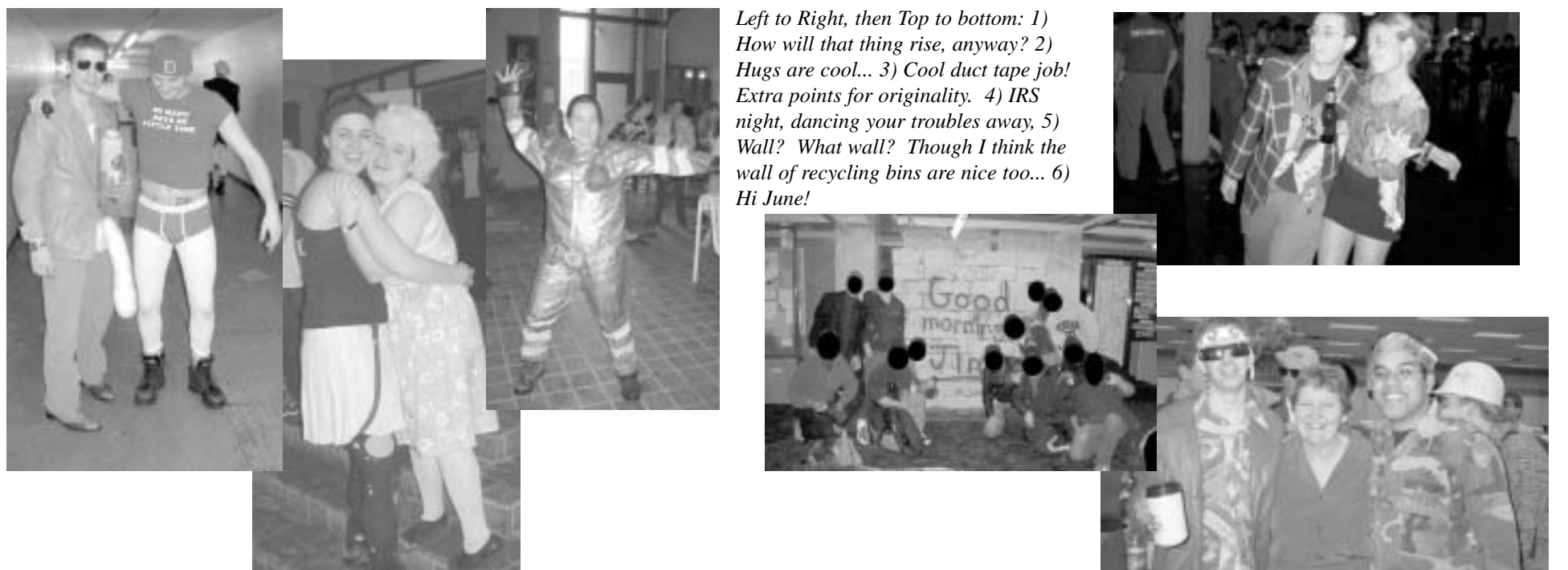
The Tool is also of great importance at the IRS, since ringed engineers are the only ones allowed to touch the mascot. Having been obligated at the Iron Ring Ceremony earlier in the day, all attendees at the IRS are eligible to touch the mascot. Again, this is an achievement and reward for five years of work, and the IRS celebration is indicative of the hard work and dedication that these engineering students have put into their degrees.

Similarities can once again be drawn between the events of the IRS and a wedding reception. Though the primary traditions of the wedding day occur at the ceremony itself, the reception is full of additional small traditions that are observed without fail. The clinking of the wedding glasses to make the bride and groom kiss, or the tossing of the bouquet and the garter are both examples of these traditions that contribute to the overall celebration that is the reception. Similarly, the black attire and the appearance of the Tool are traditions associated with IRS, and they contribute to the celebration that is the stag. Where the clinking of the glasses celebrates and congratulates the new union between man and wife, so does the appearance of the Tool celebrate and congratulate the newly obligated engineers.

As well, the inclusion of alcohol in the IRS festivities can hardly be criticized, as it is a traditional implement of celebration. Most attendees of a wedding reception would expect drinks to be served, and would be disappointed if they were not. In addition, the bride and groom are not criticized for missing the point of their wedding if they imbibe at the reception to celebrate. Similarly engineers should not be criticized for doing the same thing when, just like the bride and groom, they fully realize the significance of the ceremony in which they took part.

IRS is a celebration to mark a major milestone in the life of an engineer. Our lives are replete with similar milestones, and there will be similar celebrations to accompany them. To respect one and to deny another is to pretend that one understands the significance of all things to all people. A wedding day is just one day in the life of a person where we make allowances for celebration. IRS is just one day for a different milestone.

[1] The Iron Ring, www.ironring.ca, accessed February 23rd, 2003.



Left to Right, then Top to bottom: 1) How will that thing rise, anyway? 2) Hugs are cool... 3) Cool duct tape job! Extra points for originality. 4) IRS night, dancing your troubles away, 5) Wall? What wall? Though I think the wall of recycling bins are nice too... 6) Hi June!



## Your Campus/Opinion

## Co-Op Announcements

Lisa Mack

Communication Associate, CECS

Important Dates – Winter 2003  
March & April

<p><b>March 3:</b> Co-op Job Posting #3 (Continuous Phase) expires 8PM</p> <p><b>Due Today:</b> Hand in 1 copy of your Résumé Package along with completed Continuous Phase Registration Form to Paging Desk, Ground Level, CEC by 4PM</p> <p>Employer Interviews – <b>Architecture</b></p>
<p><b>March 4:</b> Co-op Job Posting #4 (Continuous Phase) available by 12 Noon</p> <p>CAREER SERVICES WORKSHOP: Interview Skills: Selling your Skills – Don't stop at the fundamentals; you must also prove your skills in the interview. Are you ready? 4:30-6:30 PM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a></p> <p>Employer Interviews – <b>Architecture</b></p>
<p><b>March 5:</b> Co-op Job Posting #4 (Continuous Phase) expires 8PM</p> <p>CAREER SERVICES WORKSHOP: Business Etiquette &amp; Professionalism – This workshop will cover dining etiquette and appropriate behaviour at interviews, employer receptions/sessions and other networking activities. 10:30-11:30 AM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a></p> <p>Employer Interviews – <b>Architecture</b></p>
<p><b>March 6:</b> Co-op Job Posting #5 (Continuous Phase) Available 12 Noon.</p> <p>CAREER SERVICES WORKSHOP: - Successfully Negotiating Job Offers – Increase the odds of getting what you want when negotiating salary and other details related to the job offer. Note: This workshop is geared toward graduating students. 10:30 – 11:30 AM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a> - Law School Bound? – Come and learn what important points John Richardson recommends for your law school application. 11 AM – 12 Noon. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a></p> <p>Employer Interviews – <b>Architecture</b></p>
<p><b>March 7:</b> Co-op Job Posting #5 (Continuous Phase) expires 8PM</p> <p>Employer Interviews – <b>Architecture</b></p>
<p><b>March 10:</b> Co-op Job Posting #6 (Continuous Phase) Available 12 Noon</p>
<p><b>March 11:</b> Co-op Job Posting #6 (Continuous Phase) expires 8 PM</p> <p>CAREER SERVICES WORKSHOPS: - Letter Writing – Learn how to use letters to your advantage in the job search. 3:30 – 4:30 PM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a> - Résumé Writing – Discover techniques for writing an effective résumé. 4:30 – 5:30 PM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a></p> <p><b>Architecture</b> – Ranking Forms Available after 11am; due back by 4pm.</p>

<p><b>March 12:</b> Co-op Job Posting #7 (Continuous Phase) Available 12 Noon</p> <p>CAREER SERVICES WORKSHOPS: Interview Skills: The Basics – Learn the fundamentals of successful interviewing. 3:30 – 4:30PM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a> Interview Skills: Preparing for Questions – Discuss and learn from taped excerpts of actual interviews. 4:30 – 5:30. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a></p>
<p><b>March 13:</b> Co-op Job Posting #7 (Continuous Phase) expires 8 PM</p> <p>CAREER SERVICES WORKSHOP: Interview Skills: Selling your Skills – Don't stop at the fundamentals; you must also prove your skills at</p> <p><b>Architecture</b> – Job Match Results posted 11am - Acceptance of Employment meetings with Co-ordinators - Meeting for students without employment at 4pm. CEC room 2218</p>
<p><b>March 14:</b> Co-op Job Posting #8 (Continuous Phase) Available 12 Noon</p> <p><b>Architecture:</b> Due today: 1 copy of your résumé package along with completed Continuous Phase Registration Form <b>Architecture</b> – Continuous Phase Job Posting available by 12 noon</p>
<p><b>March 17:</b> Co-op Job Posting #8 (Continuous Phase) expires 8 PM</p> <p><b>Architecture</b> – Continuous Phase Job Posting expires 8 PM</p>
<p><b>March 18:</b> CAREER SERVICES WORKSHOP: Making Polished Presentations (part 1) – Increase your confidence by learning the basics of informative speech delivery and design. \$20.00 registration fee returned in full on 2nd night (March 25). Limited to 10. 2:30 – 4:30 PM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a></p>
<p><b>March 19:</b> CAREER SERVICES WORKSHOP: Job Search Strategies – Learn the “how to” of job/work search, networking, and employer research. Creative and traditional methods are explored. 3:30 – 5:00 PM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a></p>
<p><b>March 20:</b></p> <p><b>OPEN FORUM on CO-OP</b> 4:30 – 6 PM, RCH 101 - Learn about current and upcoming changes in CECS, including the new online system - Ask CECS reps any questions about co-op, offer suggestions, etc.</p>
<p><b>March 25:</b> CAREER SERVICES WORKSHOP: Making Polished Presentations (part 2) – Increase your confidence by learning the basics of informative speech delivery and design. \$20.00 registration fee returned in full tonight (end of two-part series). Limited to 10. 2:30 – 4:30 PM. Register online at <a href="http://www.careerservices.uwaterloo.ca">www.careerservices.uwaterloo.ca</a></p>
<p><b>March 26:</b> CAREER SERVICES WORKSHOP: Writing CVs and Cover Letters – This workshop will show you how to prepare an effective curriculum vitae and cover letter when applying for positions in these areas. Watch for TRACE flyers with location and sign-up information. 12:00 – 1:00 PM.</p>
<p><b>Mission: Possible</b> – All day “fair” of job finding support and advice. Begins at 9:30 AM, <b>April 3:</b> AL 116</p>

## The World's Best Airport

Joseph Fung

3N Computer



Since last August, besides our own Lester B. Pearson International, I've had the chance to take in Chicago's, Cleveland's, San Francisco's, Beijing's, Dalian's, Shanghai's, Qingdao's and Seoul's airports. Until last week I would have given the highly subjective “Best Airport” award to Chicago's O'Hare.

With its beautifully windowed promenade and modern girder-based design, it was definitely clean and efficient. The only points where it fell down was its sheer ability to process people with limited stress. The combination of increased security and limited moving walkways made traversing the airport slow and arduous.

Last week, however, after a stressful time of trying to get the cheapest possible ticket from Dalian, China to Toronto, I found myself traipsing through Seoul's Incheon International Airport.

This was not my first trip through Seoul, I've actually been through there three times previously, but all I can remember from those trips is that they sold me bad milk, the planes were painted powder blue, and the overhead speakers addressed people in a highly accented “Radies and Rentlemen, can we prease have your atten-

tion.”. Now though, the airport can best be summed up as classy.

Where Pearson and O'Hare didn't seem to understand that people want to sit (i.e. there were insufficient chairs) Seoul had over 240 chairs (I only counted those closest to me) for a single gate. Where Beijing's Capital Airport had uncomfortable plastic seats that were pushed around at 3 a.m. to clean the floors (despite any occupants), Seoul's chairs were comfortable, elegantly upholstered and fastened to the ground.

Incheon feels like a classy corporate head office. With grey-stained hardwood floors, metal girders and wall panels painted with a soft grey and chipped stone decorating the entrance to each gate, it is relaxing and comfortable. The incalculable many moving walkways also made navigation of the airport quick and pleasant.

When I went through the States on my previous trips, I had to collect my checked baggage, go through customs then re-check it. The same happened when traveling through Beijing and Shanghai. In Seoul though, despite what I was told when I checked-in in China, I did not have to go through customs and I did not have to collect my bags. We were kept on the one side of the secured area, and were

required to do nothing what so ever. What bliss.

At Pearson International most staff members speak English, but there are signs indicating you can request a French-speaking attendant. In Beijing they had most announcements in Chinese and English, and almost all the signs were bilingual. In Seoul though, every announcement I heard was made in Korean, Chinese, Japanese and English.

Additionally, every sign had Korean and English, and some also had Chinese and/or Japanese. The finishing stroke to this overwhelming multilingual atmosphere was that at the service desk, on each attendant's name tag were little stickers saying “I can speak English”, “I can speak Chinese” or “I can speak Japanese”. I knew which server I could talk to before I waited in line.

In most Canadian restrooms we have wheelchair accessible facilities - to be sensitive to those people who need them. In China they provided a selection of “squat-ter” and “western” style toilets - again, to be sensitive to those people who need them. In Korea not only did the washrooms have wheel-chair accessibility, but they even had a special urinal with bars to hold for less ambulatory men.

The final pleasant feature was the service in Incheon. While it's possible I was just

lucky, and selected the one competent service attendant, I'd like to think otherwise. When I checked in the attendant serving me was trilingual (Chinese, English and Korean) and very pleasant. When I expressed disbelief that my luggage would automatically be checked through to Toronto, he phoned downstairs, and reading my luggage claim-tags confirmed that my three bags had indeed been checked. He then asked me where I would like to sit: aisle, window or emergency exit (which I of course selected - three cheers for unlimited leg-room).

So, in short, this time around they sold me good milk (they had 2%, homogenized, chocolate and strawberry), they improved their English announcements (and added Chinese and Japanese) and they left me in awe.

The only failure was that their planes were still powder blue. Either way, next time I fly towards East Asia, I'll definitely go through Seoul.

*“The only points where [O'Hare] fell down was its sheer ability to process people with limited stress.”*

## Duck and Cover



Jeff Henry

3N Computer

With the Russians threatening to unleash nuclear terror from ever-airborne bombers and with communists in every level of government, on every street corner, and in every restaurant looking to gain an advantage, the United States of the fifties and sixties was a scary place to live. All you had to do was listen to the news reports and the radio broadcasts and you would have heard the national hero Joseph McCarthy bringing communists everywhere to justice in one hearing after another.

Because of the Alien Registration Act of 1940 to the House of Un-American Activities Committee (HUAC) from 1938 through the McCarthy era circa 1950, it was a good time for Americans who want-

ed their government to make them feel safe from the evils of communism in an era of communist expansion.

Of course, it wasn't so good if you had or even were suspected to have left-wing views, or even a "sexual-deviant" in the State Department.

Fast-forward to the "post-September Eleventh era" and the US Patriot Act. Are you an Islamic extremist? Do you know an Islamic extremist? Are you from a country that a known Islamic extremist has come from? Then you must support terrorism. But if you come forward now and register yourself with the government you and every other American will be safe. And if you come forward before the colour coded alert system moves up to Orange you get a free falafel.

Truly the time of government-ensured safety is upon the good moral and decent citizens of the United States of America once again.

Unfortunately, just like in the fifties when the government led show-trials and hearings rarely moved from the national spotlight, the American people still feel unsafe and unprepared. After all, you could round up all the communists in the country but the Russians could still launch a nuclear attack while you were walking home from school or just watering the lawn.

Of course, television was the answer. See a nuclear explosion? No problem! Just remember to "Duck...and Cover!" Surely little Billy will be protected by hiding behind his porch, the neighbour's bush, or under his desk at school.

Today is, of course, no different. While nuclear weapons are on the radar, we're more worried about chemical and biological agents, "dirty" bombs, and other \*cue scary music\* weapons of mass destruction.

But fifty years later, technology has advanced well beyond the need for the reliable but antique "duck and cover." One

has to go no farther than <http://www.ready.gov> to learn "Terrorism forces us to make a choice. Don't be afraid...Be Ready."

Did you know that in the event of a biological attack you can protect yourself by covering your mouth and nose with several layers of tissue or paper towels? And in the event of a chemical it may just be better to "Stay Put" which means locking yourself in your house and covering the doors, windows, and air vents with plastic sheeting and duct tape.

Still don't feel safe? If you look under "Nuclear Blast" there is still the old standby, this time reduced to the much more efficient "Take Cover."

And if the terrorist threat isn't high, you can support the cause of freedom by purchasing "Freedom Fries" from Neal Rowland's Cubbie's restaurant in Beaufort, North Carolina (<http://www.cnn.com/2003/US/South/02/19/offbeat.freedom.fries.ap/index.html>).

## The Second Wonder of Waterloo

Chris Lau and Drew Morris  
3B Systems Design

The first wonder is, as you may know, the Dana Porter Library, which can be seen to be slightly leaning, much like the tower of Pisa. According to leading experts, the structure may collapse on any day. This article aims to explore Waterloo's 2nd Wonder, and its wide-reaching applications in developing countries and the field of thermodynamics. Please read on ye eager explorers of science.

Mentally picture yourself by the E2 photocopiers, the ones by the Formula SAE car. Good, now walk out the doors towards Needles Hall. Next to RCH, you will encounter a daunting yet admirable flight of 16 stairs. After mounting all 16, turn right towards E2, and enter the doors next to the bike rack. Now descend the trivial yet annoying 8 stairs. Now here's where we enter the 2nd wonder of Waterloo.

Simple algebra will show us to be at a net stair height of:

$$H_{net\ stair} = 16 \text{ stairs up} - 8 \text{ stairs down} = 8 \text{ stairs}$$

By walking along the systems hallway, we are able to return to our starting point, the photocopiers, without encountering any stairs. We have got back to where we started, but have gone up a net of 8 stairs! There is only one insignificant ramp, and minor fluctuations in ground level in between the two flights of steps. How is this possible, and what a waste of energy! But wait, if we reverse our direction, we will have effectively descended 8 stairs! Thus, the gain in energy can be found with the equation for potential energy:

$$\Delta PE = mg \Delta h = \text{mass} \times g \times (8 \text{ stairs}) = 80 \text{ stairs} \cdot m \cdot g/s^2$$

The units may not be precise, but the implications of this discovery will shock the leading entropy physicists for decades to come. What does this mean? Where can

we go from here? These are all good questions, and we shall try our best to explain them in layman's terms.

Suppose we roll a bowling ball down the 16 steps using a frictionless ramp. If we strategically position a perfectly elastic wall to deflect the perfectly elastic bowling ball, it could theoretically climb the 8 stairs, and have gained 80 stairs  $\cdot m \cdot g/s^2$  of purely kinetic energy. As we allow this ball to continue, it will eventually approach a terminal velocity of approximately 8.53 million m/s after a period of 270 hours or approximately 12 days (please refer to Article 37 in the Feb.30th 2002 edition of 'Mechanics and Models'). This energy could be used to compress a spring, drive a magnetic field, rotate a turbine or split a Uranium-235 isotope i.e. energy for all, energy for free. Eat that, Boltzmann! Long live the perpetual motion machine, baby!

So What?  
Good question, young student. An energy producing mechanism would be incredibly useful to developing countries. Just imag-

ine the possibilities.

For example, we have proposed to harness this free energy using the following ingenious scheme. Allow a ball to roll along a low-friction track that follows the mysterious yet wonderous path. After a velocity of 300 m/s (i.e. the speed of sound), the ball will spin a turbine in the 'C and D', which could potentially power the two 750 Watt microwaves in POETS for 35 minutes each, or the equivalent of being able to lightly brown 60 hamburgers. These hamburgers will then be sold in the CPH hallway at a profit of \$1.35 each, of which \$0.15 can be put towards funding a water purification system in Kenya. The remaining \$1.20 can go towards EngSoc to fund Pub Crawls and SCUNT. We calculate that in 3 years, 25 new water filtration systems can be installed throughout the country.

And you thought engineers couldn't make a difference! Think again, pal... think again.

## The Cost of Being in 4-Stream

Illan Kramer  
3B Electrical

So it's November and you're in OAC (or Sgrade 12 nowadays) and you think "Hey, I wanna be a Waterloo engineer." You proceed to research the different options available to you. You weigh the pros and cons. Some factors that might help you make your decision include the job you could get upon graduation, the subjects you most enjoy in school, the marks required for acceptance, and many more. These are the factors that (arguably) should dictate what type of engineering you choose to pursue. They might be joined by something new; something that until recently was not as significant an issue; something that could (arguably) influence prospective students to enter a

program they otherwise would not.

This issue is the cost of being an 8-stream vs. 4-stream (or if you're an elec, 4S-stream) student. With 15% tuition increases coming in our faculty prior to every summer term, the cost of being a 4-stream student is up to 34% (of 1A tuition) more than it would be for an 8-stream student. That translates to a difference of \$1033 if your 1A tuition was \$3038 as it was this past fall.

Is the stream in which you find yourself upon arrival at Waterloo worth more or less than the other stream? Should two people who start their degrees at the same time and end at the same time have to pay different prices? Could you argue that Civil is more of a bargain than Systems? The argument becomes more compelling when you look at the programs that have

two streams. Mechanical, computer engineering, and now chemical, have both 8-stream students as well as 4-stream students. For the exact same degree, should one be paying more than the other?

Unlike most universities, Waterloo has a co-op program that has students doing various terms at unorthodox times of the year, thus making tuition increases non-uniform for those students who are in the co-op program. At any other Ontario school, tuition increases would happen in the fall and every student (based on program or faculty) would pay the same amount. In essence, everyone doing the same degree pays the same fees.

There are factors that can improve the lot of the impoverished 4-stream student, however. Having co-op first means that they can pay those first year bills more

easily and don't have to go two terms into debt before starting to earn some of that money back. It also decreases the competition of finding jobs; for the summer term, engineering students all over the province are looking; during the winter, it's only Waterloo students.

Do these benefits add up to the extra amount of being a 4-stream student? Should the coop schedule dictate what type of engineering a graduating high school student picks? Can the University do anything to address this issue? In this humble writer's opinion, the answers to these three questions are: no; no; and even if they could do something, do they care enough to do it?

## Arts and Entertainment

## Another Day, Another Comic

Ryan Bayne  
Mutant Dog Creator



## SILICON VALLEY HIGH



## Arts Week Schedule

Grant Holohan and Dallas Card  
Arts Directors

Here's the schedule of events for Arts Week (Feb. 24-28):

All events are 11:30am-12:30pm, CPH foyer.

Monday: fingerpainting.

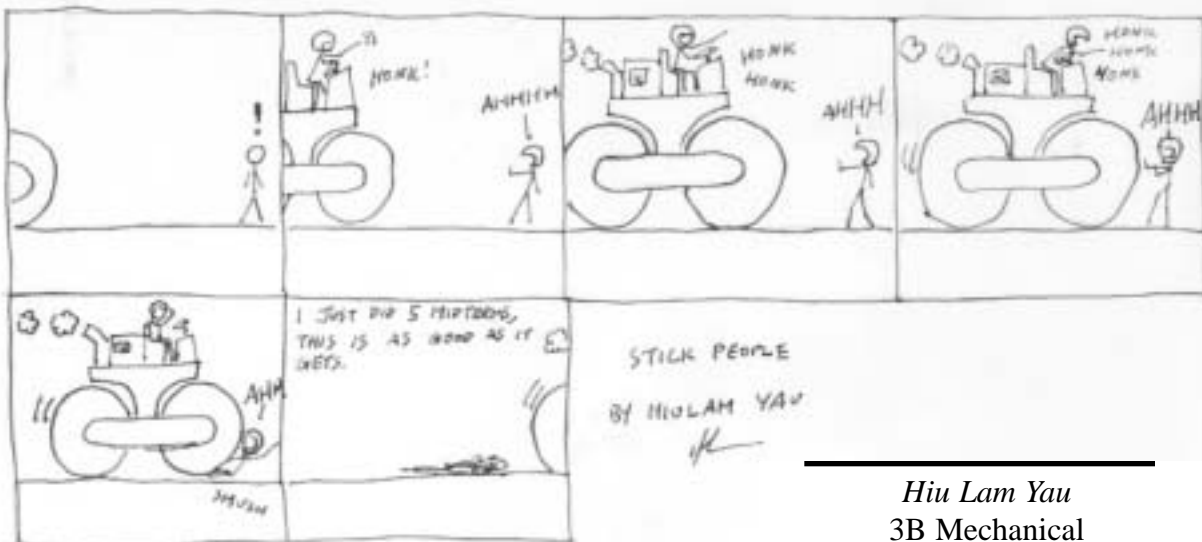
Tuesday: Duct Tape Sculpture contest, with Prizes.

Wednesday: Make your own Arts Week event day. You show up to CPH foyer and make up an arts week event!

Thursday: poetry readings/improv limericks

Friday: "No event day" since Artsies all take Fridays off.

Plus there will be some music in CPH foyer during the lunches.



Hiu Lam Yau  
3B Mechanical

## The News vs. the Noods

Illan Kramer  
3B Electrical

There are three types of people who read the Enginews (or Enginoods, or whatever else you might want to call them). There are the people who read the lists, look at the cartoons and then discard the newsletter wherever they happen to be standing. There are the hardcore fans, who read every last letter of jokes, articles, and witticisms hoping that the next will be funnier than the last. Then there are former editors. These are people with humouristic egos big enough that their heads can barely fit into RCH 101; people who believe that nobody before them or after them have been, or will be as funny as they were; people who know in their heart of hearts that they are simply the best.

I, O my brothers, fall into the last category, so as you read this article, keep in mind that it may be slightly biased.

The Enginoods, as the editors have decid-

ed to call it this term, is quite simply not very funny. There are the obligatory gut reaction laughs because of articles that deal with being funny when drunk, or swearing where swearing is not expected. There are problems, however, when it comes to the actual articles. These articles tend to be long, politically (on a university scale) based, and with a low SSR (substance-to-swearing-ratio). This edition of the 'Noods fills the needs of the first category of Enginews readers. The second might feel that something is lacking. We won't get too much into the third category, because as I have already mentioned, they will never be pleased.

Let me say, however, that not everything about this newest edition of the Enginoods is bad, and the these recent editions are far from the worst Enginews in recent years. In fact, aside from when I was an editor, they might be the best. I have been a devoted reader of the Enginews since Spring 2000 (Although I've only read them in B-soc terms). Unlike the low points of that Spring term, and the following winter term, the Enginoods this term is not simply

full of email forwards and internet jokes. Much of their content is original; an essential element to a successful publication. It is clear that the editors have gone to some trouble trying to write about the hot-topics of the week, and are doing a good job getting reader submissions.

In the opinion of this former editor, the problem could be one of two things: either the current editors simply aren't funny people, and should focus on writing for other publications; or that they need some more inspiration.

Assuming for a moment that the editors are funny, the problem must be the inspiration. "But what could be more inspiring than a weeks worth of happenings from a faculty of over 3000 students," you ask? Perhaps we need look no further than the mirror.

That's right people, you're simply not doing that many interesting things anymore. Sure, going to the local bar and drinking till you puke has that one-ha laugh potential, but I'm talking about real-

ly funny stories. Stories that involve stealing all the toilet paper from the Math building. Stories that involve lighting June's skirt on fire. Stories that often involve some body part interacting in a way that it shouldn't be with some other body part (either on your body, or someone elses). Stories that can inspire writers to write things for your Thursday morning reading pleasure.

In conclusion, I would just like to say that the Enginews was the best it has ever been, and will likely ever be in the Fall of 2001, but it's not that bad this term. Why not stop into POETS and grab yourself a copy? And remember, if you think it sucks, that's only because you do.

-Hollywood

## A Year of Chick Flicks

Cindy Zheng-Ming Bao  
2A Electrical

It's that time of the year again - the award seasons when people will inevitably argue why one sentimental melodrama is superior to another sentimental melodrama. As I'm trying to place my bets for Oscar, I found that 2002 was a productive year for films aimed at the female demographic. This is reflected not only in the quantity, but the names associated with the production and, surprisingly, the quality.

What's a chick-flick year without romantic comedy? If not the icing on the cake, it's certainly great eye-candy seeing Cameron Diaz dancing in underwear for half of the movie, while looking for The Sweetest Thing called love. Hopeless? At least I'm not the only one that thinks so. Tired of the jungle out there are two New Yorkers Helen Cooper and Jessica Stein, who started a relationship by placing and answering

a woman-seeking-woman personal in the paper (Kissing Jessica Stein). If you like it more exotic, there are the imports like Monsoon Wedding, or a Bollywood Hollywood hybrid. Don't forget the home-made, highest-grossing indie movie of all time; My Big Fat Greek Wedding was just released in video for your amusement.

Of course, there are many more to chick flicks than just sugar and spice, with tougher, smarter women. Jennifer Lopez took combat classes intending to kill her husband (Enough). Erika Christensen attempted to put on Glenn Close's seductive charm in Swimfan, the high school remake of Fatal Attraction. You have Spielberg too, in his not-so-chick-flick Minority Report, admitting the more gifted one is "the female".

When pop divas partake in making this genre, the results are Golden Raspberry nominations ([www.razzies.com](http://www.razzies.com)). Britney Spears' road trip flick was targeted at "anyone whose age is in single digits or whose IQ doesn't exceed double digits" (Peter Howell, The Toronto Star). Even better, Mrs. Sexiest-Man-Alive (well, not quite yet) left her block and moved to Manhattan to be a chambermaid. The story? Err, I don't remember, but be sure to let me know if you go to see a J. Lo movie for the sake of plot. Anyone?

*"...be sure to let me know if you go to see a J. Lo movie for the sake of plot."*

Critics seem to give their vote to the portrayal of somewhat troubled females. You see Lovely and Amazing women, who could have been found next to you on the bus, or at the grocery check-out, being insecure about how their image is perceived by others, and ultimately, them-

selves. There are dancers accused of murdering their husband/lover (Chicago), and a wife suspected of having an affair (Unfaithful). Nominated for the Oscars are Julianne Moore as a frustrated 50's housewife in The Hours, and Julianne Moore as a frustrated 50's housewife in Far from Heaven. Instead of Russell Crowe's John Nash in biopic A Beautiful Mind, Golden Globe this year nodded at The Hours, and Nicole Kidman's struggling Virginia Woolf.

In this extremely market-driven industry, the massive quantity of chick-flick productions can only be explained by a wide viewership, both gals and guys (who are forced to go if they make it to the second date). Exactly what makes chick-flicks so popular? Maybe it's our modern Cinderella fantasy, or the instant gratification of seeing all problems solved in a mere hour-and-half. Or perhaps it's because what Nicole Kidman had to say about women, "We are very interesting"!

## Explorations Wants You (to Lead Little Kids Around)



Jay Liu

3A Computer

weird glue from ChemEng to the spider robot from Systems Design to the greenhouses from EnvE, the events showcases the best toys that are otherwise kept well-buried deep inside the faculty intellectual vault. Every time, the little future engineers get to understand more about the fascinating process of making things work, appear, or stick together forever (the latter by design or by accident). The happily stunned faces of these kids that appear when the robot starts to walk as if it's on crutches is, in a MasterCard sense, priceless.

Explorations not only lets kids be up close and personal with the fascinating fields of engineering, it also lets their parents understand more about engineering. One of the most important aspects of being an

engineer is to inform the unsuspecting public of the benefits engineers contribute to society. In many instances, the presentations leave longer lasting impressions on the parents than they do on the children. And to accomplish that with an event designed for kids is simply amazing.

Of course, no event will be successful without the enthusiastic support of the EngSoc volunteers. And that's where you come in. Sign-up today by firing an empty message to [explorations2003-subscribe@yahoogroups.com](mailto:explorations2003-subscribe@yahoogroups.com). You will get a nice T-shirt, free of charge, with a nice faculty logo, which you can proudly show off to your UofT friends during your co-op term. There will, of course, be free food. You also get to learn about the many interesting projects that are being developed

inside the faculty. But most importantly, you get to show off what a cool and impressive profession you belong to to your newly made thirteen-year old friends. You are guaranteed to have a great time. Unless you'd rather be stuck in a computer lab doing assembly debugging...



Sandford Fleming Foundation  
E2 3322, ext 4008, [sff@engmail](mailto:sff@engmail)  
[www.eng.uwaterloo.ca/~sff](http://www.eng.uwaterloo.ca/~sff)

### Debates

Please contact your department undergraduate office if you are interested in participating in the Sandford Fleming Debates. The winners of the faculty finals receive \$100 each and the runners-up receive \$50 each.

DATE	March 10, 11, 12	Finals: Friday, March 14
TIME	11:30 - 1:00	Noon
PLACE	E2 - 3324	Outside C&D, CPH

Refreshments will be served at the finals  
Everyone is welcome  
\*\*\*\*\*

Student Travel Grants - Available to students participating in technical conferences. Please check our web site for further information and application forms.

Emergency Loan Funds - SFF has made available funds for short-term emergency loans, interest free for 90 days. These loans are available to engineering undergraduates, on either an academic or work term. Contact the Student Awards office for further information.

## Your Campus

## ECE "Den of Iniquity" Restored

Kareem Shehata  
4B Electrical

Or so goes the words of Terry Weldon, one of the lab technicians in Electrical and Computer engineering. Yes, the Elecs and Comps graduating in April can now return to their study room, though they won't be able to open any windows. Those have been bolted shut.

As I wrote in the first IW of the term, the ECE Fourth Year Room was double-locked after a flood of coolant caused by someone leaving a window open. What to do with the room was a contentious issue. Many students and some of the staff felt strongly that ECE undergrads really need a space of their own on campus. There was also a vocal minority who shouted back "Who cares?" As usually, in between was the silent majority.

Those of us who wanted to keep the study room were left with a daunting task: finding a resolution with the support of only a handful of people in the class. The actual cleanup and repair had already been done

by General Services, and it was way beyond our means to pay for it even if the whole class contributed. So, our contribution would have to be symbolic, somehow showing that we really did care and that we will take better care of things in the future.

The first part was solved by Remona Basur. Her petition got over a hundred signatures, and proved without a doubt that people actually cared about what was going on. Whether or not they were ready to do something about it is a different matter.

The second part could only be dealt with by talking with the powers that be to figure out what exactly was needed to restore their confidence in us. After a few long conversations with Bill Ott, we managed to reach some common ground. First, the class reps would apologise to Dominik Gratzner, the Director of the Audio-Visual Department, and Roger Sanderson, for the

damages done to their offices. The second is that we'd actually keep the place clean - starting with the fridge, which hadn't been cleaned in over a year.

So, on Thursday 6 February Dave Clegg, Yun Chan, Geoff Hart, Neeraj D'Mello, and I presented a letter of apology to Dominik Gratzner and Roger Sanderson. The next day, Rod, Steve, and Geoff from the Comp class gave me a hand cleaning out the fridge. Afterwards, Yun and Remona from the Elec class helped cleaning the rest of the kitchenette. The fridge took less than

half an hour, and the whole thing was done just in time for dinner. We probably made more of a fuss about whether or not we should do anything about the situation than actually cleaning up.

As promised, Bill Ott unlocked the room, and it hasn't been locked since. There's been many a foosball game, free comput-

ers for checking email, and couches to relax and possibly do some reading. Very useful stuff during midterms, and especially IRS.

So, what's the moral of the story? Well, the first thing I learned was that important things never get done by large groups of people. Getting a class of people with dissimilar interests to do anything as a whole is like herding cats - it ain't gonna happen. At the core of almost every successful project is a small, focused team.

The second is that that small team can bring a class together. Sure, there will always be opposition, the people in your class that you're not fond of, that make your life difficult, and never seem to have anything positive to add. Don't ignore them, since they might actually say something that's on other people's minds, but don't let them bring you down. If you really want to see something done, get the right people together, and get cracking! With some patience, you'll get through.

See you all at the foosball table!

## Federation of Students Releases Results of 2003 Elections

Brandon Sweet  
Feds Elections CRO

Waterloo - The results of the Federation of Students' 2003 Executive, Students' Council, and student Senate elections have been calculated and released by the Elections Committee.

Full time undergraduate students were eligible to vote in the election. The total number of eligible voters, including full-time Federation of Students staff members was 18,369.

### President

Dan Colquhoun 213  
Andrew Dilts 625  
Chris Edey 969  
Alex Matan 788  
Declined 141  
Turnout - 14.9%

### Vice-President, Administration & Finance

David Capper 646  
Tracy Haynes 634  
Robert Robson 486  
Rob Schmidt 595  
Declined 289  
Turnout - 14.4%

### Vice-President, Education

Aaron Lee-Wudrick 1109  
Liam McHugh-Russell 1273  
Declined 263  
Turnout - 14.4%

### Vice-President, Internal

Leo Dominguez 733

John Fedy 855  
Janna Hickson 821  
Declined 228  
Turnout - 14.4%

### Senate At-Large 2-Year

Derek Chan 530  
Liam McHugh-Russell 1441  
Declined 623  
Turnout - 14.1%

### Senate At-Large 1-Year

Siyan Li 845  
Kevin Tran 571  
Declined 951  
Turnout - 12.9%

### Senate Engineering

Mark Greco 299  
Emma Saask 316  
Declined 129  
Turnout - 18.4%

### Science Co-op (2 seats)

Rebecca Baxter 81  
Matthew Campbell 44  
Declined 27  
Turnout - 18.0%

### Science Regular

Meenal Agarwal 72  
Meera Patel 84  
Alex Sloat 68  
Declined 47  
Turnout - 18.7%

The Elections Committee would like to thank all who participated in this year's election.

## A View of the Ontario Society of Professional Engineers (OSPE)



This story begins a few years ago. Some engineers in Ontario observed that the Professional Engineers Ontario (PEO) was mostly handling regulation and legal issues. However, the engineers wanted more. These engineers wanted to see an organization suited to the promotion of the engineering profession in the social and economical worlds. That's why, in April of 2000, the Ontario Society of Professional Engineers was formed.

The Society's driving goal is to promote engineering both among the populace of Ontario and among the businesses and governments that rely on engineering services. The Society has taken over from PEO the responsibility of preparing and distributing the Salary Survey. This survey provides information to all members concerning the incomes and benefits that are available to currently employed engineers. Closely related to this service is a listing of many available jobs throughout Ontario. With these two services combined, OSPE is in a strong position to assist engineers to attain the most fulfilling and rewarding jobs available.

OSPE involves itself with government policy formation. In December, bill 175, concerning water quality control, was passed, and due to the efforts of OSPE, the

bill included requirements that all water systems be tested and approved by professional engineers. That means more jobs available for engineers. It also means more exposure for engineers. OSPE continues to influence government policy in an effort to gain more possibilities for today's and tomorrow's engineers.

Student memberships are available for this society. The membership cards are printed on flimsy material, not the solid plastic that forms bank cards, credit cards, and WatCards, which gives the impression of unprofessionalism. Since I have no access to a full membership card, I cannot conclude if this is a treatment given only to students or also to the professional engineers of the world.

A membership opens some intriguing possibilities to student engineers. One service provided to both full members and students members is EngineersFirst.

Through this portal, students and members can find deals on things like new computers, telephone services, and other handy electronic and multimedia gadgets and toys. Students also get access to the job listings and to the salary surveys. The drawback to a student membership is the cost; \$25. For us students, anything we have to pay for must be well worth the cost. With discount internet, telephone, insurance, and access to the best co-op jobs (ones the co-op people in this university might not know about), the cost will repay itself.

*"At the core of almost every successful project is a small, focused team."*

*"Through [EngineersFirst], ... members can find deals on things like ... electronic and multimedia gadgets and toys."*